3.7 Public Hearing Comments and Responses

T_AKIN1-01

MR. AKIN: Good morning, ladies and gentlemen of the Board. Thank you for being here. This project that's before us is so broad and thick. If you look -- I've looked at it on the Internet and you can't even -- you can't read the document. You couldn't read it in three weeks. What scares most of us here is are the conservation easements that are talked about within the bypass channels.

T_AKIN1-02

As a former Sutter County Supervisor that was in office during the 1997 flood in Meridian, I'm very concerned, because what happened there was the fault of the Department of Water Resources, and it was the fault of the Department of Fish and Wildlife. Fish and Wildlife was allowed to have vegetation grow within the floodplain channel. Department of Water Resources did not buck Fish and Wildlife.

Consequently, during the flood of '97, there was a three foot jump north of the Sutter Refuge in the water

T_AKIN1-03

level in the system. That forced and broke the levee in the Meridian Basin.

If you do not think that vegetation or habitat, or whatever you want to call it, within a floodplain system has an effect on water, and has an effect on elevations, just take a couple of pebbles and put them in your driveway and turn your water hose on and direct it down towards the pebbles and watch the water back up. The same thing happens to a much greater magnitude when there's vegetation within a floodplain.

So, you know, it is with great concern that we're here today looking at things, because everybody here lives with high water every year that there's a great amount of rain. We have a system that was designed and it's a very good system, if it's allowed to operate at design specs.

The Sutter Bypass, the Moulton Weir, the Colusa Weir, the Fremont Weir, Sacramento Weir have not always been allowed to operate at design specs because of the buildup of sediment within the channels. They have not been allowed to be removed because of environmental issues over the years. If those -- if this system is allowed to work as designed, and if it's maintained as designed, we'll have a good system, and it will provide flood control, but we have to be able to work on our tired levees without such a great amount of environmental impact

studies and so forth. We could cut the cost of levee repair by two-thirds if we could just work on current levees without environmental impact studies. And I know that there has to be some, but where you have a current levee, I don't think it's -- it shouldn't undergo the same scrutiny as a levee that you would to have build where there's never been a levee.

So let's look at cutting costs on environmental issues and let's look at building and repairing the levees that we have and getting this system back to working like it was designed to work. If we can do that, we have a good system that will protect everybody.

And I think that in the end what we need to do is develop a system here that will protect all and damage none.

Thank you.

PRESIDENT EDGAR: Thank you, Dick.

Dick Akin, Ehlert Business Group (Public Hearing, April 6, 2012)

Response

T_AKIN1-01

It is unclear whether the comment regarding the length and breadth of the "document" applies to the CVFPP, the DPEIR, or both. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR.

As stated in Master Response 22, the Public Draft CVFPP was released, on time, on December 30, 2011. Several of the attached supporting documents, specifically the *State Plan of Flood Control Descriptive Document* (November 2010) and the *Draft Flood Control System Status Report* (December 2011), were published before the Public Draft CVFPP and informed its development. Most CVFPP attachments were released with the public draft or in early February 2012; exceptions include the "Flood Damage Analysis," "Riverine Channel Evaluations," "Cost Estimates," and "Reservoir Analysis" attachments, which were released between mid-February and the publication of the DPEIR. The comment is noted.

The comment states concern about conservation easements within bypass channels. As stated in Master Response 1, specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders. Considerable additional work will be required before the bypass projects considered in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses, and land uses within those areas (e.g., agriculture, habitat) will be refined during post-adoption implementation activities.

T_AKIN1-02

The comment states concerns about O&M issues related to vegetation within floodplain channels, and the potential for that vegetation to restrict water movement, raise flood stage elevations, and lead to levee failures. As

stated in Master Response 6, improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures).

Where vegetation in a floodway does not match authorized parameters, adoption of the CVFPP and implementation of the SSIA would be beneficial steps towards addressing those issues. In addition, the CVFPP and DPEIR acknowledge and address the potential for vegetation in a floodway to restrict water flows and result in increased flood stage elevations.

In the DPEIR, Mitigation Measure BIO-A-2b (NTMA) in Section 3.5, "Biological Resources—Aquatic," which calls for planting of riparian vegetation on the waterside of levees, states:

> Any mitigation plantings in the floodway will not be permitted if they would result in substantial increases in flood stage elevations, or alter flows in a manner that would have a substantial adverse effect on the opposite bank.

This language, or language with similar content, is included in various locations in the DPEIR, where creating habitat in the floodway is considered.

T_AKIN1-03

The comment reiterates concern expressed in comment T_AKIN1-02 regarding vegetation within a floodplain channel potentially resulting in high water and levee failures (see response to comment T_AKIN1-02), and further raises questions regarding maintenance of existing systems and reducing costs associated with environmental studies for new facilities. As stated in Master Response 6, maintenance activities alone do not meet current needs or legislative requirements for the CVFPP (e.g., urban level of protection, systemwide approach, and providing multiple benefits). This is highlighted in the evaluation conducted for the preliminary approach called "Achieve SPFC Design Flow Capacity."

The Achieve SPFC Design Flow Capacity preliminary approach focuses on reconstructing SPFC facilities to meet current engineering criteria without making major changes to facility footprints or operations. To achieve the design flow capacity, reconstruction is required because the original

specifications focused primarily on levee prism geometry, and current evaluations have shown them to be insufficient in passing design flows if geotechnical and other engineering conditions (e.g., underseepage) are not improved. This approach was formulated to address legislation that required DWR to consider structural actions necessary to reconstruct SPFC facilities to their design standard (CWC Section 9614(g)). It also addresses requests from stakeholders to consider reconstructing the existing flood management system in place, or without major modification to facility locations. Therefore, maintenance alone, whether that be removing sediment or managing vegetation, would not meet the flood protection goals of the CVFPP. Also, as discussed in response to comment T_AKIN1-02, adoption of the CVFPP and implementation of the SSIA would be beneficial steps towards addressing maintenance of the flood protection system.

The comment suggests that repairing existing levees can be completed without having to prepare environmental impact studies or otherwise implement current standards of environmental review and mitigation. Various State and federal laws drive the need for environmental review and study currently conducted prior to implementing various projects in the SPFC; these include the federal ESA, the CESA, NEPA, and CEQA. DWR, the Board, USACE, local levee maintaining agencies, and others involved with the repair, maintenance, and improvement of flood protection systems must comply with these laws where they are applicable to their activities. Easing the level of environmental review, study, and mitigation would require changes in these laws and is not a policy issue that can be addressed by any of the agencies involved with flood protection in California.

T_AR1-01 MR. CAIN: Thank you. My name is John Cain. I am the Conservation Director for Central Valley and Bay-Delta flood management for American Rivers. American Rivers is a national nonprofit organization dedicated to protecting and restoring rivers for fish, wildlife, and people.

T_AR1-02 And flood management is one of our top three priorities. At American Rivers, we believe that protecting communities from flooding is and must be the highest priority in flood management.

T_AR1-03 But we are also confident that there are many -- that the best strategies for protecting communities from flooding is to give rivers more room. And one of the best examples, of course, is the Yolo Bypass. And not only does it protect public safety for tens of thousands of people in Sacramento, but it also provides enormous habitat and river ecosystem benefits and recreation benefits.

T_AR1-04 We're very optimistic about the plan. We think it's a great step in the right direction. We're

particularly interested in the proposal to expand the bypasses. As some of you know, I've worked very hard with several constituents in the South Delta on expanding the South Delta flood bypass, near Paradise Cut. And I want to work with all of you, our organization wants to work with all of you to improve and refine the plan over time, and look forward to actually implementing it.

Thank you very much

PRESIDENT CARTER: Thank you Mr. Cain.

American Rivers, John Cain (Public Hearing, January 27, 2012)

Response

T_AR1-01

The comment states the commenter's professional affiliation. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR. The comment is noted.

T_AR1-02

The comment states the priorities of the commenter's organization, one of which is flood management. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR. The comment is noted.

T_AR1-03

The comment suggests that the best strategy for protection from flooding while providing habitat and ecosystem benefits is to give rivers more room, as in the Yolo Bypass. As stated in Master Response 1, the CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions or existing bypasses as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Additionally, as stated in Master Response 7, under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions.

T_AR1-04

The comment states interest in proposals to expand bypasses, and mentions the South Delta flood bypass near Paradise Cut. The comment also expresses interest in continued involvement in refining and implementing the plan. See response to comment T_AR1-03 regarding the inclusion of new and expanded bypasses in the SSIA. The South Delta flood bypass could be consistent with the SSIA. As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction. The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments.

As stated in Master Response 14, DWR will engage regional flood planning partners to develop and implement communication strategies with broad interest groups to brief them on flood management planning in their regions. Regional implementing and operating agencies, land use agencies, and interest groups will be invited to participate in the planning process. Each regional planning process will seek input, as appropriate, from agricultural interests, environmental interests, permitting agencies/resource agencies, local emergency responders, tribes, and other stakeholders. DWR anticipates that a regional flood working group will be formed in each region.

Good afternoon. Welcome.

T_AR2-01 MR. CAIN: Hello, President Carter, members of the Board. Thanks for providing the opportunity for me to present comments. My name is John Cain. I am the Conservation Director for Flood Management at American Rivers.

American Rivers is a national nonprofit conservation organization that works to protect rivers for fish, wildlife, and people. And flood management is one of our highest priorities at American Rivers, and we have an internal understanding that when it comes to flood management, protecting public safety is and should be the number one priority.

We work on flood management all around the country. And what we find in other parts of the country and here as well is that the most effective way to protect public safety is to give the rivers more room, so that

they can safely convey flood flows, particularly near urban areas.

T_AR2-02 I was -- very much appreciated the opportunity to attend the 100th -- the Centennial Celebration. And thank you, President Carter, for the pin, which I'm wearing today. It prominently states public safety right at the top of the crest, which I am aware of and proudly wear.

I thought the centennial was a really fantastic presentation from Mr. Downey -- or, excuse me, George Basye. And what he talked about was how lucky we are to have a flood bypass system, and how lucky that we are that it's big enough to have provided flood protection for so many people, farmers and cities, over a hundred years. He also talked a lot about the history of the system.

We later heard from Colonel Leady who was -- also talked about how instrumental the flood bypass system has been both in California and on the Mississippi River. I had the opportunity to visit with experts from the Mississippi River Basin, who informed me that because of the flood bypasses on the Mississippi River that were adopted based on the model in California, over two million acres of farm land were saved from unexpected, unplanned inundation. And even the farm land that was flooded, much of it got a good drop in -- during the last summer.

T_AR2-03 The thing is, is from the very beginning flood

bypasses were not particularly popular among landowners. As you can imagine, if you're a landowner living along the river, you may be reluctant to give up land to expand the flood bypass, but they do protect public safety. And American Rivers has heard loud and clearly today the concerns of agriculture we very much want to work with agricultural interests to make sure that we can advance both public safety, agriculture protection, and environmental conservation.

T_AR2-04 We've also been working -- had a couple meetings with the Central Valley Flood Management Association that Mr. Shapiro referred to. And our -- I am personally very optimistic that we can identify some common ground that we can bring forward to you as the planning processing goes forward.

T_AR2-05 And to all of you who wonder about why environmental organizations are involved in the flood planning process, I ask you to just consider it -- us as a partner and a friend. And if we can identify a common vision, we think it will be much easier to marshall the resources that will be necessary from State and federal taxpayers to implement a plan that gets us all better together.

T_AR2-06 I want to talk specifically about some points that were -- that we raised in a joint letter with 15

other conservation organizations sent on February 15th to the Board. I believe it's posted on your website. These are things that we think are procedural -- are aspects of the plan, and the plan development that you should focus on in the months ago to make the plan better.

T_AR2-07 Number one, we think the plan needs to have, what we call, smart objectives, specific measurable, achievable, relevant to the goal and time-bound objectives. I first learned about smart objectives in the planning process of the Central Valley Flood Management Plan. Some of the -- and I think it's an excellent idea. Unfortunately, DWR staff was unable to come up with specific objectives. And so, as a result, the plan is lacking in that area.

One example is the overall goal is simply to improve flood risk management. That's not something that's measurable. We need to more specifically articulate what we mean by that. Let me restate that, it's to improve -- yeah, flood risk management. We don't know how you measure that. We don't know what kind of time frame they want to improve that on. And if we don't know how to measure something, how are we going to actually measure whether we're making progress over time or not. We think we can make some fairly significant progress on developing specific objectives in the next

five months, both for ecosystem restoration and flood protection and also perhaps agricultural conservation.

T_AR2-08 The second point that we make in the letter is that the plan needs to provide more specific guidance on how and when it's going to develop flood bypasses and other cost effective measures for reducing flood risks, such as levee setbacks and transitory storage. I'd like to see more specifics on that point.

T_AR2-09 Thirdly, we think the plan needs to clearly describe key physical changes in policy initiatives necessary to achieve the objectives of the plan. First, we need to -- the plan needs to more stately -- more clearly state what the objectives are, and then it needs to tie the measures proposed in the plan to those objectives, and explain how they're going to achieve those objectives.

How can we ask the voters of California to pony up more money for flood protection in the Central Valley if the Central Valley Flood Protection Board or the Department of Water Resources can't articulate what the objectives of the plan are.

T_AR2-10 Number four, we think that the plan must prioritize how and when various portions of the planning area will be improved. Without priorities, it's not a very good plan. Setting priorities is a tough thing to

do, but it's a necessary thing to do for a good plan.

T_AR2-11 Number five, we think the plan needs to provide much more specific guidance to local jurisdictions regarding the nature of the plan, so that local jurisdictions can amend their land-use plans accordingly to be in compliance with the plan. We know that this is a concern that was raised by the local governments here today, and we think the plan can do more on that front.

T_AR2-12 And lastly, and perhaps most importantly, somehow we need your leadership to articulate a much clearer version about what it is the plan is going to do, who it's going to benefit, and why the taxpayers should help support it.

If we can work together to have a common vision, it will be much easier to marshall the resources necessary to actually make the Central Valley and its rivers healthier and safer.

Thank you very much.

PRESIDENT CARTER: Thank you, Mr. Cain.

American Rivers, John Cain (Public Hearing, February 24, 2012)

Response

T_AR2-01

The comment states the commenter's professional affiliation and the priorities of the commenter's organization. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR. The comment is noted.

T_AR2-02

The comment describes the Centennial Celebration and identifies flood protection benefits provided by various existing flood bypasses. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR. The comment is noted.

T_AR2-03

The comment describes historical sentiment regarding flood bypasses and the desire of American Rivers to work with agricultural interests to advance multiple goals. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR. The comment is noted.

T_AR2-04

The comment describes interaction between American Rivers and the Central Valley Flood Management Association. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR. The comment is noted.

T_AR2-05

The comment describes involvement of environmental organizations in flood planning and a desire for collaboration between various interests. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR. The comment is noted.

T_AR2-06

The comment references a letter provided previously by 15 conservation organizations on February 15, 2012. This letter is included in the record as letter G_ConCom1 and is responded to in this FPEIR. The comment identifies that points from the February 15, 2012, are repeated in this

comment letter. This comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_AR2-07

The comment states that the CVFPP needs to have specific, measurable, achievable, relevant to the goal, and time-bound objectives (i.e., SMART objectives), and states that the goals within the CVFPP do not meet these criteria. The comment specifically identifies the goal to improve flood risk management as one that is not measurable. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted. However, a response relative to the goals of the CVFPP and how they were developed is provided below.

As stated in Master Response 8, the State Legislature enacted comprehensive flood risk management legislation in 2007, including the Central Valley Flood Protection Act of 2008. This law set a clear directive for an integrated systemwide approach to Central Valley flood management, and provided detailed guidance for DWR to follow in formulating the CVFPP. The Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in CWC Sections 9600–9625. DWR, in coordination with USACE, the Board, and multiple stakeholders, used this legislative direction to formulate the CVFPP's primary and supporting goals. For additional details, see Master Response 8.

As noted above, CWC Sections 9600–9625 provide specific direction for the preparation of the CVFPP. The following text from CWC Section 9616 refers to the objectives to be considered in the CVFPP:

(a) The plan shall include a description of both structural and nonstructural means for improving the performance and elimination of deficiencies of levees, weirs, bypasses, and facilities, including facilities of the State Plan of Flood Control, and, wherever feasible, meet multiple objectives, including each of the following:

(1) Reduce the risk to human life, health, and safety from flooding, including protection of public safety infrastructure.

(2) Expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey floodwaters away from urban areas.

(3) Link the flood protection system with the water supply system.

(4) Reduce flood risks in currently nonurbanized areas.

(5) Increase the engagement of local agencies willing to participate in improving flood protection, ensuring a better connection between state flood protection decisions and local land use decisions.

(6) Improve flood protection for urban areas to the urban level of flood protection.

(7) Promote natural dynamic hydrologic and geomorphic processes.

(8) Reduce damage from flooding.

(9) Increase and improve the quantity, diversity, and connectivity of riparian, wetland, flood plain, and shaded riverine aquatic habitats, including the agricultural and ecological values of these lands.

(10) Minimize the flood management system operation and maintenance requirements.

(11) Promote the recovery and stability of native species populations and overall biotic community diversity.

(12) Identify opportunities and incentives for expanding or increasing use of floodway corridors.

(13) Provide a feasible, comprehensive, and long-term financing plan for implementing the plan.

(14) Identify opportunities for reservoir reoperation in conjunction with groundwater flood storage.

In addition, the primary and supporting goals/objectives in the CVFPP were influenced by the results of a considerable effort by DWR in obtaining stakeholder feedback and informing a variety of groups and individuals across the CVFPP planning area. As stated in Master Response 13, this extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP. For additional details, see Master Response 13.

The goals and objectives included in the CVFPP are consistent with the Legislature's direction for preparing the plan. Before the 2017 update to the CVFPP (for the 2017 plan), public and stakeholder feedback will be solicited again, and comments will be accepted on the details of the plan.

T_AR2-08

The comment states that the plan needs to provide specific guidance on how and when it will develop flood bypasses and other facilities for reducing flood risks. The comment is on the CVFPP itself and does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. As stated in Master Response 1, the CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. For additional details, see Master Response 1.

Additionally, as stated in Master Response 14, regional flood management planning, to be conducted in each of nine regions identified in the 2012 CVFPP, is an important next step in identifying specific improvements to rural-agricultural areas, small communities, and urban areas consistent with the SSIA. Upon CVFPP adoption, DWR will work closely with local entities to collect on-the-ground information regarding flood risks and needs, identify potential local and regional improvement projects, assess the performance and feasibility of these projects, and develop proposals that reflect the priorities of local entities in reducing flood risks. Each regional plan will present an assessment of proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Regional flood management plans are anticipated to:

- Assess regional flood risks and management actions (projects) to reduce these risks
- Discuss regional priorities, including criteria used to prioritize individual projects
- Describe specific projects, including their potential costs, regional and systemwide benefits, and beneficiaries
- Provide a financial plan describing how the proposed projects would be funded, including cost sharing and financing for local shares
- Describe regional governance of flood management

For additional details, see Master Response 14.

T_AR2-09

The comment states that the plan needs to tie the measures proposed in the plan to the plan objectives. This comment is similar to comment T_AR2-07. See response to comment T_AR2-07, above.

T_AR2-10

The comment states that the plan must prioritize how and when various portions of the planning area will be improved. The comment is on the CVFPP itself and does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR.

As stated in Master Response 14, the 2012 CVFPP describes the State's vision for a sustainable flood management system in the Central Valley that provides a high degree of public safety, promotes long-term economic stability, and supports restoration of compatible riverine and floodplain ecosystems. The SSIA prioritizes State investments and other activities to contribute to achieving this vision on a systemwide scale, recognizing current funding limitations. The SSIA is a conceptual plan for flood system improvements, and additional post-adoption work is needed to refine its individual elements. Anticipated post-adoption activities include regional flood management planning, development of basin-wide feasibility studies and the CVFPP Financing Plan, completion of project-level proposals and environmental compliance, development of the Conservation Strategy, and State and USACE permitting. Ongoing and new planning studies, engineering, feasibility studies, environmental review, designs, funding, and partnering are required to better define, and incrementally fund and implement, elements of the SSIA during the next 20–25 years. For additional details, see Master Response 14.

T_AR2-11

The comment states that the plan needs to provide more specific guidance to local jurisdictions regarding the nature of the plan, for land-use plan compliance purposes. The comment is on the CVFPP itself and does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR.

As stated in Master Response 5, State law (SB 5) requires each city and county in the Sacramento–San Joaquin Valley to amend its general plan within 24 months of the Board's adoption of the CVFPP (see CGC Sections 65302.9 and 65860.1) to include consistent information. These cities and counties must also amend their zoning ordinances accordingly within 36 months of the Board's adoption of the CVFPP. Cities and counties could consider incorporating the following information from the CVFPP into their general plan amendments:

- Data and analyses contained in the CVFPP, such as the locations of the SPFC and other flood management facilities, locations of property protected by those facilities, and locations of flood hazard zones

- Goals, policies, and objectives based on the CVFPP's data and analyses, for the protection of lives and property and reduction of the risks of flood damage

- Feasible implementation measures designed to carry out the goals, policies, and objectives

The 2012 CVFPP was prepared at a conceptual level. Consequently, the plan does not include detailed floodplain mapping, data on local flood stages, or specifics about future on-the-ground projects. This information will be developed during post-adoption implementation activities. However, a great deal of information and data on Central Valley flood risks and vulnerabilities were collected as part of 2012 CVFPP development. DWR has provided much of this information in the attachments to the CVFPP and will make further information available to assist local agencies.

The CVFPP focuses on SPFC facilities (including consideration of pertinent non-SPFC levee improvements in urban areas), which relate primarily to flooding of the mainstem Sacramento and San Joaquin rivers. DWR recognizes that in some circumstances, the information and planned improvements included in the SSIA may not be sufficient for cities and counties to make findings regarding an urban level of flood protection without additional analysis. Cities and counties should consider the criteria in the *Draft Urban Level of Flood Protection Criteria* for more detail. Further, cities and counties outside the SPFC Planning Area may not find pertinent geographic information in the CVFPP for their land use planning purposes, but could consider the goals, policies, and objectives for their actions. For additional details, see Master Response 5.

Cities and Counties may also refer to *Implementing California Flood Legislation into Local Land Use Planning: A Handbook for Local Communities*, released by DWR in October 2010 (DWR 2010).

T_AR2-12

The comment states that clarity is needed regarding the vision of the plan and who will benefit. The comment is on the CVFPP itself and does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. See responses above regarding development of goals and objectives for the CVFPP and the process for its future implementation. As

stated in Master Response 8, in accordance with legislative direction and reflecting stakeholder input, DWR prepared the 2012 CVFPP to describe the State's vision for flood management in the Central Valley. This vision for flood management in the Central Valley is for a sustainable flood management system that provides a high degree of public safety, promotes long-term economic stability, and supports restoration of compatible riverine and floodplain ecosystems.

In the CVFPP, DWR describes the SSIA, which is a proposal for achieving the State's vision for flood management. The SSIA helps achieve the State's vision for flood management in a balanced manner by promoting responsible investment of public funds, commensurate with flood risks, in projects that integrate multiple benefits, in proactive maintenance of SFPC facilities and residual risk management, and in wise management of floodplains protected by the SPFC. For additional details, see Master Response 8.

T_AR3-01

MR. CAIN: Good morning.

PRESIDENT EDGAR: Good to see you.

MR. CAIN: Thank you.

Welcome to some of the new Board members. I'm going to give you my speech about who I am - some of the other Board members have heard it - and what my organization does.

My name is John Cain. I am Conservation Director for Flood Management for the Central Valley and Bay-Delta for American Rivers. American Rivers is a not-for-profit environmental organization. Our mission is to protect and restore rivers for fish, wildlife and people.

One of our three top priorities is flood

management nationally. And we recognize as part of our culture that public safety has to be the number one priority when it comes to flood management. Because if it's not and there's a conflict between public safety and the other values that rivers provide, it would be very unfortunate but that kind of conflict would not be good for rivers.

That said, we're confident that the best way to protect public safety is to give rivers more room so that they can safely convey flood flows. And in the process of giving rivers more room, we create a lot of other benefits, including fish and wildlife habitat, parks, clean water, et cetera.

I wanted to say, I'm going to try to speak on multiple points here today and it's going to take me a little more than five minutes. But I'll try to do my best to move quickly.

PRESIDENT EDGAR: Thank you.

T_AR3-02 MR. CAIN: I wanted to recognize the staff for the report. That was very useful, and I was glad to see that done. That was a useful resource, and I hope to see more of that kind of resource in the future.

T_AR3-03 We know that you're going into a difficult period of public hearings. And we have heard loud and clear that the agricultural community -- many in the agricultural

community are very upset about this plan and they see it as a grab for the environment, not paying adequate attention to agriculture. I personally think that's an unfortunate situation.

I don't think that the environmental community, the conservation community is at war with agriculture or should be at war with agriculture. In fact, I think there's a lot of common ground. And one of the big problems and one of the reasons we're here today is not because of agriculture or because of the environment, it's because humans built too many buildings in deep floodplains. And it's really the uncontrolled urban development of deep floodplains has created the crisis that needs to be addressed with this Plan, not agriculture and not the environment.

T_AR3-04 We've been doing a lot of thinking about how to -- the value of agriculture. And I just wanted to go on the record as being clear that we think agriculture is an important part of the economy and that farmlands provide important habitat. We support a plan that conserves farmland while also improving wildlife populations for hunters and anglers.

We support a plan that provides more economic and regulatory certainty for agriculture. And we think that expanding bypasses and setting levees back actually

provides that.

I learned that in the Mississippi the flood bypass system prevented 2.5 million acres of farmland from being inundated last summer. That flood bypass system in many ways was modeled after California's Central Valley flood bypass system.

T_AR3-05 And the bypass system is really important for the urban -- for better protection for the urban communities. And if the urban communities were to flood catastrophically, the impacts for everyone in the Central Valley and everyone in California would be catastrophic. And that includes the agriculture community.

T_AR3-06 We think that expanding the capacity of the floodways will -- in general, will increase flexibility for upstream reservoir management. And that potentially improves opportunities for more reliable water supply. It also improves opportunities for more reliable water supply by reducing conflicts between endangered species and water supply.

So these are other ways that we think giving the river more room actually improves conditions for agriculture through water supply.

T_AR3-07 We want to work together with the farmers to define a plan that can meet both the needs of agriculture and the environment, and we support a plan that uses the

shared interests and common vision to marshal the political and fiscal resources that will be needed for implementation.

We need to work together on this. If it's just about -- if there's no -- well, I'll say more as we go forward.

T_AR3-08 I'll say that we have been in discussions with representatives from the Central Valley Flood Control Association to identify a suite of measures that can better address the needs of all stakeholders including agriculture. And I'm optimistic that we're going to be able to provide some details in the weeks ahead about what kind of packet that package might look like that really does begin to address some of the concerns you're hearing about from agriculture as well as from the conservation community in general.

T_AR3-09 Let me move to -- there was an element that you didn't ask for in the nine points. But it was, which alternative do you support? And I will not -- I'll simply say that we're doing an in-depth analysis of the Plan and the appendices. And we think that the idea of a hybrid approach like the State Systemwide Investment Approach makes sense. But unfortunately we're not sure that the statewide investment approach is really optimized for costs or for benefits. And we'll provide more information

on that as we continue to go through the analysis.

Part of the problem with picking one alternative versus another is that we're not -- well, in the Plan they weren't described as alternatives. They were described as themes. But we're not sure that they are really developed as fair or realistic stand-alone alternatives.

Let me just say a few things about some of the problems with some of them. And hopefully in our comments in the future we'll provide more details about how to improve it.

T_AR3-10 We're concerned that the State Systemwide Investment Approach could actually increase risk, particularly in Sutter and Yuba counties in the Natomas Basin, by creating this idea that because they have 200-year levees, that there can be uncontrolled development behind them. Now, it's possible that there won't be uncontrolled development behind it. But it's not really clear in the Plan. And if indeed the State helps fund the construction of these larger levees, and then there is uncontrolled development behind the levees, we are simply back in the same situation we're in now. And it will -- actually those levees will provide a higher level of protection in terms of the probability of flooding. But when the levee breaks and during a large event, those people would be at a huge danger.

T_AR3-11

The cost estimate accounting is just not transparent, and that makes it very difficult to understand how the -- you asked the question, President Edgar, about what's, you know, the restore -- protect high risk communities compared to the enhanced system capacity, you know, what's the difference? One costs a whole lot more. But in terms of reduction of risk, it didn't seem like that large a difference. Well, we can't really -- we haven't been able to get to the bottom because it's not transparent what's being paid for or where in these different alternatives.

T_AR3-12

Now, as we learn more, we might realize that it's somewhere in the appendices.

One other example of how these alternatives are a little bit artificial is, one of the alternatives is protect high risk communities; and it's basically about spending most of the money on preventing -- improving levees around urban areas, to protect these urban areas where most of the assets that could be flooded exist.

Well, why didn't the protect high risk communities consider expanding bypasses? Expanding a bypass in south Delta can significantly lower flood stages for a Stockton-Lathrop corridor, and extending the Yolo Bypass can significantly lower flood stages for Sacramento. But yet that wasn't really considered as a

risk reduction in the protect high risk community. So we think it ends up creating an artificial analysis because the alternatives are not really alternatives, they're not really necessarily logical alternatives. They're thematic comparisons.

T_AR3-13 Let me move on to statement of vision and purpose. I am very glad that you have picked this up. I think it's absolutely essential that you state a vision and that that -- being able to articulate a clear vision, not just you, not just me, but all of us as a community, is essential for convincing voters and other decision makers that they should invest in the Central Valley Flood Management Plan.

In thinking about that vision, we think that there should be four elements to that vision statement, and it should be relatively brief, a sound bite or an elevator speech. But those four elements are:

You have to describe the problem.

You have to describe the solution.

You have to describe goals and objectives for the plan, including specific measurable objectives.

And, lastly, you need to be able to articulate the benefits of the overall solution.

T_AR3-14 In the interests of -- well, in the -- I'll just say in terms of the problem statement, our view is that

the flood flows are -- just trying to just distill down the problem statement. Remember, this has three elements:

One, is the flood flows are too high in the Delta and lower part of the system. And in part, because levees have constrained the flow of water and channeled it downstream.

The second part of the problem is that too many people live in high risk, deep, often urban floodplains that are a levee failure away from catastrophe. Levees alone do not eliminate this risk. They only control the probability of flooding. And when they fail - when they fail, not if - the consequences are very large.

Three, the third part of the problem, is that the complexity of the regulatory process along with competing interests from different stakeholders, including upstream versus downstream, the environment, water supply, agriculture, urban stakeholders, that these competing interests have become dependent on the existing system. And it makes making any fixes to this clearly deficient system difficult, expensive, and unacceptably slow.

T_AR3-15 So the solution statement might be:

Number one, to expand the floodway to better accommodate floods, reduce velocities, and lower flood stages particularly in the lower end of the system where most of the people are at risk.

Two, prevent additional urban development of undeveloped floodplains; reduce risk for people that already live on floodplains through flood system improvements like levee improvements, also emergency preparedness, building codes, flood insurance, and other residual risk strategies. A lot of this is in the Plan but it's not boiled down in a concise vision statement.

And I realize my vision statement is taking longer than I've said we need to do it. But I'm practicing in front of you in the hope that I can boil it down faster, and that you might provide some feedback to me.

Three, design -- and the third part of the solution is design the flood system improvements to achieve multiple objectives. So that all the stakeholders get better together and are willing to pay for it together.

T_AR3-16 It's harder to actually specify what the objectives should be of the Plan. But I will say that the Plan itself doesn't actually have any specific measurable objectives. And because it doesn't, it will be impossible to say with any certainty what the Plan will do or to measure whether it's actually achieved that as you begin to go through implementation.

I'll give one example of an objective. The

objective -- the measurable objective could be the lower flood stages for the 100-year flood near urban areas by two feet. Now, that's a measurable objective - can we do that?

In the planning process with DWR we heard about we're going to develop specific measurable, achievable, relevant, and time-bound objectives, smart objectives. Well, unfortunately the Plan fell short of that. And I think it's really important for the Board to either try to do that in the plan or commit to doing that in the near future, not in the distant future for the 2017 Plan.

The lack of the objectives is the biggest flaw both in the plan and the analysis, because it's hard to know whether one alternative or another alternative is really better because you're not measuring them against specific objectives.

Giving you an example, we heard a lot last week about how much the different alternatives would reduce risk. Well, it would reduce risk by 68 percent or 52 percent. But does that reduce risk to an acceptable level? Well, we haven't discussed what's an acceptable level of risk. And 200-year flood protection is not a risk standard. That's a probability standard. The reducing risk is a different concept.

T_AR3-17

PRESIDENT CARTER: John, could we speed it up

here a little bit.

MR. CAIN: Okay.

PRESIDENT EDGAR: Thanks.

MR. CAIN: Multiple benefit projects. We think that the Plan has gone a long way towards this idea of integration that Director Cowin talked about. But we don't really lack the confidence that the projects will actually be implemented in a way that achieves multiple benefits. We harbor the same concerns that the agricultural community feels, that there's some promises in the plan but there's not necessarily commitments.

I'll provide some more specifics on the parts of the Plan that we really like with regard to that.

I will say, and I've already said, that projects like expanding the Yolo Bypass or the new South Delta Flood Bypass are the kind of multiple objective projects we would like to see. There's other ones on a smaller scale and we'll provide a list of the kind of projects we would like to see.

T_AR3-18 Existing system maintenance, improvements in utilization of existing storage facilities. We think that the plan correctly concludes that simply fixing the existing system in place will not meet the objectives of the legislation. That's in Table 2-5. And in fact, it would increase flood stage and risks for urban areas.

Fixing the levees in place would only funnel the waters -- the flood waters downstream towards Sacramento and Stockton and the Delta, very important statewide resources.

The plan does not analyze how the strategy of replacing existing facilities in place would work under increased floods associated with climate change. So we think the Plan makes the point that it's not good enough. But we think if they actually analyze it under climate change, it would even be stronger reason to conclude that simply fixing the levees in place is not a viable alternative. I will leave it at that for that point.

T_AR3-19 Urban and urbanizing areas. We believe that the Plan and the documents and tools, like models, provide enough information for local agencies to develop maps of areas protected from the 200-year flood plan. The Plan provides the 100- and 200-year water surface elevations at various reaches, provides information in the appendices about the conditions of different levees. With this information, we see no reason why local jurisdictions cannot make the local maps necessary to comply with provisions of SB 5.

T_AR3-20 We know that they want to delay. We know that they want the State funding. But we don't think the State is obligated. And we don't think it's a good idea to --

well, let me put it a different way. Changing the trigger dates for compliance is completely unacceptable to American Rivers. The idea that these local jurisdictions can't afford to develop the maps on their own, yet they can go forward with permitting new development in floodplains, is really problematic to us.

Now, that said, we have been in discussions with some of the urban flood districts and want to find some sort of solution that makes provisions of SB 5 really work for the intended purposes. But we think extending the trigger dates and allowing people to continue to permit development in floodplains because of an argument that they don't have maps is not correct.

We have also heard that DWR plans to provide the 200-year flood maps by March of 2013.

T_AR3-21 With regard to the trade-offs between urban and rural flood protection, we think that urban areas are correctly prioritized for flood protection. That's where the greatest risk is to the state economy, particularly in the deep urban floodplains. The reason voters voted for Proposition 1E is because they wanted to stop -- they wanted to make sure something like Hurricane Katrina didn't happen in California. That's why they voted for it, and that's what we should focus on making sure it doesn't happen.

T_AR3-22

PRESIDENT EDGAR: John we're going to need your final comments please.

Thank you.

MR. CAIN: I've got a little bit more.

PRESIDENT EDGAR: Well, we've got a lot of people here.

MR. CAIN: Our review of the Plan to date suggests that the Plan underestimates risk to urban areas in the following ways: It uses the comp study hydrology rather than the updated hydrology. It assumes a hundred percent willingness to evacuate in a short period of time, which we don't think is realistic, and it's not consistent with what we've seen in many areas. It's based on the 2000 census date. It assumes the remaining -- it does not consider build-out risk. It assumes build out at the 2000 level. And it also doesn't assume risk to the Delta, it doesn't calculate the cost of massive Delta failures, because those are outside of the Central Valley Flood Plan. So there's a Number of reasons why the risk is understated here.

T_AR3-23

PRESIDENT EDGAR: You're going to submit those comments to us in writing, right?

MR. CAIN: I will submit those comments. I'm sorry to take so long. As you can see, we're spending a lot of time and resources trying to understand the plan,

work with other stakeholders, make it better. I apologize to you and others if I've taken up more time than was available. But --

PRESIDENT EDGAR: Well, we appreciate it.

MR. CAIN: Thank you.

PRESIDENT EDGAR: The comments were very good and we appreciate it. Thank you.

MR. CAIN: Okay.

BOARD MEMBER SUAREZ: Mr. President, can I ask a quick question to clarify?

PRESIDENT EDGAR: Yeah, sure.

T_AR3-24 BOARD MEMBER SUAREZ: Mr. Cain, originally we received a letter from a group called the Bay-Delta Central Valley Conservation Coalition, which I believe you were a part of. And I just want to clarify, are today's comments that you provided part of the Coalition comments or just American Rivers?

MR. CAIN: These comments are just on behalf of American Rivers. We are coordinating with a coalition or what we call a group -- it's a loose coalition of about 15 environmental organizations.

T_AR3-25 PRESIDENT EDGAR: John, Clyde has a comment.

BOARD MEMBER MacDONALD: Yeah, I'd just like to make one comment. I thought your presentation was very good.

When you talked about reducing stage in, say, like the Yolo Bypass as benefiting Sacramento, it's true that it protects that side. But if you look at things like the American River, the American River upstream is not tremendously benefited by a lowering of stage in the Sacramento, because you've got to get the -- all that water has to come down through those levees.

So the details are important, but I appreciate your thought.

MR. CAIN: Well, we certainly look forward to seeing the details. And that's part of the problem. I will say that there's -- SAFCA did a report in 2003 that shows that expanding the Yolo Bypass in combination with the joint federal project lowers flood stage in the Sacramento River by four feet. And why wasn't that evaluated as part of the high risk reduction alternative.

And I'll also say that the idea of treating the Folsom joint federal projects as part of the baseline is potentially really problematic. And since it's funded in large part by Prop 1E and many other projects funded by 1E are included as part of the Central Valley Flood Plan, we really think it's very important to include the joint federal project as part of the Plan, not as part of the base.

PRESIDENT EDGAR: Thanks, John.

American Rivers, John Cain (Public Hearing, April 5, 2012)

Response

T_AR3-01

The comment states the commenter's professional affiliation and the priorities of the commenter's organization. The comment identifies American Rivers' preference for wider river channels and floodways, phrased as "giving rivers more room." The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_AR3-02

The comment recognizes the usefulness of the staff report. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR. The comment is noted.

T_AR3-03

The comment describes believed historical reasons for flood issues (e.g., development in deep floodplains) and expresses a desire that the environmental community not be in conflict with the agricultural community. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_AR3-04

The comment identifies that agriculture is an important part of the economy and that farmlands provide important habitat. The comment also identifies benefits to agricultural interests provided by the Mississippi flood bypass system and suggests bypasses and setback levees as a preferred flood protection method. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_AR3-05

The comment states that the bypass system is important for protection of urban communities and identifies adverse consequences from failures of the flood protection system. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_AR3-06

The comment identifies potential benefits resulting from expansion of floodway capacity, including improved water supply. The comment is in reference to the CVFPP and does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR; however, a response is provided here. As stated in Master Response 1, the CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions or existing bypasses as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency. For additional details, see Master Response 1. The SSIA incorporates floodway widening elements proposed by the commenter. The comment identifies potential mechanisms by which expanding floodway capacity could benefit water supply, but does not provide supporting evidence or documentation. No further response is required.

T_AR3-07

The comment states a desire for American Rivers to work with farmers to support agriculture and the environment and implementation of the CVFPP. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_AR3-08

The comment describes interaction between American Rivers and the Central Valley Flood Control Association. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_AR3-09

The comment raises questions regarding the alternatives approach used in the CVFPP. The comment is in reference to the CVFPP and does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR; however, a response is provided here.

As stated in Master Response 9, three preliminary approaches were used during development of the CVFPP to explore a range of potential physical changes to the existing flood management system and help highlight needed policies or other management actions: Achieve SPFC Design Flow Capacity, Protect High-Risk Communities, and Enhance Flood System Capacity. Evaluating these preliminary approaches provided information on their costs, benefits, and overall effectiveness. None of the three preliminary approaches were found to fully satisfy the legislative requirements and CVFPP goals in a cost-effective manner. However, the most promising elements of each were combined to formulate the State's preferred approach—the SSIA. The CVFPP and accompanying attachments provide additional details about the formulation and screening of elements included in the SSIA. For additional details, see Master Response 9. The comment questions whether the alternatives included in the CVFPP are sufficiently detailed to be considered "alternatives" versus simply "themes," but does not provide information about any perceived deficiencies. The comment is noted.

T_AR3-10

The comment raises concerns that the SSIA could increase risk in Sutter and Yuba counties and in the Natomas Basin, in regard to 200-year levees, by allowing development in the newly flood-protected areas. The comment is in reference to the CVFPP and does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR; however, a response is provided here.

The CVFPP recognizes that development behind levees is often incompatible with periodic flooding, to the detriment of public safety and floodplain ecosystems, unless special measures, such as elevating or floodproofing buildings, are implemented to limit damages. The plan therefore broadly discourages incompatible development, and encourages compatible development, within floodplains. Beyond those broad policies, however, the CVFPP does not directly impose local planning obligations.

The 2007 flood legislation, however, imposes several planning and development approval obligations on certain cities and counties, as generally described in DWR's October 2010 *Implementing California Flood Legislation into Local Land Use Planning: A Handbook for Local Communities.* First, under CGC Section 65302.9, local agencies in the Sacramento–San Joaquin Valley are required to amend their general plans within 24 months of the Board's adoption of the CVFPP, to contain the following:

(1) The data and analysis contained in the Central Valley Flood Protection Plan, including, but not limited to, the locations of the facilities of the State Plan of Flood Control, the locations of other flood management facilities, the locations of the real property protected by those facilities, and the locations of flood hazard zones.

(2) Goals, policies, and objectives, based on the data and analysis identified pursuant to paragraph (1), for the protection of lives and property that will reduce the risk of flood damage.

(3) Feasible implementation measures designed to carry out the goals, policies, and objectives established pursuant to paragraph (2).

Second, under CGC Section 65860.1, those cities and counties are also obligated to amend their zoning ordinances to be consistent with these required amendments to their general plans within 36 months of the adoption of the CVFPP.

Third, following these general plan and zoning ordinance amendments, under CGC Sections 65865.5, 65962, and 66474.5, local agencies must make at least one of the following findings before granting entitlements to develop and approving certain building permits:

(1) The facilities of the State Plan of Flood Control or other flood management facilities protect the property to the urban level of flood protection in urban and urbanizing areas or the national Federal Emergency Management Agency standard of flood protection in nonurbanized areas.

(2) The city or county has imposed conditions on the development agreement that will protect the property to the urban level of flood protection in urban and urbanizing areas or the national Federal Emergency Management Agency standard of flood protection in nonurbanized areas.

(3) The local flood management agency has made adequate progress on the construction of a flood protection system that will result in flood protection equal to or greater than the urban level of flood protection in urban or urbanizing areas or the national Federal Emergency Management Agency standard of flood protection in nonurbanized areas for property located within a flood hazard zone, intended to be protected by the system. For urban and urbanizing areas protected by project levees, the urban level of flood protection shall be achieved by 2025.

The statutory requirements combined could establish substantial restrictions on development in floodplains in the SPA. Enforcement of these requirements will be triggered by adoption of the CVFPP, the adoption of which is, itself, required by law to occur by July 1, 2012 pursuant to CWC Section 9612(b).

T_AR3-11

The comment raises questions about the costs of the alternatives and the cost information provided in the CVFPP. The comment is in reference to the CVFPP and does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR; however, a response is provided here.

As stated in Master Response 9, the SSIA was formulated by assembling the most promising, affordable, and timely elements of the three preliminary approaches to best meet legislative requirements and identified CVFPP goals. The SSIA reflects a balanced and fiscally responsible approach, which will be developed further as DWR completes more detailed studies and designs for site-specific capital improvements and develops other, systemwide flood improvement projects. The Central Valley Flood Protection Act of 2008 (SB 5) requires a systemwide approach for developing the CVFPP (CWC Section 9603) and requires inclusion of multiple benefits, where feasible (CWC Section 9616). Not all potential SSIA benefits have been detailed or quantified (e.g., avoided damage to infrastructure and/or life loss, ecosystem restoration), and the planning-level cost estimates remain preliminary; therefore, it is inappropriate to analyze the benefit-cost ratio using information contained in the high-level 2012 CVFPP. During post-adoption activities (e.g., regional flood management planning, development of basin-wide

feasibility studies, and development of a financing plan for the CVFPP), DWR will refine the physical elements of the CVFPP and confirm their feasibility, including the costs and benefits of site-specific improvements. Specific project features ultimately implemented for the SSIA will depend on a host of factors. These factors include the results of detailed project feasibility studies; designs and cost estimates; environmental benefits and impacts; interaction with other local projects and system improvements; participation by local, State, and federal agencies in project implementation; and changing physical, institutional, and economic conditions. Costs presented in the 2012 CVFPP are preliminary planning-level estimates. The actual costs of these elements will depend on the specific projects that are justified by feasibility studies, project scopes, implementation times, future economic and contractor-bidding conditions, and many other factors. For additional details, see Master Response 9.

T_AR3-12

The comment raises questions about the adequacy of the "Protect High-Risk Communities" alternative and the general formulation of alternatives in the CVFPP. The comment is in reference to the CVFPP and does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR; however, a response is provided here.

As stated in Master Response 9, three preliminary approaches were used to explore a range of potential physical changes to the existing flood management system and help highlight needed policies or other management actions: Achieve SPFC Design Flow Capacity, Protect High-Risk Communities, and Enhance Flood System Capacity. Evaluating these preliminary approaches provided information on their costs, benefits, and overall effectiveness. None of the three preliminary approaches were found to fully satisfy the legislative requirements and CVFPP goals in a cost-effective manner. However, the most promising elements of each were combined to formulate the State's preferred approach—the SSIA. The CVFPP and accompanying attachments provide additional details about the formulation and screening of elements included in the SSIA. For additional details, see Master Response 9. The commenter's suggestion that specific project features might be included in the Protect High-Risk Communities alternative is achieved through development of the SSIA, which combines the most promising elements of the three preliminary approaches.

T_AR3-13

The comment discusses the value of having a vision for the CVFPP and provides a suggested methodology for developing a vision. The comment is

in reference to the CVFPP and does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR; however, a response is provided here.

As stated in Master Response 8, the State Legislature enacted comprehensive flood risk management legislation in 2007, including the Central Valley Flood Protection Act of 2008. This law set a clear directive for an integrated systemwide approach to Central Valley flood management, and provided detailed guidance for DWR to follow in formulating the CVFPP. The Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in CWC Sections 9600–9625. DWR, in coordination with USACE, the Board, and multiple stakeholders, used this legislative direction to formulate the CVFPP's primary and supporting goals. For additional details, see Master Response 8.

As noted above, CWC Sections 9600–9625 provide specific direction for the preparation of the CVFPP. The following text from CWC Section 9616 refers to the objectives to be considered in the CVFPP:

(b) The plan shall include a description of both structural and nonstructural means for improving the performance and elimination of deficiencies of levees, weirs, bypasses, and facilities, including facilities of the State Plan of Flood Control, and, wherever feasible, meet multiple objectives, including each of the following:

(1) Reduce the risk to human life, health, and safety from flooding, including protection of public safety infrastructure.

(2) Expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey floodwaters away from urban areas.

(3) Link the flood protection system with the water supply system.

(4) Reduce flood risks in currently nonurbanized areas.

(5) Increase the engagement of local agencies willing to participate in improving flood protection, ensuring a better

connection between state flood protection decisions and local land use decisions.

(6) Improve flood protection for urban areas to the urban level of flood protection.

(7) Promote natural dynamic hydrologic and geomorphic processes.

(8) Reduce damage from flooding.

(9) Increase and improve the quantity, diversity, and connectivity of riparian, wetland, flood plain, and shaded riverine aquatic habitats, including the agricultural and ecological values of these lands.

(10) Minimize the flood management system operation and maintenance requirements.

(11) Promote the recovery and stability of native species populations and overall biotic community diversity.

(12) Identify opportunities and incentives for expanding or increasing use of floodway corridors.

(13) Provide a feasible, comprehensive, and long-term financing plan for implementing the plan.

(14) Identify opportunities for reservoir reoperation in conjunction with groundwater flood storage.

In addition, the primary and supporting goals/objectives in the CVFPP were influenced by the results of a considerable effort by DWR in obtaining stakeholder feedback and informing a variety of groups and individuals across the CVFPP planning area. As stated in Master Response 13, this extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, “Engagement Record,” in Appendix A, “Central Valley Flood Protection Plan.” The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and

reviewing and commenting on the draft content of the CVFPP. For additional details, see Master Response 13.

The goals and objectives included in the CVFPP are consistent with the Legislature's direction for preparing the plan. Before the 2017 update to the CVFPP (for the 2017 plan), public and stakeholder feedback will be solicited again, and comments will be accepted on the details of the plan.

T_AR3-14

The comment provides a suggested "problem statement" consistent with the first element of the "vision" methodology described in comment T_AR3-13. The comment is a suggestion for "vision" development and does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted. The goals, objectives, and content of the CVFPP are guided by the Legislature. Response to comment T_AR3-13, above, describes the legislative requirements of the contents of the CVFPP and what is required for inclusion in the plan.

T_AR3-15

The comment provides a suggested "solution statement" consistent with the second element of the "vision" methodology described in comment T_AR3-13. The comment is a suggestion for "vision" development and does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted. The goals, objectives, and content of the CVFPP are guided by the Legislature. Response to comment T_AR3-13, above, describes the legislative requirements of the contents of the CVFPP and what is required for inclusion in the plan.

T_AR3-16

The comment provides suggestions related to CVFPP goals and objectives in response to the third element of the "vision" methodology described in comment T_AR3-13. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR; however, a response is provided here.

The comment offers the "SMART object" principle and suggests that more specific and measurable objectives be included in the CVFPP. This comment is similar to comment T_AR2-07 provided at the February 24,

2012, public hearing. See response to comment T_AR2-07 regarding the CVFPP objectives and the principle of SMART objectives.

T_AR3-17

The comment questions whether the projects will be implemented in a way that actually achieves multiple benefits. The comment states that the Yolo Bypass and new South Delta Flood Bypass are the kind of multiple objective projects that the commenter likes to see. The commenter states an opinion but provides no supporting documentation of the concern raised, nor does the commenter provide data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts to support their comment. This comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR.

Regarding the issues of implementing multiple-benefit projects and bypasses as multiple-benefit projects: As stated in Master Response 1, the CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions or existing bypasses as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency. For additional details, see Master Response 1.

Additionally, as stated in Master Response 7, under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. For additional details on multiple benefits provided by the SSIA, see Master Response 7.

T_AR3-18

The comment states that the plan correctly concludes that fixing the existing system in place will not meet the objectives of the legislation. The comment further states that the plan does not analyze how the strategy of replacing existing facilities in place would work under increased flood stages associated with climate change; however, such an analysis would only support the conclusion that replacing existing facilities in place is not sufficient. The commenter states an opinion in agreement with the information provided in the CVFPP. This comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_AR3-19

The comment states agreement that the plan and the documents and tools, like models, provide enough information for local agencies to develop maps of areas protected from the 200-year floodplain. The commenter states an opinion in agreement with the information provided in the CVFPP. This comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_AR3-20

The comment expresses a desire not to extend the trigger dates for local jurisdictions to comply with SB 5 compliance and a belief that local jurisdictions have sufficient resources to comply with SB 5. As stated in Master Response 5, State law (SB 5) requires each city and county in the Sacramento–San Joaquin Valley to amend its general plan within 24 months of the Board's adoption of the CVFPP (see CGC Sections 65302.9 and 65860.1) to include consistent information. These cities and counties must also amend their zoning ordinances accordingly within 36 months of the Board's adoption of the CVFPP. SB 5 also requires cities and counties to make findings on certain land use decisions in relation to an urban level of flood protection (CGC Sections 65865.5, 65962, and 66474.5). For additional details, see Master Response 5. Neither DWR nor the Board has authority to alter the trigger dates for SB 5 compliance. These elements of SB 5 are a legislative action and, if they are modified, must be modified by the Legislature. This comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_AR3-21

The comment states the opinion that urban areas are correctly prioritized for flood protection. As stated in Master Response 4, the CVFPP does not create any new requirements or assurances for levels of flood protection in the Central Valley; the local findings requirements regarding the required levels of protection were established by the State Legislature with the passage of SB 5. Similarly, the plan does not change existing State requirements related to new development in nonurbanized areas, including small communities, which must continue to meet the national FEMA standard of flood protection (per CGC Sections 65865.5, 65962, and 66474.5). This national standard corresponds to the minimum level of flood protection (100-year flood) required for participation in the NFIP, and is consistent with the existing Building Code. The Central Valley Flood Protection Act of 2008 further clarifies that the CVFPP is a descriptive document, and neither the development nor the adoption of the CVFPP constitutes a commitment by the State to provide any particular level of flood protection (CWC Sections 9603(a) and 9603(b)).

In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments would vary from region to region depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, all areas protected by the SPFC would receive flood risk management benefits from fully implementing the SSIA. Further, the State places a priority on flood management improvement projects that provide multiple benefits to support broad State interests and expand cost-sharing opportunities. For additional details, see Master Response 4.

T_AR3-22

The comment states that the CVFPP underestimates flood damage risk to urban areas in a number of ways.

The DPEIR and CVFPP use data from the 2000 U.S. Census and DOF for reasons of internal consistency. All current estimates and projections provided by DOF are based on a benchmark from the 2000 U.S. Census. Updates to key DOF demographic estimates and projects based on the 2010 U.S. Census benchmark are not anticipated until late 2012 or 2013. It is acknowledged that 2010 DOF estimates (based on a benchmark from the 2000 U.S. Census) differ substantially from U.S. Census 2010 figures. These differences are largely attributable to the methods used by the respective agencies to tabulate domestic migration and the effect of the nationwide recession (December 2007 through June 2009) on birth rates,

domestic migration, and international migration. In addition, data from the 2010 U.S. Census are still being adjusted because the Census Question Resolution process is ongoing (June 2010 through June 2012).

Regarding impacts on the Delta, the CVFPP does consider the Delta. As stated in Master Response 11, consistent with the Central Valley Flood Protection Act of 2008 (SB 5, CWC Section 9603(b)), the 2012 CVFPP focuses on reducing flood risks on lands protected by the SPFC, including those in the Delta. Approximately one-third of the Delta's levee system is part of the SPFC and thus is included in the CVFPP. Responsibilities for flood management in Delta areas outside the SPFC reside with a variety of local agencies and are supported by various State, federal, and local efforts (e.g., the State's Delta Special Flood Projects Program and Delta Levees Maintenance Subventions Program, Delta Plan development).

In addition, the State is sensitive to the potential effects that upstream actions may have on the Delta and is developing more detailed policies to minimize and mitigate potential redirected hydraulic impacts. The results of preliminary systemwide evaluations indicate that implementing the SSIA as a whole would not result in significant adverse hydraulic impacts on the Delta (see Attachment 8C in Appendix A, "Central Valley Flood Protection Plan"). However, post-adoption implementation actions and studies to refine the SSIA will involve conducting more detailed reach- and site-specific studies, evaluating any potential temporary downstream impacts caused by the sequencing of SSIA implementation, and providing mitigation.

The issue of potentially redirecting hydraulic impacts is also addressed in the DPEIR under Impact HYD-2 (NTMA), Impact HYD-4 (NTMA), Impact HYD-2 (LTMA), and Impact HYD-4 (LTMA) in Section 3.13, "Hydrology." As indicated in these impact discussions, any project proponent implementing a project consistent with the SSIA that would affect flood stage elevations would need to obtain various applicable permits before project implementation (such as Section 408 and 208.10 authorizations from USACE and encroachment permits from the Board). The project proponent would need to analyze the potential for the project to locally impede flow or transfer flood risk by causing changes in river velocity, stage, or cross section. Projects would not be authorized if changes in water surface elevation, and thus flooding potential, would increase above the maximum allowable rise set by these agencies. If the design of a project would result in an unacceptable increase in flooding potential, a project redesign or other mitigation would be required to meet agency standards before the project could be authorized and implemented. For additional details, see Master Response 11.

T_AR3-23

The comment states that commenter's organization is spending time and resources to understand the plan. This comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_AR3-24

The comment clarifies that the commenter is commenting only on behalf of the American Rivers organization. This comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_AR3-25

The commenter, through an interaction with Board member MacDonald, expresses a desire for more detail to be included in the CVFPP, such as an existing SAFCA report on the Yolo Bypass. The commenter also expresses a concern that the Folsom Joint Federal Projects should be included as part of the CVFPP and not part of the baseline.

The comment suggests that it is inconsistent for the JFPs at Folsom to be accounted in the budget for the SSIA (i.e., included as a cost of the program), while at the same time being included in the No-Project Alternative. However, this is appropriate because of the differing purposes of the two analyses. Because costs for the JFP will be incurred in the future, it will be appropriate to account for them at that time as part of the SSIA. However, the No-Project Alternative must be based on a reasonable forecast of future conditions, which includes the JFP (CEQA Guidelines Section 15126.6(e)).

The comment also suggests that hydraulic benefits from the JFP should be accounted for in connection with implementation of other portions of the SSIA, such as an expansion of the Yolo Bypass, thus making the project "self-mitigating." Presumably this comment is intended to refer to the Board's future evaluation of future activities, such as bypass expansions, to ensure adequate hydraulic performance. However, the Board's future engineering and technical evaluations will be based on standardized procedures described in the Title 23 regulations, which will determine how those evaluations are performed. Moreover, whether these evaluations (without or without consideration of benefits from the JFP) will have any effect on the environment is speculative at this time.

The comment frames these suggestions in terms of the appropriate "baseline." However, the base case for financial planning purposes, the No-Project Alternative, and the environmental baseline under CEQA are not necessarily the same. In fact, Section 15126.6 of the CEQA Guidelines expressly states, "The no project alternative analysis is not the baseline for determining whether the proposed project's environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline."

CEQA analysis typically compares project conditions to the existing environmental setting at the time the NOP for an EIR is issued, by analyzing what are commonly referred to as "existing plus project" conditions. Under Section 15125(a) of the CEQA Guidelines, the physical environmental conditions in the vicinity of the project at the time the NOP is published "will *normally* constitute the baseline physical conditions by which a lead agency determines whether an impact is significant" (emphasis added).

However, the CEQA Guidelines allow flexibility to utilize a different approach. The use of the term "normally" provides the lead agency with discretion to deviate from the standard time-of-review baseline.[1] As the California Supreme Court recently explained, "[n]either CEQA nor the CEQA Guidelines mandates a uniform, inflexible rule for determination of the existing conditions baseline."[2]

The following text in Section 3.1 of the DPEIR describes the establishment of environmental baseline for analysis:

> The "Environmental Setting" section describes the physical environmental conditions assumed in this PEIR for analyzing the effects of the CVFPP. The environmental setting generally consists of the existing physical environment as of October 27, 2010, the date when DWR published the notice of preparation (NOP) to prepare an EIR for the CVFPP and filed it with the State Clearinghouse. Under CEQA, baseline environmental conditions are typically set at the time the NOP is published (CEQA Guidelines, Section 15125(a)). However, baseline information may describe conditions at a different time, such as if the most recent data available are from a year before the NOP was published.

In each topical section of the DPEIR, the environmental baseline is set based on the best available information describing the existing conditions

[1] *See Fat v. County of Sacramento*, 97 Cal. App. 4th 1270, 1278 (2002).
[2] *Cmtys. for a Better Env't v. S. Coast Air Quality Mgmt. Dist.*, 48 Cal. 4th 310, 328 (2010).

at the time that the NOP was published, as well as practical considerations related to the environmental topic. Water resource issues affected by hydrology typically are considered in light of a record of flows that vary over a historical period. Biological baselines are set based on the best available information from data sets such as the CNDDB, which in turn are made up of data collected from studies over a large geography and over a period of many years.

The comment is in reference to the CVFPP and does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR; however, a response is provided here. Regarding the level of detail in the CVFPP, see response to comment T_AR3-11 and Master Response 9, for information about the level of detail included in the CVFPP and the process for developing additional detail in the future.

T_AR4-01 MR. CAIN: Thank you. My name is John Cain. I'm with American Rivers. We're a national conservation organization. Our mission is to protect and restore rivers for fish, wildlife, and people. I'm -- I've said often in public meetings, and I'll say it again, flood management is an important part of the work we do across the country. And part of our culture is recognizing that when it comes to flood management, public safety has to be the number one priority. And we believe that in this system as well.

T_AR4-02 Although I was at the meeting yesterday where I spoke too long, I'll try to be brief. And I'm mostly here today just to hear the concerns of agricultural and acknowledge that American Rivers thinks agricultural is an important part of the solution, not the problem. And that protecting and conserving the agricultural economy is a big part of what we need to do here. In fact, the problem is actually losing land from agricultural to urban areas on deep floodplains that should not be developed.

In short, we want to work with agricultural. We

want to be a partner, not an adversary. And we think that as partners, we can achieve far more than going at it alone.

T_AR4-03 We've had a successful partnership -- American Rivers has had a successful partnership in the south Delta and San Joaquin County working with the local South Delta Water District, and a developer, and some agricultural landowners to develop a new flood bypass there. And the way that would worked is it would route water out of the main stem San Joaquin River, so it doesn't have to flow by the urbanizing areas of Lathrop and Stockton, and it would route it into an undeveloped where there's enough conveyance capacity.

We've had a lot of success working with partners there and we'd like to do the same here. We think that we -- I've heard other people say that bypasses -- if you're going to look at bypasses, you need to start at the bottom end of the system, we couldn't agree more with that. There's a lot of logic to that.

T_AR4-04 Going forward, we're going to have to figure out how to actually make those general ideas more specific and how to get local input. And so I'd recommend much more of a local planning model where the State's role is to establish clear goals and objectives for how the different regions will sum up into a statewide plan, and then

empower the locals, and I want to help the locals, develop a good plan that has a good prospect of getting funding and permitting.

Thank you very much.

PRESIDENT EDGAR: Thank you, John.

American Rivers, John Cain (Public Hearing, April 5, 2012)

Response

T_AR4-01

The comment states the commenter's professional affiliation and the priorities of the commenter's organization. The comment does not raise specific questions or information regarding CVFPP or the adequacy of the environmental analysis provided in the DPEIR. The comment is noted.

T_AR4-02

The comment states that the commenter's organization understands the importance of the agricultural economy, desires to partner with agricultural interests, and identifies as a problem the conversion of agricultural land to development in deep floodplains. This comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR. The comment is noted.

T_AR4-03

The comment describes the commenter's organization's partnerships in the south Delta and San Joaquin County working with the local South Delta Water District, a developer, and agricultural landowners to develop a new flood bypass there. The comment further states that consideration of a bypass should start at the bottom end of the system. As stated in Master Response 1, expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass. The location of the facility within the overall SPFC system would also be considered, whether at the downstream end of the system or elsewhere.

T_AR4-04

The comment recommends a local planning model where the State's role is to establish clear goals and objectives for how the different regions will sum up into a statewide plan and then help the locals, develop a good plan that has a good prospect of getting funding and permitting.

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form “alternatives” for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

T_AR5-01

MR. TOMPKINS: Hi, there, Mr. President and members of the Board. Thank you very much for giving me the time to speak today.

I'm Mark Tompkins. I'm here on behalf of American Rivers today. I'm a consulting engineer and geomorphologist and stream ecologist. And actually my work with American Rivers has been part of a Switzer Foundation Fellowship where I've been working closely with them for the last two years providing technical input on

the development of the flood plan.

I think I want to just take a couple of seconds to describe the Switzer Foundation and this process we've been in with the American Rivers for the last couple of years because I think it gives could context for the two statements which I'll make which are related to the multiple benefit aspects of the Plan.

And so the Switzer Foundation was actually established about 30 years ago by the folks that started Dayglow Paint. And it was in response to their dealing with natural resources management issues where they were trying to do new things. They didn't -- they wanted to produce their paint in a responsible manner. But there were regulations, you know, managing how they did that and how they dealt with the products and the wastes that they produced. There wasn't a good way yet though for them to implement all of those -- you know, to operate and satisfy all those regulations and objectives.

And so they through this foundation have funded lots of different work, but in this case flood protection work where we've moved into this era of multiple objectives with the flood control project. And as others have said, while the first goal certainly is and should be public safety, there are other important objectives of the flood plan, namely, the fact that it is the footprint and

provides habitat for the species in the Central Valley.

So with that, I've got two comments:

Number one is really speaking to the Focus Point 5A about the vision statement. I think because this is a very complex multiple objective plan, certainly a clear vision statement, something that we could all communicate to our families who aren't embroiled in this kind of thing I think is going to be really instrumental in gaining support for the Plan and then being able to successfully implement the Plan going forward.

And so what that vision statement should look like -- well, number one, it should include objectives - flood risk reduction objectives, conservation objectives, and then the range of supporting objectives that are described in the Plan in a concise way. And one way you could do that is to have a problem statement, conceptual solutions for those problems, and the goals that you would have to achieve in order to meet those -- to satisfy those conceptual solutions and then the benefits of achieving those goals. So that's to 5A.

T_AR5-02 And then a more specific comment is to Focus Point 5B, which is on the topic of multi-benefit projects. And based on my involvement -- so I've been involved in this process going back to 2009 when the environmental stewardship working group was put into place to develop

some of the early goals and objectives for the environmental aspects of the Plan, through the regional work groups that went from 2010 to 2011, and then a lot of the other steps in the process along the way.

I first want to say, you know, very well done to the team and the Department for putting this together and to keeping the environmental objectives, which, you know, for a flood plan are, you know, not the first tier objective, but for keeping them in the radar the entire way through. I think it actually is sort of a testament to and shows the importance and how we're all really thinking about these projects as multi-benefits projects now.

Just one point to that though. While the conservation strategy that is in the Plan and the conservation framework that are in the Plan are a good start, I think -- you know, this is still a challenge we're all facing in this field of natural resource management flood protection -- is that there's still more of a mitigation kind of approach to the conservation aspects of the Plan.

And so we would suggest an effort to fully integrate the multiple objectives now, because as you get further into implementation, it becomes harder and harder to really truly address multiple objectives, you know, as

opposed to achieving the objective with the sub-objectives more as constraints. And so as you get more and more into implementation, we suggest that you certainly focus on making those multi-objectives an integral part of the plan.

And just a specific example of -- you know, we actually as part of the Switzer Foundation work with American Rivers have looked at multiple benefits - and I think it's come up in some of the other comments - of multiple benefits of flood reduction -- flood risk reduction and water supply improvement and habitat improvement.

Specifically we've looked at the example in the south Delta, primarily around Paradise Cut bypass expansion, where the analyses that we've run, and we're still in the process of finalizing our report on this work, but looking at different configurations -- and we're not the first to look at different configurations of the Paradise Cut. Certainly this has been done before.

But we are the first that have really looked at it with the objective of identifying multiple benefits, looking at quantifying the ecosystem benefits, looking at quantifying the potential water supply benefits and at the same time looking at quantifying the flood control benefits. And we are seeing the potential to decrease

flood stage in the San Joaquin more than a foot, as others have shown; to increase floodplain habitat in a number of years and across an area that based on the literature - and there is quite a bit of literature on floodplain habitat and its importance to the species in the Central Valley - that it would significantly increase that habitat to improve the condition of those species.

T_AR5-03 And then finally that if we assume that there is a place to put some of the water -- put some of the water supply that you could actually move downstream through an expanded corridor, and things like the reoperation studies that others have alluded to are looking at places to put that water, conjunctive use and other kinds of approaches, that you could actually improve water supply by having an expanded flood control footprint.

So I think -- you know, multiple benefit projects are real and there is real potential there. And I think it's very important that we begin to integrate them as directly as we can into the Plan, because it does really get more and more difficult as you get into implementation and certain objectives are necessarily floating to the top above others.

So thank you very much for your time.

T_AR5-04 BOARD MEMBER COUNTRYMAN: Bill, I've got a question.

We've been getting quite a few comments as we hold these hearings that people want to know, is this a flood plan or is it a habitat plan?

And specifically about the cost, if you look at the cost increment between the flood control only plan and the joint plan, there's a tremendous increase in cost. And so I guess one thing I'm wondering, is there a cost sharing partner for that increment? In other words, are we going to expect the local entities to cost share that or is somebody else going to step forward?

MR. TOMPKINS: You know, I'm not sure I'm able to answer that question on the cost estimates.

BOARD MEMBER COUNTRYMAN: Just one of the things that I was thinking about, I mean if we have multiple partners, maybe we can find multiple, you know, ways to share the cost. Because it's going to be a real burden on the local folks to come up with their cost share.

MR. TOMPKINS: Are you thinking more the environmental or the water supply potential benefits from these kind --

BOARD MEMBER COUNTRYMAN: I was thinking environmental mainly, but -- because I think if it's mitigation, there's no need to find an additional cost sharing partner because you can say, "Well, that's mitigation for the existing project."

But if we're going to go, like you were suggesting, beyond that and say, no, this is going to be an integrated plan that has a feature beyond mitigation, so I'm just wondering who's going to pay for that, and is it going to be cost shared or not?

MR. TOMPKINS: We may be able to address some of that in the written comments that we suggest. So I think I'd probably better not speculate on that up here. I'm not prepared --

BOARD MEMBER COUNTRYMAN: That would be helpful, to give us some ideas about that. Thank.

MR. TOMPKINS: Okay. Thank you.

T_AR5-05 BOARD MEMBER RAMIREZ: Bill, just one quick comment that.

As an example, and to have equity for the Sacramento and the San Joaquin sides, there's probably two examples that are worth looking at. Maybe the staff can do this and come back and talk about it. I think there's not a program set up yet, but I can think of two good examples that address Joe's question. One of them's Hamilton City. And one of them was mentioned already today, and that's the San Joaquin River National Wildlife Refuge. Just because I know in both cases there were creative funding proposals and implementation that allowed both to go forward.

So without having said more than that, I think it's worth just having those provided to people as examples of ways that it has been done already. Not to say that it's a precedent, but at some point maybe it's worth thinking about how we would create a more formal structure for folks to be able to tap into that and then address, you know, Joe's question more directly.

PRESIDENT EDGAR: Okay. Jay, I guess you've got a note on that.

EXECUTIVE OFFICER PUNIA: Yes, we've got it.

American Rivers, Mark Tompkins (Public Hearing, April 9, 2012)

Response

T_AR5-01

The comment provides information on the commenter's qualifications and experience and work with the Switzer Foundation. This is introductory information and does not raise specific questions or information regarding the CVFPP or adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

The comment also discusses a suggested methodology for development of a vision statement, goals and objectives, and suggested content for these items. These same suggestions were provided in comments from American Rivers that were submitted in previous public hearings. See responses to comments T_AR2-07 and T_AR3-13 for responses to the suggestions in this comment.

T_AR5-02

The comment suggests that the CVFPP fully integrate the multiple objectives (multiple-benefits projects) at this stage of implementation. The Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction for the CVFPP to meet multiple objectives wherever feasible, as related to water supply and groundwater recharge, water supply and reservoir operations, integration of ecosystem improvements, and recreation. As stated in Master Response 7, the SSIA describes potential opportunities for integrating water supply benefits with proposed flood management actions, but it does not include specific project recommendations related to water supply because of the need for future site-specific proposals and analyses. During post-adoption activities (regional flood management planning and development of basin-wide feasibility studies), additional details will be developed, including specific water management features as part of multi-benefit projects, in collaboration with interested local and regional agencies and organizations.

Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important shaded riverine aquatic habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA

compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework.

For additional details, see Master Response 7.

T_AR5-03

The comment reiterates the main point of comment T_AR5-02. See response to comment T_AR5-02, above.

T_AR5-04

The comment references a conversation between Board Member Countryman and the commenter regarding potential costs and cost sharing opportunities for ecosystem benefit activities above and beyond those needed for mitigation of individual projects. The commenter states that he may address the issue in written comments provided by American Rivers. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_AR5-05

In the comment, Board Member Ramirez provides some examples of projects that answer some of Board Member Countryman's questions included in comment T_AR5-04. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_BELL1-0

MR. BELL: Good morning, President Edgar and Board members. Really appreciate the opportunity to talk with you this morning, and your efforts in protecting people.

You know flooding does not recognize political boundaries. And one of the concerns we have, of course, is that the weakest area can be that which actually does receive damage. And that's the concern we would have. We do appreciate that a systemwide approach is really a best plan looking at all aspects of this flood protection program. So we definitely appreciate the staff presentation this morning, especially that they were looking at thinking of all-weather access road protection, and also mitigation for improvements. I think the mitigation for improvements is really important.

T_BELL1-02

Bypasses. I think the bypass has been in operation for some time proved very successful. I think we've heard some comments this morning on ways to optimize, and I'll get into that a little bit later. But if we're putting in new bypasses that really form diversions, diversions without an adequate receiving system, can present some issues.

T_BELL1-03

Part of the planning we would like to see is really taking a look at the inflow, controlling the inflow. And I think some of the plan components of really

value there are trying to take some of that impact off the entire system. Also, improving the outflow at the lower end. The middle sections of the areas that if we just include those improvements could see some impacts. So some of the comments regarding this is definitely we do applaud that storage concept. And so one of the components that could be even looked at, we encourage consider the Sites Reservoir. There's an area that could be stored off the central system increasing flexibility.

T_BELL1-04

T_BELL1-05

The other is the further analysis and optimization of the existing bypass systems, before we dive into expanding new bypass systems. And that we've heard some comments about the impacts of increasing habitat. Well, if we're seeing more debris in the current systems, that would present a capacity issue.

T_BELL1-06

Develop the rural levee standards, another aspect we would like to be considering. You know, and that's something that may have even funding in the Prop 1E, so that could be an area to look at.

T_BELL1-07

And then given that this could be a 25-year ambitious plan, really look at -- and I know that earlier said that was not a funding part, but really when we think about addressing impacts or mitigating there will probably have to be some dedication to funds. And the rural areas now exposed as the weaker links really are the areas that

need that consideration in our view.

T_BELL1-08 One of the concerns is the transitory storage envisioned as 200,000 acre of feet. But not really fully understood is the depth of impoundment. And if that were just one foot deep, for example, we're talking about an impacted area directly of over 300 square miles. And if you think in terms of not knowing exactly how those areas would fall out, let's just suppose you had a corridor five miles wide, that would be basically 60 miles long of impact. So you can see that would be quite an impact.

T_BELL1-09 These kinds of things should really be looked at as a systemwide approach. We sure approve, and we applaud the partnership role mentioned earlier, and would like to be a partner in that.

Thank you very much.

PRESIDENT EDGAR: Thank you, sir.

James Bell, County of Colusa (Public Hearing, April 6, 2012)

Response

T_BELL1-01

The comment states appreciation that a systemwide approach is presented in the plan. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_BELL1-02

As stated in Master Response 1, expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass. For additional details, see Master Response 1.

T_BELL1-03

The comment states that controlling inflow and improving outflow could reduce impacts on the entire system. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_BELL1-04

As stated in Master Response 10, storage elements ultimately retained in the SSIA are based on preliminary systemwide analyses conducted for the 2012 CVFPP, legislative direction for the CVFPP, and the findings of prior and ongoing studies. Among those studies are ongoing surface storage

investigations and prior local, State, and federal studies such as the Shasta Lake Water Resources Investigation, North-of-the-Delta Offstream Storage (Sites Reservoir), In-Delta Storage Program, Los Vaqueros Reservoir Expansion, and Upper San Joaquin River Basin Storage Investigation (Temperance Flat Reservoir).

Ongoing investigations are being conducted to determine the feasibility of surface storage and consider potential environmental effects. The analyses included in these surface-storage studies are more detailed than those conducted at a systemwide scale for the 2012 CVFPP. Consequently, these studies are developing more comprehensive information about the potential costs and benefits of site-specific increases in flood storage.

Some specific examples of ongoing multipurpose surface-storage investigations and related investigations that are examining the feasibility of adding new flood storage are listed below.

- **Upper San Joaquin River Basin Storage Investigation**—An evaluation of increasing storage in Millerton Reservoir or building a new multipurpose reservoir upstream, such as Temperance Flat Reservoir. The current formulation includes an additional storage allocation for flood management.

- **North-of-Delta Offstream Storage Investigation**—An evaluation of building a new offstream reservoir in the Sacramento River Basin west of the Sacramento River, also known as Sites Reservoir. Flood management benefits may be possible by coordinating storage operations with other multipurpose reservoirs, such as Shasta Dam and Reservoir.

- **Shasta Lake Water Resources Investigation**—An evaluation of raising Shasta Dam for multiple purposes. The formulation considered an additional allocation for flood storage as well as operational changes, but these options are not being carried forward.

- **DWR System Reoperation Program**—An evaluation of pursuing reservoir reoperation strategies at a systemwide scale to improve water supply reliability, reduce flood hazards, and protect and restore the ecosystem.

For additional details, see Master Response 10.

T_BELL1-05

As stated in Master Response 6, improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at

existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures). For additional details, see Master Response 6.

If a place-based project would be defined and pursued as part of the proposed program, and if the CEQA lead agency would be subject to the authority of local jurisdictions, the applicable county and city policies and ordinances would be addressed in a project-level CEQA document as necessary. Planting of vegetation in the floodway may not be authorized by the Board, USACE, or other agencies if the vegetation would impede floodflows sufficiently that a rise in water surface elevation would cause a significant increase in risk to public safety.

In the DPEIR, Mitigation Measure BIO-A-2b (NTMA) in Section 3.5, "Biological Resources—Aquatic," which calls for planting of riparian vegetation on the water side of levees, states:

> Any mitigation plantings in the floodway will not be permitted if they would result in substantial increases in flood stage elevations, or alter flows in a manner that would have a substantial adverse effect on the opposite bank.

This language, or language with similar content, is included in various locations in the DPEIR where creating habitat in the floodway is considered.

T_BELL1-06

As stated in Master Response 4, the CVFPP does not include levee design criteria for rural areas, but recognizes that the urban levee design criteria are not always practical or affordable for protecting rural areas. DWR supports future development and implementation of rural levee repair criteria in coordination with local and regional flood management agencies. For additional details, see Master Response 4.

The comment requests that a particular item, "an engineering based rural level standard," be included in the CVFPP. DWR currently is working with local maintaining agencies to draft guidelines for nonurban levee repair criteria. Suggestions may be presented during various elements of future implementation of the CVFPP, as described in Master Response 14; however, no change to the current version of the CVFPP was made.

T_BELL1-07

The comment suggests dedicating funds to rural areas. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_BELL1-08

As stated in Master Response 1, the Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities.

The PEIR recognizes that converting current land uses (particularly agricultural uses) to bypass and related uses (such as habitat and recreation) would result in potentially significant and unavoidable impacts, particularly on agriculture, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 1.

T_BELL1-09

The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does

the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_BERRIER1-0

MS. BERRIER: Thank you for allowing me to speak here today. My name is Yana Berrier. I'm an attorney, but today here I speak as a homeowner -- I'm sorry, I'm kind of emotional -- business owner, and on behalf of my family and my neighbors.

I'm usually not emotional like this. I'm a lawyer and I deal with legal issues, and I don't deal with people's emotions. But I found out about possibility of including our properties there and my neighbors' in that area and flooding it, creating a habitat. I found out last Friday and this is devastating.

I have a letter here that was signed by community members, my neighbors, and I'm going to submit it when I'm done.

Last week, I -- no, it was yesterday actually -- I attended the meeting of the Board of Supervisors in Sutter County. And what I found out is that there has been no engineering justification for this particular levee. Look at it. It's highlighted in yellow.

There will be devastating impact on agriculture. Those are homes and also farm land. There will be severe impact on tax revenues and jobs. And also I found out that doesn't really help in flood protection. This is basically done for habitat.

So if you only look at these factors, I would ask you not to include this as a part of the plan. I also would add that the cost of condemning these lands will be very large. The litigation will be enormous, I predict that. Those are one of -- those are very fertile soils, one of the most fertile soil that we can find in California. And we're only talking about four miles of levee there. So this is not for flood protection, this is for habitat. Do we really need it?

I want to focus on human impact. There have been lots of studies done, different impacts, what about impact on human lives?

T_BERRIER1-02 Since last Friday, I have been meeting my neighbors, and I can tell you that they are devastated. I used to live in Sacramento. And until I moved to the country, I never really knew what it means to love your land. The feelings I have when I see the trees that grow that I planted, I can only compare with the joy I see -- with the joy I have when I see my children grow. And I'm just a newcomer. I found home there.

There's some people who lived in that area for a hundred years, over a hundred years. They have farms there. They have memories, emotions, attachments. You can't compensate it with just compensation that's provided by our Fifth Amendment. And if you balance that against habitat, human emotions and attachments and lives should outweigh any habitat.

I met some very interesting people. I met a gentleman he was on a tractor. He was listening there. He barely spoke english. There was an interpreter fortunately. And he was devastated. He works day and night on his orchard. I see him in hot sun on his tractor. I also met a Hispanic couple. They live down the street in a very modest home. They've worked all their life for the farm, for that land, and now it's going to become a habitat.

If you tell me that it's necessary to sacrifice this tiny community for the benefit of protecting people from the floods, save Sacramento, save Natomas. I'm not an engineer. I don't know how it all works. That's fine, but not for habitat.

T_BERRIER1-03 Even though preserving lands is a part of the plan that was adopted in 2008, I believe that they should be balancing process to see what is really important here. We reclaimed those lands. I didn't. You know, I'm an

immigrant. But I know that when people came to this country, they reclaimed those lands from wilderness, and worked them. And we shouldn't give them back. We should preserve what we have and there are other ways of preserving and maintaining the wildlife.

T_BERRIER1-04 As a lawyer, I want to say that once you adopt the plan, and you attach these little maps showing property, as planned to become a habitat, even though it may not happen for 10 or 15 years, the values of the property went down drastically, right now. Not this second, but once you adopt the plan.

Let's say somebody wants to sell. I met a couple. They're elderly people. They farmed all their life, and they're tired. They want to sell. They want to move closer to their grandchildren. They're not going to sell really, because as sellers they're obligated to disclose all facts materially affecting the value of the property.

And if they don't, they will be sued. So they lost property value. Farmers don't want to plant. It will be difficult to even borrow money, to enter into a long-term lease. Everything will be affected.

T_BERRIER1-05 I also want to say that the lack of notice is appalling. Perhaps I'm not saying it in the right forum here. It's not your fault. I read the Act that was

adopted in 2008, and it only says that there should be a couple of -- no less than two public meetings. That's all.

There's no notice to the affected landowners to prepare to do some research to read that. I basically stopped my business, and I -- you know, in the last several days I was reading all these documents and it's difficult. I was able to read the Central Valley Flood Protection Act, that's fine, and the eminent domain laws and all this other legal stuff, but this is very complicated. So there's no time to really address these issues for laypeople who are not engineers, like myself.

Again, that might not be the right place to talk about notice. That will be addressed in another forum, I'm sure. And even though the State law says no, no, this is necessary. Fortunately, we have federal law that says no there's an opportunity to be heard. So I brought it up to the Sutter County counsel yesterday to see if they can do something, and bring an action against the State.

T_BERRIER1-06 I want to say also -- actually, I want to conclude it by saying that 22 years ago I came from the Soviet Union, the country where individual rights were not valued, individual lives were not valued. I came to this country because I thought that here everybody is important, every single person. Don't look at it in those

numbers in those phrases, they mean nothing. Look at it from the standpoint that it's going to affect this family, this gentleman who spoke before me here, who has a farm that's going to be wiped.

And I ask you as a State agency, as our government in which we trust to take into consideration human aspect in every single decision, and every single stretch of the levee, and this place that I'm talking, my place, my neighbor's. It's unnecessary. You can't possibly justify wiping us out for habitat.

T_BERRIER1-07 I also want to say you were commenting that I should -- we should suggest some solutions. I didn't have time to think what we can do for habitat in that area, but I will tell you when I moved into that area, my husband and I planted 200 redwood trees. We planted a fruit orchard. We have thousands of birds. Nothing was there before. We have deer. We have mountain lyon. We have rabbits.

There is a neighbor of mine, he actually dug a pool -- it's not a pool. It's like a lake. He has fish, ducks. I saw another piece of property they have deer. They have all kinds of animals. It is already a habitat. And there are already laws in effect protecting it. For example, there are some restrictions on parcel split, zoning. You can't build a house. You can't build a

subdivision there. So it's already in place. And please don't ruin our lives for the sake of habitat.

Thank you.

PRESIDENT EDGAR: Thank you very much.

Yana Berrier (Public Hearing, April 11, 2012)

Response

T_BERRIER1-01

As stated in Master Response 2, the CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed

land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable.

In addition to expansion of the bypass system, levee reconstruction, and other elements, the SSIA includes State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans.

The PEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

T_BERRIER1-02

The comment states that land conversion of a small community for flood protection is fine, but not for habitat. This comment raises similar concerns as the previous comment, T_Berrier1-01. See response to comment T_Berrier1-01, above.

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood

protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework.

The commenter states an opinion but provides no supporting documentation of the concern raised, nor does the commenter provide data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts to support his comment. The comment is noted.

T_BERRIER1-03

The comment states that lands previously converted from wilderness should be preserved and other ways of maintaining wildlife should be considered. The commenter states an opinion but provides no supporting documentation of the concern raised, nor does the commenter provide data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts to support his comment. The comment is noted.

T_BERRIER1-04

See response to comment T_Berrier1-01, above. As stated in Master Response 2, the DPEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has

adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments.

T_BERRIER1-05

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP. Phase 1 of the public engagement planning process focused on identifying problems and needs and crafting specific goals for the CVFPP. A variety of regional and topic-based work groups formed during this phase. Phase 2 focused on identifying individual actions that could be taken to achieve the CVFPP goals, and engaged stakeholders through continued regional and topic-based work groups and public workshops.

After Phase 2, stakeholders indicated that they preferred to review more developed materials and information before continuing with intense working meetings. With that understanding, DWR focused its efforts on content development (considering previously provided input and ongoing analyses) and developed a cohesive working draft document for stakeholder review in fall 2011. Outreach efforts included e-mail communications and updates, workshops, webinar briefings, and meetings with individuals and agencies. Work group members were also given an opportunity to review and comment on a working draft of the CVFPP. However, with a commitment to complete a public draft CVFPP within the legislated time frame, the degree of engagement provided in Phases 1 and 2 was not feasible for Phases 3 and 4.

The Board provided various opportunities for members of the public and agencies to comment on the public draft CVFPP, released in December 2011. Hearings were held in 2012 on April 5 (Sacramento), April 6 (Marysville), April 9 (Stockton), and April 11 (Woodland), and public comments were heard and discussed at both regular and special Board

meetings. DWR also accepted comments on the DPEIR, which was released in early March 2012. More information on the Board's process for public review and plan adoption can be found on its Web site, http://www.cvfpb.ca.gov. For additional details, see Master Response 13.

T_BERRIER1-06

See response to comment T_Berrier1-01, above.

T_BERRIER1-07

See response to comment T_Berrier1-01, above. The DPEIR identifies the biological resources value provided by agricultural lands. For example, Section 3.6, "Biological Resources—Terrestrial," provides a description of the potential wildlife habitat functions of agricultural lands, including the following statement:

> The value of agricultural habitat for sensitive and common wildlife species varies greatly among crop types and agricultural practices. Rice fields can provide relatively high-quality agricultural habitat. Seasonal flooding creates surrogate wetlands that can be exploited by a variety of resident and migratory birds, and dry rice fields can attract rodents and their predators (e.g., raptors). Flooded rice fields and irrigation canals also provide important habitat for the giant garter snake, a sensitive species that, like waterfowl and shorebirds, has had its preferred wetland habitat greatly reduced and now uses rice fields as surrogate habitat.

T_BROCKER1

T_BROCKER1-01

MS. BROCKER: Thank you. It must be hard sitting here all day listening to these comments, but I want to thank you for your attention to a matter that I personally think is very important to agriculture and to myself as a farmer.

My name is Tara Brocker. I live in South Sutter County. I live in the town of Nicolaus, at the bottom of the basin at Verona, which is the confluence of the Sacramento and Feather Rivers. It's also directly north of the SAFCA Levee Improvement Project, so I've had an opportunity to see what some of the levee improvement projects do look like.

T_BROCKER1-02

But I'm here today to explain why I can't support this plan. I think the number one reason is that the agricultural community and rural communities have not had an opportunity to be informed about the plan, haven't had an opportunity to participate in the development of the plan, and, quite frankly, I think there's a large number

of people, such as the gentleman before myself, who just do not have any information about what this plan is proposing, and they're going to be significantly impacted.

T_BROCKER1-03

The second reason is because I don't believe that ecosystem restoration has any place in flood protection. I feel that a flood protection plan should be designed to protect life and property. And I think all you have to do is look at the existing bypass systems that we have, and you can see how that habitat and vegetation have caused a negative impact to the system functioning at full capacity.

I think it's more important that we spend the time to focus on the system that we have, improving those flows, improving those systems by removing the excess vegetation, instead of creating a larger system, and then going ahead and introducing more habitat in that system.

T_BROCKER1-04

The third reason I feel that there's a problem with this plan, is because there are not any assurances for rural agricultural communities. We should not be sacrificed for the greater good. We have a right to receive equal treatment. Eminent domain should not be used as a result of lack of ability or desire to improve our levee systems.

T_BROCKER1-05

I stand before you today to say we desperately need an improved flood protection in rural California, but

T_BROCKER1-06

I don't believe this plan is the solution. I feel that this plan is flawed, and I'm disappointed by how much money has been spent to develop a plan that did not adequately include the major stakeholders, which I believe are farmers and rural America, in the process.

So just to recap, the three reasons why I can't support the plan today is because I don't believe agriculture got to participate in the process, I don't believe ecosystem restoration should be included in flood protection, and I believe that agriculture should not be the relief valve for flood protection in urban areas.

Thank you very much for your time and for listening to my concerns.

PRESIDENT CARTER: Thank you, Ms. Brocker.

Tara Brocker, Nicolaus, California (Public Hearing, February 24, 2012)

Response

T_BROCKER1-01

The comment states the location of the commenter's residence. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_BROCKER1-02

The comment states that community members have not had an opportunity to be informed of or participate in development of the plan. As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

Phase 1 of the public engagement planning process focused on identifying problems and needs and crafting specific goals for the CVFPP. A variety of regional and topic-based work groups formed during this phase. Phase 2 focused on identifying individual actions that could be taken to achieve the CVFPP goals, and engaged stakeholders through continued regional and topic-based work groups and public workshops.

After Phase 2, stakeholders indicated that they preferred to review more developed materials and information before continuing with intense working meetings. With that understanding, DWR focused its efforts on content development (considering previously provided input and ongoing analyses) and developed a cohesive working draft document for stakeholder review in fall 2011. Outreach efforts included e-mail

communications and updates, workshops, webinar briefings, and meetings with individuals and agencies. Work group members were also given an opportunity to review and comment on a working draft of the CVFPP. However, with a commitment to complete a public draft CVFPP within the legislated time frame, the degree of engagement provided in Phases 1 and 2 was not feasible for Phases 3 and 4.

The Board provided various opportunities for members of the public and agencies to comment on the public draft CVFPP, released in December 2011. Hearings were held in 2012 on April 5 (Sacramento), April 6 (Marysville), April 9 (Stockton), and April 11 (Woodland), and public comments were heard and discussed at both regular and special Board meetings. DWR also accepted comments on the DPEIR, which was released in early March 2012. More information on the Board's process for public review and plan adoption can be found on its Web site, http://www.cvfpb.ca.gov. For additional details, see Master Response 13.

T_BROCKER1-03

The comment states that ecosystem restoration has no place in flood protection and improving the maintenance of the existing system by removing excess vegetation should be the priority. As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)). For additional details, see Master Response 7.

Furthermore, as stated in Master Response 6, improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures). For additional details, see Master Response 6.

If a place-based project would be defined and pursued as part of the proposed program, and if the CEQA lead agency would be subject to the authority of local jurisdictions, the applicable county and city policies and ordinances would be addressed in a project-level CEQA document as necessary. Planting of vegetation in the floodway may not be authorized by the Board, USACE, or other agencies if the vegetation would impede floodflows sufficiently that a rise in water surface elevation would cause a significant increase in risk to public safety.

In the DPEIR, Mitigation Measure BIO-A-2b (NTMA) in Section 3.5, "Biological Resources—Aquatic," which calls for planting of riparian vegetation on the water side of levees, states:

> Any mitigation plantings in the floodway will not be permitted if they would result in substantial increases in flood stage elevations, or alter flows in a manner that would have a substantial adverse effect on the opposite bank.

This language, or language with similar content, is included in various locations in the DPEIR where creating habitat in the floodway is considered.

T_BROCKER1-04

The comment states that rural agricultural communities should not be sacrificed, and eminent domain should not be used instead of improvements to the levee system. As stated in Master Response 2, some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA would comply with State and federal laws, as applicable. In addition to expansion of the bypass system, levee reconstruction, and other elements, the SSIA includes State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans. These easements would be used to preserve agriculture and prevent urban development in current agricultural areas, discouraging conversion to land uses that would increase flood risks within floodplains protected by SPFC facilities.

The PEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has

adequately addressed the environmental issues at a program level and no new significant environmental topic or information was raised in the comments. For additional details, see Master Response 2.

As stated in Master Response 3, based on initial planning-level cost estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to provide flood stage reduction benefits to many of the areas in the system, including small communities and rural-agricultural areas.

In addition, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and 3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed.

The State supports the continued viability of small communities to preserve cultural and historical continuity and provide important social, economic, and public services to rural populations and agricultural enterprises. The SSIA describes State investment priorities in small community flood protection while avoiding the inducement of imprudent growth within SPFC floodplains. Under the SSIA, many small communities would receive increased flood protection benefits as a result of system improvements focused on protecting nearby urban areas. For example, levee improvements may be constructed upstream from an urban area to prevent a scenario in which floodwaters from an upstream levee breach would flow down gradient into the urban area. The upstream levee improvement that may extend into rural locations would therefore also reduce flood risks for the rural area immediately adjacent to the improved levee segment. Conditions in small communities would also be evaluated on a case-by-case basis to identify appropriate State investments in additional structural and/or nonstructural actions (e.g., levees, flood walls, floodproofing, or relocations).

The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas outside small communities. These actions are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development or increasing flood risks within lands protected by the SPFC. No target minimum level of flood protection has been established for prioritizing State investments in rural-agricultural areas (see CWC Section 9603). However, the SSIA proposes (1) projects that maintain levee crown elevations for rural SPFC levees and provide all-weather access roads for inspection and floodfighting; (2) economically feasible projects that resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs; (3) system elements (e.g., bypass expansion) that lower peak flood stages within some rural channels; and (4) actions to manage residual flood risks. For additional details, see Master Response 3.

T_BROCKER1-05

See response to comment T_Brocker1-02, above. As stated in Master Response 4, the SSIA identifies minimum flood protection targets when State investments are made to protect public safety in urban areas and small communities (protection from 200- and 100-year flood events, respectively). However, the plan acknowledges that State investments alone cannot achieve these targets in all communities without leveraging federal and local funds, and encourages higher levels of flood protection whenever feasible. The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas, and that are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development in floodplains. The SSIA does not target a minimum level of flood protection for State investments in rural-agricultural areas outside of the small communities because conditions and local interests differ from one area to another, and additional regional planning efforts are needed to formulate solutions that meet community needs and State investment priorities. However, the SSIA includes various options for addressing flood risks in rural-agricultural areas, including the following:

- Projects to maintain levee crown elevations for existing rural SPFC levees and provide all-weather access roads for inspection and floodfighting

- Economically feasible projects to resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs

- System elements (such as new and expanded bypasses) that would lower water surface elevations within some rural and urban channels

All areas would benefit from State investments in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery.

T_BROCKER1-06

See responses to comments T_Brocker1-02, T_Brocker1-03, and T_Brocker1-04, above.

T_BROCKER2-01 MS. BROCKER: This time I'd like to speak just as a landowner, rice farmer, in South Sutter County.

We recently lost about 300 acres of our farm ground for mitigation to The Conservancy for urban development in the Sacramento area. And I am concerned that we also run the risk of losing a significant portion of our ground to habitat and environmental impacts.

Agriculture seems to get a two-for-one ding. We not only lose ground every time urban areas expand, but we also are losing ground consistently on the environmental impacts to develop habitat. And I think that it's important to recognize that we have a limited resource and we're really being pulled in many directions.

And it would be nice if the Board and the plan could think out of the box and try to come up with ways to incorporate this habitat in a friendly manner with agricultural, rather than as a competing interest.

It's very difficult. We often get labeled as being environmentally unfriendly. And I think that that is a misconception. We care very deeply about the environment. We care very deeply about our ground. If we don't maintain our ground, we don't sustain our farms. So it would be refreshing to know that there was an opportunity in the future for willing landowners to incorporate more habitat in the existing agricultural areas, rather than continuing to compete for that limited resource.

T_BROCKER2-02

I think you would find with local input, there are a lot of good ideas out there on how to incorporate habitat and how to avoid this continued struggle for limited acreage in the valley.

T_BROCKER2-03

I also think it would be really good to mitigate those environmental impacts outside of the floodplain. I don't think that they -- at least as far as the trees and the vegetation go, I don't think they're a compatible use with what we're trying to achieve. And I think that we need to be very cautious when we do implement these habitat plans, that we recognize the need to protect the farmers that do not participate against encroachment of these species onto their ground. So we need to provide some sort of safe harbor or other types of arrangements that protect farmers from invasion of species or plants onto their property.

So it's a very complex issue, but I think if we can drive this from the local communities, and engage the farmers in the process, I think we might be able to come up with some refreshing new approaches on how to continue to recognize the environmental impacts, but not continue to have this competing nature that exists currently.

Thank you very much for your time.

T_BROCKER2-04

PRESIDENT EDGAR: Thank you, Ms. Brocker.

BOARD MEMBER COUNTRYMAN: Bill.

PRESIDENT EDGAR: Tara, there is a question.

BOARD MEMBER COUNTRYMAN: I found your comments very, very interesting. Could you gives like a couple of examples of how we could incorporate habitat in the existing farm operation, rather than say in the flood project?

MS. BROCKER: Well, I think, you know, every landowner is going to have probably input in how it would best work in their operation, but in our operation specifically, we have ground that isn't able to be utilized because of the way it's located on the property. It might be a corner parcel that we aren't able to farm or get water to. And we have small pieces of ground that could easily be developed to promote habitat.

There may be farmers that have very unproductive soil types and they would be willing to convert some of that ground towards habitat. There may be small setbacks along ditches, road easements, that we may be able to incorporate buffers for upland game bird, pheasants. You know, we don't need to strip spray maybe as much as we have in the past.

If there was compensation to participate in these programs, I think you would find that the farmers can be extremely creative in developing ways to do both.

BOARD MEMBER COUNTRYMAN: Thank you.

Tara Brocker, Nicolaus, California (Public Hearing, April 6, 2012)

Response

T_BROCKER2-01

The comment expresses concerns regarding agricultural conversion for habitat. As stated in Master Response 2, some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable. In addition to expansion of the bypass system, levee reconstruction, and other elements, the SSIA includes State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans. These easements would be used to preserve agriculture and prevent urban development in current agricultural areas, discouraging conversion to land uses that would increase flood risks within floodplains protected by SPFC facilities. For additional details, see Master Response 2.

T_BROCKER2-02

The comment states that local input could provide ideas on plan elements. As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, “Engagement Record,” in Appendix A, “Central Valley Flood Protection Plan.” The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of

management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP. For additional details, see Master Response 13.

T_BROCKER2-03

The comment expresses concerns about compatibility between habitat and agriculture and reiterates desire for public involvement.

The DPEIR identifies the biological resources value provided by of agricultural lands. For example, Section 3.6, "Biological Resources—Terrestrial," provides a description of the potential wildlife habitat functions of agricultural lands, including the following statement:

> The value of agricultural habitat for sensitive and common wildlife species varies greatly among crop types and agricultural practices. Rice fields can provide relatively high-quality agricultural habitat. Seasonal flooding creates surrogate wetlands that can be exploited by a variety of resident and migratory birds, and dry rice fields can attract rodents and their predators (e.g., raptors). Flooded rice fields and irrigation canals also provide important habitat for the giant garter snake, a sensitive species that, like waterfowl and shorebirds, has had its preferred wetland habitat greatly reduced and now uses rice fields as surrogate habitat.

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during

post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework.

Appendix E, "2012 Central Valley Flood Protection Plan Conservation Framework," provides a preview of a long-term Conservation Strategy that DWR is developing to support the 2017 CVFPP Update. The Conservation Framework focuses on promoting ecosystem functions and multi-benefit projects in the context of integrated flood management for near-term implementation actions and projects. The Conservation Framework provides an overview of the floodway ecosystem conditions and trends and key conservation goals that further clarify the CVFPP's ecosystem goal. For additional details, see Master Response 7.

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP. For additional details, see Master Response 13.

T_BROCKER2-04

The comment describes how habitat could be incorporated in an existing farming operation and suggests compensation for programs of that nature. As stated in Master Response 3, the SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. In addition, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources

that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and 3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed. The State supports the continued viability of small communities to preserve cultural and historical continuity and provide important social, economic, and public services to rural populations and agricultural enterprises. The SSIA describes State investment priorities in small community flood protection while avoiding the inducement of imprudent growth within SPFC floodplains. The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas outside small communities. These actions are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development or increasing flood risks within lands protected by the SPFC. For additional details, see Master Response 3.

The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_BSWA1

T_BSWA1-01

MR. SWANSON: My name is Roger Swanson, and I

represent the Butte Sink Waterfowl Association up in the Butte Sink.

T_BSWA1-02

And it came to our attention that one of the elements in the flood protection -- and I'm quoting from the Appeal Democrat from January 24 -- is quote, "...and the plan also suggests a new bypass northwest of Gridley from where the Feather River emerges below Oroville Dam, along what's now the Cherokee Canal and ending in the Butte Basin".

The Cherokee Canal comes right through the Wild Goose Duck Club, which I'm a member of and vice president of, and through much of -- or most of, and then into -- back into Butte Creek through the Butte Sink. And I just am trying to find out who is working on that element of the flood control. I would like to meet with them and try to understand what the plan might be, and see if we can't, as a stakeholder, get involved in it. That's the only thing I wanted to do. And I've called your agency, and nobody seems to know anything about this particular element of the plan.

T_BSWA1-03

PRESIDENT CARTER: Okay. Thank you very much for coming Mr. Swanson. With respect to questions on the plan, probably the first stop would be Ms. Nancy Moricz or Mr. Eric Butler or Mr. Punia here on the Board staff. And the best number to call them at would be 916.574.0609.

And on your way out, if you'd like to check with Ms. Moricz - Ms. Moricz, would you please raise your hand - and you can get direct contact information.

They can perhaps answer your questions or direct you to somebody within our organization or DWR to answer your questions.

MR. SWANSON: Okay. Thank you very much.

PRESIDENT CARTER: You're very welcome.

Butte Sink Waterfowl Association, Roger Swanson (Public Hearing, February 24, 2012)

Response

T_BSWA1-01

The comment states the commenter's professional affiliation. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_BSWA1-02

The comment raises questions regarding a bypass northwest of Gridley, where the Feather River emerges below Oroville Dam, along what is now the Cherokee Canal, and ending in the Butte Basin. As stated in Master Response 1, expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

T_BSWA1-03

The comment is a discussion between the Board and the commenter regarding a contact person for the commenter to contact to get questions about the plan answered. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CARTER1-01

MS. CARTER: Thank you, President Carter, Board members. I'm Colusa County Supervisor Denise Carter. Today, I would like to offer the following three areas of concern for the residents and businesses of Colusa county.

T_CARTER1-02

Number one, ag sustainability. Agriculture is critically important to the long-term economic viability of our county. As the plan points out, agriculture is a million dollar contributor to the California economy.

In our county, between the Cherokee Canal expansion, the weir lowerings, the lack of funding to upgrade rural levees, FEMA remapping and the resulting National Flood Insurance Program implications, it's going to be difficult for our producers to remain competitive.

T_CARTER1-03

Number two, small community funding guarantee. The City of Colusa along with the small communities of Grimes and Princeton have existed along the Sacramento River for over 150 years. These communities support our agricultural producers and have survived and thrived due to the understanding that the State Plan of Flood Control was providing protection.

The funding required to attain 100 year protection for these small communities should be born largely by the State and federal governments, and not be conditioned on again where economically feasible.

T_CARTER1-04

Number three, public outreach and involvement.

T_CARTER1-05

Colusa County opposes the Cherokee Canal expansion. As you've heard before, there was no public vetting of this idea nor discussion for our county the implications to the Butte Sink of nearly tripling the design capacity.

In conclusion, Colusa County and other rural areas are bearing the burden to provide 200-year protection to the urban areas. Assurances and funding for our rural county is very important to us. And we actually would love to work with you to hopefully revise this plan and make it work for all of us.

Thank you.

PRESIDENT CARTER: Thank you, Ms. Carter.

Denise Carter, Colusa County Supervisor (Public Hearing, February 24, 2012)

Response

T_CARTER1-01

The comment is an introductory statement and identifies the commenter's professional affiliation. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CARTER1-02

The comment raises concerns regarding impacts on agricultural sustainability. As stated in Master Response 3, these impacts generally are social and economic in nature, and CEQA does not require addressing them except to the extent that they relate to potentially significant adverse effects on the physical environment. Nonetheless, the responses shown below have been prepared to maximize responsiveness to public participation in the CVFPP.

The SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. In addition, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) in Section 3.3, "Agriculture and Forestry Resources," of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed.

The State supports the continued viability of small communities to preserve cultural and historical continuity and provide important social, economic, and public services to rural populations and agricultural enterprises. The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas outside small

communities. These actions are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development or increasing flood risks within lands protected by the SPFC. For additional details, see Master Response 3.

Regarding concerns about specific SSIA projects and activities, as stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals. The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable. For additional details, see Master Response 2.

T_CARTER1-03

The comment states that funding required to attain 100-year protection for small communities should be born largely by the State and federal governments, and not be conditioned where economically feasible. As stated in Master Response 3, based on initial planning-level cost estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to provide flood stage reduction benefits to many of the areas in the system, including small communities and rural-agricultural areas.

The State recognizes potential regional differences in the capacity to pay for flood system improvements and O&M. The CVFPP proposes working with rural interests to develop appropriate criteria for rural levee repairs to cost-effectively address known problems (see CVFPP Sections 3.4.1 and 4.1.4). Further, the plan proposes reviewing O&M roles and responsibilities for SPFC facilities and forming regional maintenance authorities, as appropriate, in the interest of improving maintenance efficiency and more equitably distributing system maintenance costs to beneficiaries. For example, DWR has developed cost-sharing guidelines to promote multi-objective projects and to provide additional financial support for economically disadvantaged areas (http://www.water.ca.gov/floodsafe/docs/Cost_Sharing_Formula_12-29-10_Final.pdf). For additional details, see Master Response 3.

As stated in Master Response 15, Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the

passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

T_CARTER1-04

The comment states that the Cherokee Canal expansion was not publicly vetted and it is opposed by Colusa County. As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP. For additional details, see Master Response 13.

As stated in Master Response 1, expansions of various bypasses are identified in the SSIA as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. For example, through bypass expansions, peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations,

ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

T_CARTER1-05

In regards to funding, this comment is similar to comment T_Carter1-03. See response to comment T_Carter1-03, above. In regards to the assertion that rural areas are "bearing the burden" of providing flood protection for urban areas, see responses to comments T_Carter1-02, T_Carter1-03, and T_Carter1-04 above.

T_CARTER2-01

COLUSA COUNTY SUPERVISOR CARTER: Oh, that's quite all right, President Edgar. Denise Carter, Colusa County Supervisor.

Thank you very much for making these public hearings available for all of us to comment. It's very important obviously to us. As I stated at a previous meeting, our communities have basically survived and grown slowly as result of the protection that levees have provided.

As for the plan, I think you probably understand that we really feel there needs to be a firm commitment to a rural levee program, and the plan needs to address the development of the rural levee standard and allocate the appropriate funding from Prop 1E to develop the program.

Future funding as well should contain specific funding for the rural communities. Colusa County hasn't had the pleasure of being remapped into the FEMA floodplains yet, but it's on its way. We need assistance and support from the State to push for reform of the FEMA National Flood Insurance Plan floodplain regulations for the ag basins.

T_CARTER2-02

As the plan states, farming is good for -- a good use for the floodplain. It's important to the viability of our county that we continue our agricultural economy. The plan needs to fully recognize the important role that

agricultural plays.

T_CARTER2-03 Finally, this plan must be built on trust. Trust is only built by giving those impacted by these projects a voice in the ultimate implementation of these projects.

T_CARTER2-04 And on a personal note, I'm also a landowner and resident that happens to be in the Butte Basin. But in the plan, you reference using conservation, flood easements, and outright purchase of land that's required for bypass modifications. As a landowner, who hopes to stay on our land the rest of our lives and pass it on to our children, there are additional risks and expenses when farming in the floodways or bypasses. Landowners need to be compensated fairly for their enormous benefit that they're providing for the rest of the State.

T_CARTER2-05 Additionally, these lands are much more likely to be maintained if they are in private ownership, even those that are converted to habitat. Pay that local farmer to maintain those lands wherever possible. They have the knowledge of the region. They know the dirt. They're there to stay, and they can do it for less money.

This keeps our residents employed, keeps the property on those tax rolls, and keeps it local. We are an integral part of the flood protection system, and I hope you'll make the commitment to allow us to work together with you.

Thank you.

PRESIDENT EDGAR: Thank you.

Denise Carter, Colusa County Supervisor (Public Hearing, April 6, 2012)

Response

T_CARTER2-01

The comment states the opinion that there needs to be a firm commitment to a rural levee program, and that the plan needs to address the development of the rural levee standard and allocate the appropriate funding from Proposition 1E to develop the program. The comment further states that Colusa County needs assistance and support from the State to push for reform of the FEMA NFIP floodplain regulations for the agricultural basins. As stated in Master Response 4, the CVFPP does not create any new requirements or assurances for levels of flood protection in the Central Valley; the local findings requirements regarding the required levels of protection were established by the State Legislature with the passage of SB 5. Similarly, the plan does not change existing State requirements related to new development in nonurbanized areas, including small communities, which must continue to meet the national FEMA standard of flood protection (per CGC Sections 65865.5, 65962, and 66474.5). This national standard corresponds to the minimum level of flood protection (100-year flood) required for participation in the NFIP, and is consistent with the existing Building Code. The Central Valley Flood Protection Act of 2008 further clarifies that the CVFPP is a descriptive document, and neither the development nor the adoption of the CVFPP constitutes a commitment by the State to provide any particular level of flood protection (CWC Sections 9603(a) and 9603(b)).

In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments would vary from region to region depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, all areas protected by the SPFC would receive flood risk management benefits from fully implementing the SSIA. Further, the State places a priority on flood management improvement projects that provide multiple benefits to support broad State interests and expand cost-sharing opportunities.

The CVFPP does not include levee design criteria for rural areas, but recognizes that the urban levee design criteria are not always practical or affordable for protecting rural areas. DWR supports future development and implementation of rural levee repair criteria in coordination with local and regional flood management agencies.

Cost-sharing rules are governed by federal and State laws, regulations, and policies, which have continued to evolve over time. CWC Section 12585.7 identifies the State cost-share of nonfederal capital costs for flood management projects. The State normally pays 50 percent of the nonfederal cost-share, but will pay up to 20 percent more (for a maximum of 70 percent of the nonfederal cost-share) if the project makes significant contributions to other State interests and objectives (e.g., the ecosystem, recreation, open space, protection for disadvantaged communities, and protection for transportation and water supply facilities).

The 2012 CVFPP includes an estimate of potential cost-sharing by State, federal, and local entities for the SSIA, developed to assist with CVFPP development and analysis. However, cost-sharing for implementation of the SSIA will be refined during feasibility studies and project implementation as additional project-level information is gathered and the interests of the partnering agencies in elements of the SSIA are identified. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, and development of a financing plan for the CVFPP) will address cost-sharing and local capacity to pay.

The CVFPP does not provide funding assurances for any specific project or improvement element, and current bond funding is not sufficient to fully implement the SSIA. A financing plan will be prepared as part of the post-adoption activities (CWC Section 9620(c)). For additional details, see Master Response 4.

Furthermore, as stated in Master Response 3, the State supports efforts to reform FEMA's NFIP to more equitably reflect corresponding flood risks, including establishing a flood zone for agriculturally based communities to allow replacement of existing structures or reinvestment development in the floodplain. The State also supports identifying a special, lower-premium rate structure that reflects actual flood risks for agricultural buildings in rural-agricultural areas located in Special Flood Hazard Areas. The State will work with local flood management interests to pursue reform of the NFIP. For additional details, see Master Response 3.

The comment requests that a particular item, "an engineering based rural level standard," be included in the CVFPP. DWR currently is working with local maintaining agencies to draft guidelines for non-urban levee repair criteria. Suggestions may be presented during various elements of future implementation of the CVFPP, as described in Master Response 14; however, no change to the CVFPP was made.

T_CARTER2-02

The comment states that the plan needs to recognize the important role of agriculture and farming in floodplains. As stated in Master Response 3, the SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. In addition, the DPEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) in Section 3.3, "Agriculture and Forestry Resources," of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed. The State supports the continued viability of small communities to preserve cultural and historical continuity and provide important social, economic, and public services to rural populations and agricultural enterprises. The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas outside small communities. These actions are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development or increasing flood risks within lands protected by the SPFC. For additional details, see Master Response 3.

T_CARTER2-03

The comment brings up the point of "giving those impacted by these projects a voice in the ultimate implementation of these projects." As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing

CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP. For additional details, see Master Response 13.

As stated in Master Response 14, the SSIA is a conceptual plan for flood system improvements, and additional post-adoption work is needed to refine its individual elements. Anticipated post-adoption activities include regional flood management planning, development of basin-wide feasibility studies and the CVFPP Financing Plan, completion of project-level proposals and environmental compliance, development of the Conservation Strategy, and State and USACE permitting.

DWR will engage regional flood planning partners to develop and implement communication strategies with broad interest groups to brief them on flood management planning in their regions. Regional implementing and operating agencies, land use agencies, and interest groups will be invited to participate in the planning process. Each regional planning process will seek input, as appropriate, from agricultural interests, environmental interests, permitting agencies/resource agencies, local emergency responders, tribes, and other stakeholders. DWR anticipates that a regional flood working group will be formed in each region.

Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. The studies will be conducted in coordination with USACE (and ongoing cost-share feasibility studies) and local implementing agencies. It is anticipated that working groups will form to help evaluate and refine bypass expansion options, identify implementation challenges, and provide input in the planning process. For additional details, see Master Response 14.

T_CARTER2-04

The comment states that landowners must be compensated fairly for the benefit they provide and the risks and expenses they experience. As stated in Master Response 3, these impacts generally are social and economic in nature, and CEQA does not require addressing them except to the extent that they relate to potentially significant adverse effects on the physical environment. Mitigation Measure LU-5a (NTMA and LTMA), “Provide Financial Compensation for Property Loss and Relocation Assistance to Compensate for the Removal and Displacement of Residential Land Uses,” states that the project proponent will provide financial compensation for property loss and relocation expenses to any person displaced because of the acquisition of real property, as required by the State of California Relocation Assistance Act (CGC Section 7260 et seq.). Before an offer is made to each property owner, all real property to be acquired will be appraised to determine its fair market value. The project proponent will

assist property owners in finding comparable replacement housing and will pay for actual, reasonable moving costs consistent with applicable State and federal law.

The DPEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

T_CARTER2-05

The comment suggests that lands supporting CVFPP implementation be retained in private ownership and that private landowners be paid to maintain lands that are converted to habitat or used for other plan purposes. As stated in Master Response 2, a portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of levees in rural areas. For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements.

The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning

efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable. For additional details, see Master Response 2.

At this time, the suggestion related to retaining land in private ownership and having owners maintain it consistent with CVFPP requirements is noted. Such suggestions may be presented during various elements of future implementation of the CVFPP, as described above; however, no change to the current version of the CVFPP was made. DWR and the Board appreciate Supervisor Carter's participation in this process and look forward to continuing to work her and others in Colusa County as the CVFPP is implemented.

T_CCRRF1-0 McKENZIE: Thank you very much. I hope this is the appropriate place, but I'll make my comments succinct and brief. You will get them in writing as well on that.

PRESIDENT EDGAR: Thank you.

MR. McKENZIE: I'm the Director of the Rice Experiment Station, which is located in the banks of the

Cherokee Canal, Highway 162, the site of the proposed Feather River Bypass.

Experiment Station is 500-acre nonprofit facility owned and funded by growers. We've developed rice varieties, do research since 1912.

Our facilities include laboratories, greenhouses, solar arrays. We produce foundation seed, basic seed stock for the State's 550,000 acres. We have germplasm and breeding material that are irreplaceable and stored in our seed house on site.

The concept of the expansion of the Cherokee to form a Feather River Bypass would appear to condemn the facility. And relocation opportunities could be fatal for our institution. You've heard earlier this morning our -- we can reflect the concerns, in terms of agricultural productivity. Loss of farming land, I think, is critical. And you've heard of this in terms of affecting farming operations, revenues for the regional and local governments, and also the ability to support an industry in terms of bringing the products from elsewhere, including effective new pesticides and herbicides, which are environmentally more friendly. You need to have a base acreage to support that.

T_CCRRF1-0 And certainly, there's a component of habitat. The 100-year floodplain runs through our station. We're

very aware of that. We realize we're subject to flooding. We have heavy clay soils, and that's why we're located there. There is a flood risk associated with agriculture, and we appreciate that.

T_CCRRF1-03 To give specific comments. As was suggested in our earlier meeting, we believe that the excavation of Cherokee Canal to return it to its fully functioning flood control, adequate maintenance would be a good decision for the Board to consider. The narrow channel and the tree vegetations, in fact, do not buffer the levees, as they exist now. And the adjacent lands are productive, profit making, fertile, tax generating, rich in wildlife and in agricultural resource.

T_CCRRF1-04 The existing canals and irrigation systems of the rice acreage in the area have a tremendous capacity, I think, to absorb a rare flooding event as it would happen. I think it needs to be examined about their ability to do that consideration of putting in structures that would allow a controlled release under some of the large acreages that exist in the valley.

T_CCRRF1-05 Finally, agriculture is a primary industry. I think still for California and Resources, the Central Valley and the State needs to be preserved. We also have looked at the information provided by the Butte County Rice Growers with Mr. Carl Hoff who spoke early and

especially support the concepts aligned by them or mentioned, including the need for new water storage.

Thank you very much.

PRESIDENT EDGAR: Thank you for your comments.

California Cooperative Rice Research Foundation, Inc., Rice Experiment Station, Kent McKenzie (Public Hearing, April 6, 2012)

Response

T_CCRRF1-01

The comment states the commenter's professional affiliation and provides information about the organization activities. The comment also raises concerns about the Cherokee Canal and potential bypass expansion. As stated in Master Response 1, expansions of various bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and

USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available.

The PEIR recognizes that converting current land uses (particularly agricultural uses) to bypass and related uses (such as habitat and recreation) would result in potentially significant and unavoidable impacts, particularly on agriculture, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments.

Several commenters expressed concern regarding the potential for particular properties to be included in a bypass proposal. Concerns were also expressed that preliminary identification of conceptual bypass designs might create a “cloud” over the properties, making it difficult to manage, obtain loans for, or sell those properties. DWR and the Board wish to make clear that the conceptual designs reflected in the CVFPP do not reflect a determination regarding any specific properties, and that the potential involvement of particular properties in any future bypass project is entirely speculative at this time. For additional details, see Master Response 1.

Additionally, as stated in Master Response 2, initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass expansion could continue to

support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements. For additional details, see Master Response 2.

T_CCRRF1-02

The comment acknowledges the existing flood risk to the organization's property. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CCRRF1-03

The comment suggests excavating the Cherokee Canal to return it to full capacity, as a maintenance action, rather than widening it to increase capacity. As stated in Master Response 6, DWR and the Board recognize the importance of proper maintenance to protect State, local, and federal investments in the flood management system. However, maintenance activities alone do not meet current needs or legislative requirements for the CVFPP (e.g., urban level of protection, systemwide approach, and providing multiple benefits). This is highlighted in the evaluation conducted for the preliminary approach called "Achieve SPFC Design Flow Capacity."

The Achieve SPFC Design Flow Capacity preliminary approach focuses on reconstructing SPFC facilities to meet current engineering criteria without making major changes to facility footprints or operations. To achieve the design flow capacity, reconstruction is required because the original specifications focused primarily on levee prism geometry, and current evaluations have shown them to be insufficient in passing design flows if geotechnical and other engineering conditions (e.g., underseepage) are not improved. This approach was formulated to address legislation that required DWR to consider structural actions necessary to reconstruct SPFC facilities to their design standard (CWC Section 9614(g)). It also addresses requests from stakeholders to consider reconstructing the existing flood management system in place, or without major modification to facility locations.

Based on an initial assessment, this preliminary approach is estimated to cost approximately $19 billion to $23 billion and take 30–35 years to

implement. This approach would improve the reliability of SPFC facilities compared to existing conditions. However, in many locations, upstream levee reconstruction would increase peak flows and stages downstream because upstream levee failures would be reduced compared to existing conditions. Further, the level of protection would be highly variable throughout the system and would not be linked to the current public safety needs and legislated requirements, and to assets at risk within the floodplain. Consequently, this approach would only partially address the primary CVFPP goal of improving flood risk management.

Investments in SPFC reconstruction would initially reduce SPFC O&M costs, but long-term costs to maintain the system would remain high. Thus, this approach would only partially contribute to the goal of improving O&M. Opportunities to integrate ecosystem restoration and enhancement would be limited and would not contribute to improved ecosystem functions on a systemwide scale. There would also be few opportunities to promote multipurpose benefits including incorporating new groundwater recharge or other water-related benefits, and promoting ecosystem functions, recreation, or agricultural sustainability. Consequently, an approach focusing on maintenance, repair, and reconstruction of existing facilities would contribute in only a minor way to the supporting goals of multi-benefit projects. For additional details, see Master Response 6.

T_CCRRF1-04

The comment suggests that the existing canals and irrigation systems in areas where rice is grown have a large capacity to absorb a rare flooding event and structures should be created to allow a controlled release to these areas. As stated in Master Response 2, the conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions

conducted to implement the SSIA will comply with State and federal laws, as applicable. For additional details, see Master Response 2.

The suggestion by the commenter could be consistent with the purchase of easements included in the SSIA. The comment is noted. Such suggestions may be presented during various elements of future implementation of the CVFPP as described above; however, no change to the current version of the CVFPP was made.

T_CCRRF1-05

The comment expresses opinions about the importance of the agricultural industry and states agreement with a previous commenter, Mr. Carl Hoff. See responses to Letter T_HOFF1 for responses to Mr. Hoff's comments. Regarding the agricultural industry, as stated in Master Response 3, the SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. Implementing the SSIA would increase the percentage of the population receiving at least 100-year (1 percent annual chance) flood protection from the current 21 percent to more than 90 percent (CVFPP, page 3-40). The remaining 10 percent of the population would receive benefits through residual risk management actions. Based on initial planning-level cost estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to provide flood stage reduction benefits to many of the areas in the system, including small communities and rural-agricultural areas.

The State supports the continued viability of small communities to preserve cultural and historical continuity and provide important social, economic, and public services to rural populations and agricultural enterprises. The SSIA describes State investment priorities in small community flood protection while avoiding the inducement of imprudent growth within SPFC floodplains. Under the SSIA, many small communities would receive increased flood protection benefits as a result of system improvements focused on protecting nearby urban areas. For example, levee improvements may be constructed upstream from an urban area to prevent a scenario in which floodwaters from an upstream levee breach would flow down gradient into the urban area. The upstream levee improvement that may extend into rural locations would therefore also reduce flood risks for the rural area immediately adjacent to the improved levee segment. Conditions in small communities would also be evaluated on a case-by-case basis to identify appropriate State investments in

additional structural and/or nonstructural actions (e.g., levees, flood walls, floodproofing, or relocations).

The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas outside small communities. These actions are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development or increasing flood risks within lands protected by the SPFC. No target minimum level of flood protection has been established for prioritizing State investments in rural-agricultural areas (see CWC Section 9603). However, the SSIA proposes (1) projects that maintain levee crown elevations for rural SPFC levees and provide all-weather access roads for inspection and floodfighting; (2) economically feasible projects that resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs; (3) system elements (e.g., bypass expansion) that lower peak flood stages within some rural channels; and (4) actions to manage residual flood risks.

All areas protected by the SPFC would benefit from State investments included in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery. The SSIA also proposes State investments to preserve agriculture and discourage urban development in rural floodplains (e.g., purchasing agricultural easements from willing landowners, when consistent with local land use planning). In addition, the SSIA proposes FEMA flood insurance reforms to support the sustainability of rural-agricultural enterprises.

The State supports efforts to reform FEMA's NFIP to more equitably reflect corresponding flood risks, including establishing a flood zone for agriculturally based communities to allow replacement of existing structures or reinvestment development in the floodplain. The State also supports identifying a special, lower-premium rate structure that reflects actual flood risks for agricultural buildings in rural-agricultural areas located in Special Flood Hazard Areas. The State will work with local flood management interests to pursue reform of the NFIP.

T_CFBF1-01

MR. FREDRICKSON: Yes. My name is Justin Fredrickson. I'm an environmental policy analyst with the California Farm Bureau.

T_CFBF1-02

And as near as we can tell, based on reading the plan, it looks like the footprint of the setback levees and the bypasses expansion is somewhere on the order of 40,000 acres. Most of that land is currently in agriculture.

T-CFBF1-03

The plan also describes the concept of taking roughly a quarter of that 10,000 acres and restoring it permanently to habitat. We feel that because of the way this system has been managed or mismanaged over the last several decades, that our existing system has lost quite a bit of capacity.

T-CFBF1-04

And that there's a risk -- we're concerned about the farm land loss. We're concerned about the compatibility of things that may be put in the floodway and not maintained in the future.

T-CFBF1-05

And I also respectfully differ with the opinion expressed that the communication on this plan has been adequate to date. I don't believe it has. Yes, there's been a very elaborate outreach effort. Lots of facilitated meetings in Sacramento with consultants, with

NGOs, professional meeting attenders like myself, but not many landowners on the ground.

And so I feel -- I've talked to people. And generally, most of the people who would be impacted by this have no knowledge of it. And as the gentleman who came up here and spoke a moment ago was -- provided an excellent example of this. People at the local levee behind -- behind levees farming in rural areas are very aware of the issues in their areas.

I think, in many cases, more aware than engineers sitting in Sacramento or politicians sitting in Sacramento. I don't believe there has been a real conversation with those folks, and we've waited until the last minute.

So now we are six months before adoption of a final plan. I'm very hopeful that there will be some effort made to initiate some of those real conversations with people who will really be affected by this plan.

Thank you.

PRESIDENT CARTER: Thank you, Mr. Fredrickson.

California Farm Bureau Federation, Justin Fredrickson (Public Hearing, January 27, 2012)

Response

T_CFBF1-01

The comment introduces the commenter and his professional affiliation. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CFBF1-02

The comment states that the footprint of the setback levees and the bypasses expansions identified in the CVFPP is approximately 40,000 acres, most of which is currently agriculture. As stated in Master Response 2, the 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated. For additional details, see Master Response 2.

T_CFBF1-03

The comment states that as described in the CVFPP, roughly 10,000 of the approximately 40,000 acres of the expanded flood system that could result from implementing the CVFPP could be restored permanently to habitat. The comment states that the existing system has lost a lot of capacity because of management actions. As stated in Master Response 2, a portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of levees in

rural areas. For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements. For additional details, see Master Response 2.

Additionally, as stated in Master Response 6, DWR recognizes the importance of proper maintenance to protect State, local, and federal investments in the flood management system. However, maintenance activities alone do not meet current needs or legislative requirements for the CVFPP (e.g., urban level of protection, systemwide approach, and providing multiple benefits). This is highlighted in the evaluation conducted for the preliminary approach called "Achieve SPFC Design Flow Capacity."

The Achieve SPFC Design Flow Capacity preliminary approach focuses on reconstructing SPFC facilities to meet current engineering criteria without making major changes to facility footprints or operations. To achieve the design flow capacity, reconstruction is required because the original specifications focused primarily on levee prism geometry, and current evaluations have shown them to be insufficient in passing design flows if geotechnical and other engineering conditions (e.g., underseepage) are not improved. This approach was formulated to address legislation that required DWR to consider structural actions necessary to reconstruct SPFC facilities to their design standard (CWC Section 9614(g)). It also addresses requests from stakeholders to consider reconstructing the existing flood management system in place, or without major modification to facility locations.

Based on an initial assessment, this preliminary approach is estimated to cost approximately $19 billion to $23 billion and take 30–35 years to implement. This approach would improve the reliability of SPFC facilities compared to existing conditions. However, in many locations, upstream levee reconstruction would increase peak flows and stages downstream because upstream levee failures would be reduced compared to existing conditions. Further, the level of protection would be highly variable throughout the system and would not be linked to the current public safety needs and legislated requirements, and to assets at risk within the floodplain. Consequently, this approach would only partially address the primary CVFPP goal of improving flood risk management.

Investments in SPFC reconstruction would initially reduce SPFC O&M costs, but long-term costs to maintain the system would remain high. Thus, this approach would only partially contribute to the goal of improving O&M. Opportunities to integrate ecosystem restoration and enhancement would be limited and would not contribute to improved ecosystem functions on a systemwide scale. There would also be few opportunities to promote multipurpose benefits including incorporating new groundwater recharge or other water-related benefits, and promoting ecosystem functions, recreation, or agricultural sustainability. Consequently, an approach focusing on maintenance, repair, and reconstruction of existing facilities would contribute in only a minor way to the supporting goals of multi-benefit projects.

In addition, improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures). For additional details, see Master Response 6.

T_CFBF1-04

The comment raises concerns about loss of farmland and compatibility of added features to floodways that may not be maintained in the future. As stated in Master Response 3, the SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. In addition, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and 3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed. For additional details, see Master Response 3.

Additionally, as stated in Master Response 6, improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures). For additional details, see Master Response 6.

Regarding potential future activities in the floodway, as stated in Master Response 14, the SSIA is a conceptual plan for flood system improvements, and additional post-adoption work is needed to refine its individual elements. Anticipated post-adoption activities include regional flood management planning, development of basin-wide feasibility studies and the CVFPP Financing Plan, completion of project-level proposals and environmental compliance, development of the Conservation Strategy, and State and USACE permitting.

The Board has review and permitting authority under the CWC and CCR Title 23 for any project, including those resulting from the CVFPP, which may encroach upon, improve, alter, or affect adopted plans of flood control (including the State-federal flood management systems, regulated streams, and designated floodways under the Board's jurisdiction).

T_CFBF1-05

The comment raises concerns about the adequacy of public outreach to date and in the future. As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

Anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies,

and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_CFBF2

T_CFBF2-01

MR. SCHEURING: Thank you, Mr. Chair -- Mr. President, members of the Board. I am Chris Scheuring and I am appearing on behalf of the California Farm Bureau Federation, the State organization. My family also farms in Yolo county.

T_CFBF2-02

As you know, The Farm Bureau has got thousands of members in your planning area. And I'd like to thank

you -- or thank the Board for the opportunity to appear on their behalf and provide you with these focus comments. I want to start by saying that we recognize that the Board has a statutory responsibility of adopting a flood plan by July 1st, and there are constraints within the legislation on what that flood plan has to have inside it. We understand that.

T_CFBF2-03

We also recognize that the folks at the Department of Water Resources have put a lot of good effort into the draft flood plan that is in front of you. And we also recognize that ag, as much as anybody else, generally benefits from flood protection under general circumstances.

T_CFBF2-04

That being said, my sort of 30,000-foot level impression of this plan is that there is much good in it for the environmental community in terms of habitat and so forth, there is much good in it for the urban community, in terms of sort of upgraded protection to 200-year level of flood protection.

But for ag, we feel like we're holding the bag on this one. We're a little bit worried about it. It seems as if ag is the canvass upon which we are going to paint here. And that's, I think, why you're going to hear from some of us today.

I hope I'm wrong about that, but the numbers

associated just with the concept of conversion of ag lands here, as part of the levee setbacks and the expanded floodways bypasses are pretty large. Forty thousand acres -- 35,000-40,000 acres are going to be additional acres, probably mostly very prime ground, is going to be burdened at least under the expansive alternative or approach that's in this flood plan.

About 10,000 acres of that is going to be permanently converted, as I understand, meaning loss to agricultural production. And those are some pretty big numbers, particularly for prime ground. It's hard for me as the Farm Bureau's lawyer to get really kind of worked up about the next big box project that converts a hundred acres, when we're talking about a magnitude like this.

So I think the agricultural community has some really legitimate concerns on a system level about how this flood plan develops.

T_CFBF2-05

As far as suggestions for the focus -- the draft flood plan, I think you should probably start by looking through the lens of funding, what's achievable in funding terms. I think that's acknowledged as one of the open questions about this very expansive plan, at least the ambitious alternative, but funding is probably going to drive what's achievable, so I would start there.

T_CFBF2-06

With respect to the conversion of agricultural

lands, which are what my folks are worried about, I would want you to take a look at all the issues associated with that. Something like 75 percent of this thirty-five or forty thousand additional acres is going to remain farmable. I'd like to drill into -- on what terms they will remain farmable, by who, what sort of practices? I moon, I would imagine it's similar to what's going on currently within bypasses, but that's an important discussion to have.

T_CFBF2-07

I think we need a more particularized level of detail too with respect to the lands that are going to be -- the additional lands that are going to be inundated as part of the expanded bypasses and so on. I could take a pretty good guess -- and most farmers could probably, if you asked them, could take a pretty good guess at it.

But what we really have, at this point, is just sort of big blue arrows, kind of a large-scaled map. And a lot of farmers, it's difficult for them to respond to kind of an amorphous sort of Sacramento document. But if you sent them something in the mail, and they can go, "Oh, wow, I'm going to be under water", they'll come and see you. So I think it's really important to bring them into the discussion.

T_CFBF2-08

Also be mindful that April, which is when I think your outreach meetings are being held, April is a pretty

tough month for farmers. So extra efforts to get farmers here are going to be important, because I know my dad's -- my dad can't even remember my name in the month of April. So farmers are going to be busy at that time. And I think that it's critical to do the outreach to get them here.

With respect to -- you know, I'd like you to take a hard look at the alternatives, what reduced impact options do you have, you know, that -- the flood -- the draft plan appears to carve out two other approaches, but it doesn't like them. Kind of the preferred approach is the big, expensive, ambitious approach. T_CFBF2-09

If you're inclined in that direction, we should at least discuss some sort of reduced scope thing. So I'm interested in alternatives. I'm interested in a discussion about mitigation. How do we mitigate in CEQA terms or just general terms for the conversion of lots of farm land.

And then my members would want me to ask you about the spill-over impacts of habitat protection, 10,000 acres of new habitat, probably largely in sort of riparian-type settings. You know, what are the species concerns with that. T_CFBF2-10

And there's also -- I'm trying to get my arms around the idea of increased vegetation in some of the floodways, is that consistent with channel capacity? T_CFBF2-11

T_CFBF2-12

Those are the things I'm interested in.

I just have two more. Ag levees and funding and how do the ag levees come out of this? I think you'll probably hear from some folks later on this. I don't totally understand this, but I have heard this concept of ag being a de facto sort of transitory storage for flood waters, and I'm concerned about that as we go forward to July 1st.

T_CFBF2-13

And then finally, a subject near and dear to my heart, there's some discussion about reservoir reoperation in the document, and how it's possible to kind of reoperate some of these reservoirs to provide increased flood buffers. I think that's great, to the extent that it doesn't have adverse impacts on storage, because usually those two concepts are at odds with each other.

I would like further exploration of that. And I'd be interested in to see if you, in the document, in a meaningful sense could call for additional storage, which The Farm Bureau believes is very necessary in California.

So with that, I'll end my talk. And I thank you for the opportunity to comment today.

PRESIDENT CARTER: Thank you, Mr. Scheuring.

California Farm Bureau Federation, Chris Scheuring (Public Hearing, February 24, 2012)

Response

T_CFBF2-01

The comment introduces the commenter and his professional affiliation. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CFBF2-02

The comment is an introductory statement, and the commenter recognizes the statutory responsibility and schedule requirements of the plan. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CFBF2-03

DWR and the Board appreciate the commenter's recognition of the effort required to prepare the CVFPP. The comment recognizes that agriculture generally benefits from flood protection. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CFBF2-04

The comment raises concerns regarding conversion of agricultural lands for levee setbacks and bypasses. As stated in Master Response 2, the 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land

uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

A portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of levees in rural areas. For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements. For additional details, see Master Response 2.

As stated in Master Response 1, specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. For additional details, see Master Response 1.

As stated in Master Response 3, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) in Section 3.3, “Agriculture and Forestry Resources,” of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. For additional details, see Master Response 3.

T_CFBF2-05

The comment raises concerns about funding the plan. As stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA "alternatives" for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management

activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

T_CFBF2-06

The comment raises concerns about conversion of agricultural lands and how flood lands would be continued in farming. See response to comment T_CFBF2-04 above regarding conversion of agricultural land. In addition, as stated in Master Response 2, the conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. Details regarding specific land uses in expanded floodways would be determined during these future post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land

acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable.

In addition to expansion of the bypass system, levee reconstruction, and other elements, the SSIA includes State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans. These easements would be used to preserve agriculture and prevent urban development in current agricultural areas, discouraging conversion to land uses that would increase flood risks within floodplains protected by SPFC facilities. Agricultural conservation easements could be purchased through various DWR programs; an example is DWR's Flood Corridor Program, which focuses on nonstructural flood risk reduction integrated with protection of natural resources and agricultural lands. For additional details, see Master Response 2.

T_CFBF2-07

The comment requests additional detail on locations of proposed land conversions. As stated in Master Response 1, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA

compliance, development of a Conservation Strategy, and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

In regards to gaining input from landowners and other stakeholders, as stated in Master Response 13, future planning efforts associated with CVFPP implementation will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form “alternatives” for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review.

Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_CFBF2-08

The comment raises concerns about the public outreach timing. As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP. For additional details, see Master Response 13.

See response to comment T_CVBF2-07 for information on anticipated future outreach activities. Outreach efforts typically take into consideration the availability/unavailability of stakeholders, and the commenter's input on the availability of farmers will be taken into consideration.

T_CFBF2-09

The commenter identifies their intentions to further evaluate the CVFPP alternatives. The comment raises concerns about the scope and cost of the alternatives and mitigation of agricultural land conversion. As stated in Master Response 2, the DPEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

As stated in Master Response 3, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) in Section 3.3, "Agriculture and Forestry Resources," of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed. For additional details, see Master Response 3.

T_CFBF2-10

The comment raises questions about spill-over impacts of habitat protection and species concerns. As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important shaded riverine aquatic habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. For additional details, see Master Response 7.

Additionally, as stated in Master Response 1, the CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed

project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

See response to comment T_CVBF2-07 regarding the level of detail of the CVFPP, future project-level analysis, and CVFPP implementation planning and outreach. Details regarding compatibility of habitat and adjacent land uses will be addressed as needed as plan implementation proceeds. However, there seems to be little potential for meaningful conflicts between habitat created as part of the plan and existing agricultural uses. Where DWR, the Board, or others create habitat, the land would be part of a specific project and owned in fee title by an appropriate agency to preserve and maintain the habitat. Where this habitat is in an expanded floodway, DWR or another appropriate agency would own the surrounding land in the floodway in fee title, and land would be leased for agricultural production as appropriate. In this circumstance, the habitat would not conflict with continuing nearby agricultural operations owned by a private entity. If habitat were created on the edge of an existing or expanded floodway, typically a levee and associated maintenance easements would separate the habitat from any privately held agricultural land on the landside of the levee, minimizing the potential for conflicts between sensitive species that might occupy the habitat and agricultural operations.

T_CFBF2-11

The comment raises concerns about channel capacity in regards to increased vegetation in floodways. As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

Local HCPs can be countywide initiatives or can be implemented in response to proposed development. The main objectives of these plans are to protect natural resources, including species and habitat, and to enhance coordination and collaboration of development stakeholders.

If a place-based project would be defined and pursued as part of the proposed program, and if the CEQA lead agency would be subject to the authority of local jurisdictions, the applicable county and city policies and ordinances would be addressed in a project-level CEQA document as necessary. Planting of vegetation in the floodway may not be authorized by the Board, USACE, or other agencies if the vegetation would impede flood flows sufficiently that a rise in water surface elevation would cause a significant increase in risk to public safety.

In the DPEIR, Mitigation Measure BIO-A-2b (NTMA) in Section 3.5, "Biological Resources—Aquatic," which calls for planting of riparian vegetation on the waterside of levees, states:

> Any mitigation plantings in the floodway will not be permitted if they would result in substantial increases in flood stage elevations, or alter flows in a manner that would have a substantial adverse effect on the opposite bank.

T_CFBF2-12

The comment raises questions about agricultural levees and funding. As stated in Master Response 4, in recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments would vary from region to region depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, all areas protected by the SPFC would receive flood risk management benefits from fully implementing the SSIA. Further, the State places a priority on flood management improvement projects that provide multiple benefits to support broad State interests and expand cost-sharing opportunities.

Cost-sharing rules are governed by federal and State laws, regulations, and policies, which have continued to evolve over time. CWC Section 12585.7 identifies the State cost-share of nonfederal capital costs for flood management projects. The State normally pays 50 percent of the nonfederal cost-share, but will pay up to 20 percent more (for a maximum of 70 percent of the nonfederal cost-share) if the project makes significant contributions to other State interests and objectives (e.g., the ecosystem, recreation, open space, protection for disadvantaged communities, and protection for transportation and water supply facilities).

The 2012 CVFPP includes an estimate of potential cost-sharing by State, federal, and local entities for the SSIA, developed to assist with CVFPP development and analysis. However, cost-sharing for implementation of the SSIA will be refined during feasibility studies and project implementation as additional project-level information is gathered and the interests of the partnering agencies in elements of the SSIA are identified. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, and development of a financing plan for the CVFPP) will address cost-sharing and local capacity to pay.

The CVFPP does not provide funding assurances for any specific project or improvement element, and current bond funding is not sufficient to fully implement the SSIA. A financing plan will be prepared as part of the post-adoption activities (CWC Section 9620(c)). For additional details, see Master Response 4.

Regarding the comment element about whether agricultural land is “de facto transitory storage for flood waters,” the State and the CVFPP do not promote or assume the inundation of any land outside the floodway resulting from a system failure. Only lands officially identified as transitory storage are assumed as transitory storage. As stated in Master Response 3, the SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. Implementing the SSIA would increase the percentage of the population receiving at least 100-year (1 percent annual chance) flood protection from the current 21 percent to more than 90 percent (CVFPP, page 3-40). The remaining 10 percent of the population would receive benefits through residual risk management actions. Based on initial planning-level cost estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to

provide flood stage reduction benefits to many of the areas in the system, including small communities and rural-agricultural areas. For additional details, see Master Response 3.

T_CFBF2-13

The comment raises concerns about reservoirs and storage. As stated in Master Response 10, in developing the CVFPP and formulating the SSIA, DWR considered various forms of storage for flood management, including operational changes to existing reservoirs with flood storage, new or expanded flood storage in reservoirs, and storage in floodplains. Specifically, one of the preliminary approaches—Enhance Flood System Capacity—included enlarging the flood storage allocation of several multipurpose reservoirs to improve management of flood risks on lands protected by the SPFC. This evaluation found potential benefits from and opportunities for reservoir flood storage and operational changes, such as improving flexibility in managing hydrologic changes (such as climate change) and potentially offsetting the hydraulic effects of certain system improvements on downstream reaches. At the same time, these analyses addressed both the physical limitations of these opportunities and the potential negative effects of increasing flood-storage allocations on water supply and other beneficial uses. The analyses of reservoir storage and flood operations that were conducted in support of the 2012 CVFPP are described in Attachment 8B in Appendix A, "Central Valley Flood Protection Plan."

Storage elements ultimately retained in the SSIA are based on preliminary systemwide analyses conducted for the 2012 CVFPP, legislative direction for the CVFPP, and the findings of prior and ongoing studies. Among those studies are ongoing surface storage investigations and prior local, State, and federal studies such as the Shasta Lake Water Resources Investigation, North-of-the-Delta Offstream Storage (Sites Reservoir), In-Delta Storage Program, Los Vaqueros Reservoir Expansion, and Upper San Joaquin River Basin Storage Investigation (Temperance Flat Reservoir). However, no new site-specific investigations of surface storage were included in the systemwide analyses conducted to support the 2012 CVFPP.

In the 2012 CVFPP, the SSIA includes coordinated reservoir operations aimed at making the most efficient and effective use of current flood storage allocations in existing reservoirs, and implementation of the authorized Folsom Dam Raise (see Section 3.5.4 of the CVFPP). These SSIA storage elements appropriately reflect the conceptual level of detail and systemwide focus of the 2012 CVFPP, without precluding future consideration of new or expanded storage by the State or local agencies. At this time, the SSIA does not include new reservoirs or expansion of storage (other than at Folsom Dam) solely for the purpose of flood management;

however, DWR will continue to consider flood management in the context of, and as an objective of, its ongoing multi-benefit surface storage investigations and systemwide reoperation studies. Should these State investigations or other related efforts by local or federal agencies identify flood management as a component of a feasible reservoir storage project, this may be reflected in future updates to the CVFPP. For additional details, see Master Response 10.

In addition, as described in DPEIR Section 2.6, "No Near- or Long-Term Reduction in Water or Renewable Electricity Deliveries," based on hydrologic analysis conducted during CVFPP development, and a commitment included in the proposed program related to no long-term reduction in water deliveries to various customers, no potential exists for a significant impact on water supply deliveries or hydroelectric power production resulting from potential changes to the flood management operations of existing reservoirs included as part of the SSIA.

As stated in Master Response 7, the SSIA includes an F-CO Program that seeks to coordinate flood releases from existing reservoirs located on tributaries to major Central Valley rivers. Considering the timing and magnitude of flood releases from reservoirs, the F-CO Program seeks to optimize the use of downstream channel capacity in balance with total available flood storage space in the system to reduce overall downstream peak floodflows. The F-CO Program also can modify operation of reservoirs in a way that will improve flood management and provide opportunities for more aggressive refilling of reservoirs during dry years. Such operations could increase water supplies within reservoirs, especially in dry years when the water supply system is most stressed.

Water supply benefits from the F-CO Program would vary depending on current reservoir operations rules, watershed hydrology, flexibility in reservoir operation and physical outlet facilities (i.e., adequate release capacity), quality of reservoir inflow forecasts, and other factors. Therefore, a case-by-case study of flood management and multipurpose reservoirs will be needed to adequately define and quantify the potential benefits.

T_CFBF3-01

MR. MERKLEY: Thank you, Chairman Edgar, members of the Board. Danny Merkley with the California Farm Bureau. Let me just briefly explain. My family personally is very aware of the flood concerns and issues. Our family has been farming in the Sacramento valley for five generations. My great grandfather grew hops before prohibition. There was a little bit of a problem after that.

(Laughter.)

MR. MERKLEY: But his home still sits at the corner of 22nd and V in Sacramento what's called Poverty Ridge. That's where people would move when Sacramento would flood to high ground until the waters would reside and they'd go back and rebuild their homes or continue

working on building the Capitol.

My comments will be very brief. We've submitted detailed written comments, and you're going to hear an awful lot today, so let me be as brief as possible.

I'd like to first thank DWR staff, Jeremy, Keith Swanson, Paul Marshall, Matt Reeve who have made extra efforts to reach out to the Farm Bureau. They came last month to meet with the Farm Bureau president, our administrator, myself, and another member of our staff. And so I appreciate that.

T_CFBF3-02

We understand this is a system level plan. However, Chairman, even in your words, this is a beginning. I feel this beginning has set the forms. The next step, adoption of this, is setting the foundation. It's going to be real difficult to move this house once those forms and that foundation is set. And so we have concerns about this being deemed as just a beginning. And there's lots of room for work. But once that gets set, it's going to be tough to move things, to change some things, as we get more into the detail.

T_CFBF3-03

We would ask that you take a little closer look at the enabling legislation to balance flood protection with habitat. We have concerns about the 10,000 acres of habitat that would come out of productive farm land, in addition to the 30,000 acres of farm land that would be

impacted. I have seen firsthand, and our members have seen firsthand, what a bad neighbor habitat can become if it's not managed properly. And I don't think I need to get into the details of that.

T_CFBF3-04

We would also ask that any of the land that does come out of production that -- or that is impacted by these things, that our members are fairly compensated. And that takes into consideration the increased costs of their farming operations as a result of having neighbors like new habitat and so on.

T_CFBF3-05

Agricultural is a very complex symphony of activities. The public, environmental organizations, engineers don't truly understand, unless they've been there and done that. It looks great, and you think you understand what's going on when you drive up and down Highway 99 or I-5. But until you have actually lived that, you don't understand the impacts of some of these things on what it takes to actually get a crop from seed to harvest.

T_CFBF3-06

Lastly, I'd like to say that I commend you on trying to meet timelines. That's a very rare thing this day and age for State agencies and organizations to meet their legislative timelines. However, I would like to point out that getting this right is -- should be the highest priority, so we would hope you would look at that

and make sure that if you need to do a little more outreach, you need to get a little more input from folks on the ground, that you consider that.

I'll end there. Thank you.

California Farm Bureau Federation, Danny Merkley (Public Hearing, April 6, 2012)

Response

T_CFBF3-01

The comment provides introductory remarks identifying the commenter, his professional affiliation, and other personal details. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted. DWR and the Board appreciate the California Farm Bureau Federation's recognition of DWR's outreach to the Bureau.

T_CFBF3-02

The comment raises concerns that the plan, if adopted, will restrict options for future actions. As stated in Master Response 1, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

As stated in Master Response 14, the 2012 CVFPP describes the State's vision for a sustainable flood management system in the Central Valley that provides a high degree of public safety, promotes long-term economic stability, and supports restoration of compatible riverine and floodplain ecosystems. The SSIA prioritizes State investments and other activities to contribute to achieving this vision on a systemwide scale, recognizing current funding limitations.

The SSIA is a conceptual plan for flood system improvements, and additional post-adoption work is needed to refine its individual elements. Anticipated post-adoption activities include regional flood management planning, development of basin-wide feasibility studies and the CVFPP Financing Plan, completion of project-level proposals and environmental compliance, development of the Conservation Strategy, and State and USACE permitting.

Some elements of the SSIA have already been implemented (through the Early Implementation Projects Program since 2007, for example). Others may be accomplished before the first update of the CVFPP in 2017, and

many will require additional time to fully develop and implement. Ongoing and new planning studies, engineering, feasibility studies, environmental review, designs, funding, and partnering are required to better define, and incrementally fund and implement, elements of the SSIA during the next 20–25 years.

DWR and the Board are the State lead agencies for implementing the CVFPP and preparing the 5-year CVFPP updates. CVFPP consistency is not a requirement of SB 5, and DWR and the Board retain flexibility in future activities; however, the State intends for all major flood management programs and projects in the Central Valley to be planned and implemented in a manner generally consistent with the vision, goals, and provisions of the CVFPP. DWR will also work closely with USACE and the Board to develop the federal *Central Valley Integrated Flood Management Study* and State basin-wide feasibility studies. In addition, the State is partnering with USACE on several regional feasibility investigations and post authorization change reports aimed at modifying the State-federal flood management system. For additional details, see Master Response 14.

T_CFBF3-03

The comment raises concerns about the balance between flood protection and habitat. Preparation of the CVFPP was made a requirement by the State Legislature through passage of the Central Valley Flood Protection Act of 2008 (SB 5). The CVFPP itself fulfills the intent and requirements of the Central Valley Flood Protection Act of 2008, embedded in SB 5 and codified in CWC Sections 9600–9625. CWC Section 9616 refers to 14 objectives to be met when implementing the CVFPP where feasible. Among these 14 "multiple objectives" are five directly related to habitat and ecosystems and expanding flood system capacity:

- Expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey floodwaters away from urban areas.

- Promote natural dynamic hydrologic and geomorphic processes.

- Increase and improve the quantity, diversity, and connectivity of riparian, wetland, flood plain, and shaded riverine aquatic habitats, including the agricultural and ecological values of these lands.

- Promote the recovery and stability of native species populations and overall biotic community diversity.

- Identify opportunities and incentives for expanding or increasing use of floodway corridors.

As stated in Master Response 7, SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework.

Appendix E, "2012 Central Valley Flood Protection Plan Conservation Framework," provides a preview of a long-term Conservation Strategy that DWR is developing to support the 2017 CVFPP Update. The Conservation Framework focuses on promoting ecosystem functions and multi-benefit projects in the context of integrated flood management for near-term implementation actions and projects. The Conservation Framework provides an overview of the floodway ecosystem conditions and trends and key conservation goals that further clarify the CVFPP's ecosystem goal. For additional details, see Master Response 7.

Additionally, as stated in Master Response 1, the Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and

restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass. For additional details, see Master Response 1.

Regarding the reference to habitat conflicting with adjacent agricultural land, little potential seems to exist for meaningful conflicts between habitat created as part of the plan and existing agricultural uses. Where DWR, the Board, or others create habitat, the land would be part of a specific project and owned in fee title by an appropriate agency to preserve and maintain the habitat. Where this habitat is in an expanded floodway, DWR or another appropriate agency would own the surrounding land in the floodway in fee title and land would be leased for agricultural production as appropriate. In this circumstance, the habitat would not conflict with continuing nearby agricultural operations owned by a private entity. If habitat were created on the edge of an existing or expanded floodway, typically a levee and associated maintenance easements would separate the habitat from any privately held agricultural land on the landside of the levee, minimizing the potential for conflicts between sensitive species that might occupy the habitat and agricultural operations.

T_CFBF3-04

The comment raises concerns about fair compensation for agricultural land taken out of production. As stated in Master Response 2, a portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of levees in rural areas. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable. For additional details, see Master Response 2.

T_CFBF3-05

The comment suggests that one cannot truly understand potential effects on agricultural activities unless one has actually operated an agricultural operation. This is an expression of an opinion, and the comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CFBF3-06

DWR and the Board appreciate the commenter's recognition of the State's efforts on the CVFPP. The comment raises concerns about plan adoption timing and appropriate public outreach. As stated in Master Response 13, a

multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

Anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale.

Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_CLEVELAND1-0

PRESIDENT EDGAR: Good afternoon, Stan.

SUTTER COUNTY SUPERVISOR CLEVELAND: Good afternoon. It was a nice break.

PRESIDENT EDGAR: You told me you weren't going to talk today.

SUTTER COUNTY SUPERVISOR CLEVELAND: Well, it wasn't going to be on the other part of it. This is the EIR part of it, and I will be speaking directly to this instead. The eloquence of everyone in the morning and the current Senator and all was much beyond what I could have done, so I'm very satisfied there.

The comments will be also sent to you. The Board will be -- so Sutter County will be looking these over on Tuesday to send our official comments by the date that's necessary. But there are some concerns that we do have based upon the plan and the current EIR. I'm going to go down the list. We have eight of them, but I can be pretty quick with it.

First of all, on page ES17, it states that the beneficiary pays quote, "Approach would allocate costs to

those with property in a specific flood protected area". Well, this actually neglects the multi-use nature of the State's water project, which is to convey and deliver water statewide. Improving the levees, improves the State's capacity to convey and deliver water throughout the entire State.

T_CLEVELAND1-02 So the receiving of a more consistent water supply elsewhere in the State, those would be beneficiaries of this plan also. So the cost would need to be, in our opinion, spread out through those -- that area also.

Number two is ES21, it identifies quote, "Modified Statewide Investment approach alternative, which more limited construction and activities and no bypass expansions". The lettering is a little small and it's dim in here. Either that, or my eyes are getting worse.

PRESIDENT EDGAR: It's dim in here.

SUTTER COUNTY SUPERVISOR CLEVELAND: I think it's my eyes actually. This Modified SSIA has never mentioned -- was never mentioned in the Central Valley Flood Protection Plan. No further information as to the project cost, impact on environmental restoration cannot be evaluated due to the lack of information, and it's not clear why being presented in a single paragraph as a viable alternative.

T_CLEVELAND1-03

Okay. And then number three on ES24. This states that the Statewide System Investment Approach alternative may have potentially significant and unavoidable impacts to agriculture. This plan identifies up to 40,000 acres of land within the proximity of the project that may be impacted by setback levees, bypass expansions, or floodplain restoration easements. This could economically cripple Sutter County specifically, because we have the major bypass adjustment and make agriculture infeasible for these acreages.

So that is not an insignificant, it is significant, or it may -- it's not this that it might be or potentially.

T_CLEVELAND1-04

On page ES24 states that the Statewide System Investment Approach alternative may have potentially significant and unfavorable impacts on the aquatic and terrestrial species. This brings into question the State's intent to migrate for or improve habitat for one species to the detriment of another, which also has to do with one of the previous speakers up there at the Cherokee Creek Canal, that's kind of what would have to happen there for them to accomplish the goal.

So the Central Valley Flood Protection Plan proposes to eliminate thousands of acres of rice production for the benefit of Salmon, Sturgeon, Steelhead

and/or other endangered species. So that's trading one for the other in this plan, or potentially.

T_CLEVELAND1-05 Let me go on to number five which is ES24. Actually, I'm going to skip that one. I'm going to go to six, seven, and eight.

Also, on ES24 though that it states that the Statewide System Investment Approach alternative would have significant and unavoidable impacts on land use and planning. As proposed, the Central Valley Flood Protection Plan would take thousands of acres of prime agricultural land out of production, negatively affect tens of thousands of acres of other agricultural lands requiring change of crops or farm practices.

This would be permanent prohibition of growth of multiple commodities. It would eliminate local control over land-use issues, create an ongoing expense for locals to cover levee and channel maintenance, the HCP and CMP expenses, monitoring and reporting costs, and eliminate a large percentage of local tax base.

Some of these things were discussed from the point of view of just the farmers and that, but this has to do with by not being addressed in the EIR -- well DPEIR and the concerns that directly arise due to that.

T_CLEVELAND1-06 On page ES5, this states that the Statewide System Investment Approach alternative would have a less

than significant impact on population, employment, and housing. This is a little bit more passionate for me on this one.

As proposed, the plan would take thousands of acres of prime agricultural land out of production, eliminate many agricultural related jobs, prohibit development in many areas throughout the County, limit future growth, and the ability to construct additional housing. And that is a significant effect, not an insignificant one.

T_CLEVELAND1-07 Number eight is actually quite important. No alternative considers new or expanded storage. This may actually invalidate the EIR, since it has not been considered. That and I think it's most vulnerable in this area. So with that, thank you very much.

PRESIDENT EDGAR: Thanks very much. Are there any questions from the Board?

Thank you, Stan.

Stanley Cleveland, Sutter County Board of Supervisors (Public Hearing, April 6, 2012)

Response

T_CLEVELAND1-01

The text in the DPEIR Executive Summary to which the commenter refers is in a section titled "Areas of Known Controversy and Issues to be Resolved" (Section ES.5). The intent of identifying the "beneficiary pays" concept in this section is to point out challenges in determining financial responsibility for improving the flood management system. This section of the DPEIR focuses strictly on this topic and does not relate to water supply issues. However, the potential for water users to help fund improvements to the flood management system would fall within the concept/question identified in the DPEIR text about whether improvements should be funded just by beneficiaries of the flood management system (which could include water users) or by the State as a whole.

As is stated in Master Response 7, the CVFPP includes a high-level discussion on integrating water supply benefits with flood management improvements. The SSIA elements focus on public safety and improvement of flood management, consistent with the legislative direction and CVFPP primary goal; however, implementing these elements could improve water management because expanding floodways and the bypass system could improve the flexibility of reservoir operations and increase in-channel groundwater recharge. The SSIA describes potential opportunities for integrating water supply benefits with proposed flood management actions, but it does not include specific project recommendations related to water supply because of the need for future site-specific proposals and analyses. During post-adoption activities (regional flood management planning and development of basin-wide feasibility studies), additional details will be developed, including specific water management features as part of multi-benefit projects, in collaboration with interested local and regional agencies and organizations. For additional details, see Master Response 7.

As stated in Master Response 15, flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs,

depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

T_CLEVELAND1-02

See response to comment T_CLEVELAND1-01, above, regarding the first part of the comment. The remainder of the comment, which refers to the Modified SSIA, is also related to the DPEIR Executive Summary. The Modified SSIA is described in more detail in DPEIR Chapter 5.0, "Alternatives," and impacts of this alternative are compared to impacts of the SSIA (i.e., the proposed program). The Modified SSIA was included in the DPEIR to provide a more comprehensive range of alternatives for analysis.

As stated in Master Response 24, Section 15126.6 of the CEQA Guidelines indicates that an EIR must "describe a range of reasonable alternatives to the project ... which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. ..." An EIR need not consider every conceivable alternative to a project or alternatives that are infeasible. (*Id.*; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 574 (*Goleta*).) "In determining the nature and scope of alternatives to be examined in an EIR, the Legislature has decreed that local agencies shall be guided by the doctrine of 'feasibility.' " *Id.* at 565. CEQA defines "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." (PRC Section 21061.1; see also CEQA Guidelines Section 15364.)

"There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason." CEQA Guidelines Section 15126.6(a). The rule of reason "requires the EIR to set forth only those alternatives necessary to permit a reasoned choice" and to "examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project." CEQA Guidelines Section 15126.6(f). An EIR does not have to consider alternatives "whose effect

cannot be reasonably ascertained and whose implementation is remote and speculative." CEQA Guidelines Section 15126.6(f)(3). Further, "an EIR need not study in detail an alternative that is infeasible or that the lead agency has reasonably determined cannot achieve the project's underlying fundamental purpose." *CALFED Proceedings, supra,* at 1165 (citing and quoting *Goleta, supra,* at 574 ("a project alternative which cannot be feasibly accomplished need not be extensively considered").) Further, "a lead agency may structure its EIR alternative analysis around a reasonable definition of underlying purpose and need not study alternatives that cannot achieve that basic goal." *CALFED Proceedings, supra,* at 1166.

The DPEIR evaluated a reasonable range of alternatives (seven were considered and five received full analysis, and a sixth alternative is included in the FPEIR for the non-CEQA purpose of helping support a future vegetation variance application to USACE) (see Chapter 5.0, "Alternatives"). The DPEIR explained how additional alternatives were screened and the basis for eliminating some alternatives from more detailed consideration. The scope of the alternatives analysis in the DPEIR was sufficient to "foster informed decision making and public participation." Attachment 7, "Plan Formulation Report," in CVFPP Volume II provides additional information regarding the foundational development of alternatives presented in the DPEIR. For additional details, see Master Response 24.

T_CLEVELAND1-03

The "potentially significant and unavoidable" designation for agriculture- and forestry-related impacts in Table ES.8-1 is related to the significance of impacts after mitigation. The "potentially" aspect of the conclusion is based on both the lack of specific details about the ultimate location, design, and configuration of future projects to be implemented as part of the CVFPP (and therefore the extent and nature of the impact) and the uncertainty about whether mitigation measures could reduce impacts to a less-than-significant level.

As stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions

identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

The DPEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

In addition, as stated in Master Response 3, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and 3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and

various methods of preserving topsoil would be followed. For additional details, see Master Response 3.

T_CLEVELAND1-04

As indicated in Response T_CLEVELAND-03, above, because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Therefore, the SSIA contains no proposal to eliminate any particular type of agricultural land, nor specific proposals to eliminate this land to benefit particular species. The State also has no intent to improve habitat for one species to the detriment of another. The Executive Summary impact conclusions referenced by the commenter result from a variety of impact mechanisms included in Section 3.5, "Biological Resources—Aquatic," and Section 3.6, "Biological Resources—Terrestrial," in the DPEIR. These impact mechanisms include loss of habitat during construction and improvement of flood protection facilities, disturbance of species during construction, and loss of riparian vegetation associated with implementation of the CVFPP VMS.

As stated in Master Response 14, DWR is collaborating with an interagency advisory committee (DWR, DFG, USFWS, NMFS, and USACE) on development of a long-term Conservation Strategy. The Conservation Strategy will build on the Conservation Framework developed for the 2012 CVFPP, and will provide a comprehensive approach for the State to (1) achieve the environmental goals and objectives of the Central Valley Flood Protection Act of 2008 (SB 5), FloodSAFE, and the CVFPP; and (2) implement DWR's environmental stewardship policy within the flood management system. The Conservation Strategy will integrate measures to mitigate potential impacts on environmental resources resulting from improvements to the SPFC, along with other ecosystem restoration activities implemented within the SFPC footprint.

Development of the Conservation Strategy will continue in close coordination with, and will support development of, 5-year updates to the CVFPP. This collaborative development provides environmental planning, policy, and technical support to develop public outreach and engagement; to identify opportunities to solve flooding problems with environmental approaches; and to provide a solid scientific foundation for improving environmental conditions and trends. The Conservation Strategy will be developed through engagement with the Board, partnering agencies, and environmental, recreational, agricultural, and other interests. For additional details, see Master Response 14.

The DPEIR identifies the biological resources value provided by agricultural lands. For example, on Page 3.6-34 in Section 3.6, "Biological Resources—Terrestrial," is a description of the potential wildlife habitat functions of agricultural lands, including the following:

> The value of agricultural habitat for sensitive and common wildlife species varies greatly among crop types and agricultural practices. Rice fields can provide relatively high-quality agricultural habitat. Seasonal flooding creates surrogate wetlands that can be exploited by a variety of resident and migratory birds, and dry rice fields can attract rodents and their predators (e.g., raptors). Flooded rice fields and irrigation canals also provide important habitat for the giant garter snake, a sensitive species that, like waterfowl and shorebirds, has had its preferred wetland habitat greatly reduced and now uses rice fields as surrogate habitat.

The discussion of Impact BIO-T-3 (NTMA) on page 3.6-78 includes the following:

> Construction-related activities of NTMAs may also affect special-status species that are associated with grassland and agriculture. These include 12 species of special-status plants (such as Red Hills vervain and heartscale) and seven species of birds (among them northern harrier and white-tailed kite). Some special-status species associated with grasslands and agriculture—such as western pond turtle, giant garter snake, and Swainson's hawk—are also associated with wetland and riparian habitats.

These species also could be affected by the construction of levee improvements, particularly landside seepage and stability berms.

T_CLEVELAND1-05

The commenter expresses the opinion that effects on land use and planning would constitute a prohibition on growth of multiple agricultural commodities, and that this is not addressed in the DPEIR.

Impacts associated with converting agricultural land to another use or preventing the continued use of agricultural land for agricultural purposes are addressed in Section 3.3, "Agriculture and Forestry Resources." See response to comment T_CLEVELAND1-03, above.

Effects on local land use issues are addressed in Section 3.14, "Land Use and Planning," especially the effects on local jurisdictions caused by the requirements of SB 5 and the urban level of flood protection. In particular, see Impact LU-7 (NTMA) and Impact LU-7 (LTMA).

The remaining impacts listed in the comment are economic in nature, and CEQA does not require that they be addressed, except to the extent that they relate to potentially significant adverse effects on the physical environment. The comment does not provide a nexus between the economic effects and environmental effects. Nonetheless, the following response has been prepared to maximize responsiveness to public participation in the CVFPP.

As stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA “alternatives” for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally

authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

T_CLEVELAND1-06

The analysis of population, employment, and housing is provided in Section 3.16 of the DPEIR. Thresholds of significance used in the DPEIR to determine whether implementing the proposed program would result in a significant impact are based on Appendix G of the CEQA Guidelines, as amended, with slight modifications. As described on Page 3.16-57 of the DPEIR, an impact on population and housing is considered significant if implementation of the proposed program would do any of the following when compared against existing conditions:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)

- Displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere

In addition, an impact on employment is considered significant if implementation of the proposed program would do the following when compared against existing conditions:

- Induce substantial unemployment in an area, either directly (for example, by displacing places of business in areas where no adequate relocation possibilities exist) or indirectly, by affecting land uses closely tied to regional economic output and employment (for example, by affecting recreational areas)

The analysis of population, employment, and housing impacts is provided on pages 3.16-57 through 3.16-62 of the DPEIR, and using the significance thresholds identified above, the impacts are considered less than significant. Furthermore, as stated in Master Response 2, the DPEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topic or information was raised in the comments. For additional details, see Master Response 2.

The comment does not raise specific questions or provide information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CLEVELAND1-07

As stated in Master Response 24, the DPEIR evaluated a reasonable range of alternatives (seven were considered and five received full analysis, and a sixth alternative is included in the FPEIR for the non-CEQA purpose of helping support a future vegetation variance application to USACE) (see Chapter 5.0, “Alternatives”). The DPEIR explained how additional alternatives were screened and the basis for eliminating some alternatives from more detailed consideration. The scope of the alternatives analysis in the DPEIR was sufficient to “foster informed decision making and public participation.” Attachment 7, “Plan Formulation Report,” in CVFPP Volume II provides additional information regarding the foundational development of alternatives presented in the DPEIR.

Several commenters specifically requested analysis of an alternative that includes the expansion or construction of new upstream reservoirs. As stated in Master Response 19, above, potential development of upstream storage facilities does not offer a feasible alternative to floodplain conveyance and/or storage in relation to the CVFPP. As a result, CEQA does not require that such an alternative be included. For additional details, see Master Response 24.

Furthermore, as stated in Master Response 10, in developing the CVFPP and formulating the SSIA, DWR considered various forms of storage for flood management, including operational changes to existing reservoirs with flood storage, new or expanded flood storage in reservoirs, and storage in floodplains. Specifically, one of the preliminary approaches—Enhance Flood System Capacity—included enlarging the flood storage allocation of several multipurpose reservoirs to improve management of flood risks on lands protected by the SPFC. This evaluation found potential benefits from and opportunities for reservoir flood storage and operational changes, such as improving flexibility in managing hydrologic changes (such as climate change) and potentially offsetting the hydraulic effects of certain system improvements on downstream reaches. At the same time, these analyses addressed both the physical limitations of these opportunities and the potential negative effects of increasing flood-storage allocations on water supply and other beneficial uses. The analyses of reservoir storage and flood operations that were conducted in support of the 2012 CVFPP are described in Attachment 8B in Appendix A, "Central Valley Flood Protection Plan."

Storage elements ultimately retained in the SSIA are based on preliminary systemwide analyses conducted for the 2012 CVFPP, legislative direction for the CVFPP, and the findings of prior and ongoing studies. Among those studies are ongoing surface storage investigations and prior local, State, and federal studies such as the Shasta Lake Water Resources Investigation, North-of-the-Delta Offstream Storage (Sites Reservoir), In-Delta Storage Program, Los Vaqueros Reservoir Expansion, and Upper San Joaquin River Basin Storage Investigation (Temperance Flat Reservoir). However, no new site-specific investigations of surface storage were included in the systemwide analyses conducted to support the 2012 CVFPP.

In the 2012 CVFPP, the SSIA includes coordinated reservoir operations aimed at making the most efficient and effective use of current flood storage allocations in existing reservoirs, and implementation of the authorized Folsom Dam Raise (see Section 3.5.4 of the CVFPP). These SSIA storage elements appropriately reflect the conceptual level of detail and systemwide focus of the 2012 CVFPP, without precluding future consideration of new or expanded storage by the State or local agencies. At this time, the SSIA does not include new reservoirs or expansion of storage (other than at Folsom Dam) solely for the purpose of flood management; however, DWR will continue to consider flood management in the context of, and as an objective of, its ongoing multi-benefit surface storage investigations and systemwide reoperation studies. Should these State investigations or other related efforts by local or federal agencies identify flood management as a component of a feasible reservoir storage project, this may be reflected in future updates to the CVFPP.

During the early and mid-20th century, most of the major rivers and tributaries draining into the Central Valley were dammed, providing both intentional and incidental flood management benefits. The aggregate benefit of these reservoirs to flood management has been substantial, and has contributed to the success of the existing flood system in reducing or avoiding damage from major flood events during the past century. However, California's topography and geology limit opportunities for reservoir construction, and most of the feasible locations have already been developed with the existing major dams (e.g., Shasta, Oroville, Folsom). The remaining opportunities are much more limited.

Specifically, unlike the situation that existed at the beginning of the 20th century, only a few remaining dam sites, spread throughout the Central Valley watersheds, offer the potential to provide large volumes of flood storage capacity. Other than for a few specifics, such as raising Shasta Dam or constructing Sites Reservoir, commenters on this topic did not provide a more detailed proposal or recommendation for implementing upstream storage projects. In particular, commenters provided no specific information regarding the feasibility of using an upstream-reservoir approach to meet the requirements of SB 5.

DWR recognizes the importance of developing additional water storage capacity in California to support an increasing population, to help compensate for the anticipated loss of snowpack storage as a result of climate change, and to maintain the important role of Central Valley agriculture for the nation and the world. For these reasons, multipurpose reservoir projects will likely continue to be proposed and, if successful, may help to meet needs for flood storage capacity.

However, these proposals face daunting challenges. Despite their benefits, new or expanded reservoirs generally face considerable opposition given their environmental effects, costs, perceived risks, and other factors. Also, environmental laws established mostly in the 1970s now apply to these proposals. Among these laws is the requirement under Section 404 of the CWA that any project affecting waters of the United States can be approved only if it is demonstrated to be the least environmentally damaging practicable alternative. Many other laws also present permitting challenges.

It is significant that no new major onstream reservoir has been constructed in the Central Valley watershed since New Melones Dam was completed in 1978. The Auburn Dam project, which commenced construction in 1968, was never completed because of several factors, including its cost, geologic problems with the site, and potential harm to recreational and ecological values. Recently, successful projects have consisted largely of projects to

provide offstream storage (such as Los Vaqueros Reservoir), which can provide only limited flood control benefits outside their watersheds given the need for pumping, and projects to increase the capacity of existing reservoirs (which by their nature are only incremental).

Moreover, to serve as a substitute for floodway conveyance and storage, upstream reservoir capacity would have to be developed throughout the Central Valley watershed. The extreme weather events (i.e., atmospheric rivers) that create the greatest risk of a severe flood are often localized. Floodplain storage protects against floodwaters originating from all upstream areas, but by definition, upstream reservoirs can store only the floodwaters that originate from a particular area or tributary watershed. For example, an increase in the capacity of Shasta Lake would provide little or no benefit in the event of a major atmospheric rivers event focused on the central or southern Sierra Nevada. There is simply no reasonable scenario under which an array of new reservoir projects spread throughout the Central Valley watershed would be feasible and could serve as an effective substitute for floodplain storage. Suitable and feasible remaining sites do not exist, the costs would likely be prohibitive and the opposition substantial, and environmental permits would be difficult if not impossible to obtain. It would be both speculative and imprudent for the CVFPP to rely on such an approach. None of the comments on the topic have addressed, much less rebutted, the substantial evidence that such an alternative could not feasibly meet the objectives of the CVFPP as directed by SB 5.

Failing to reserve adequate floodway conveyance and storage capacity now would leave future generations with limited options for addressing their flood protection needs. The current generation has benefited from the existing bypass system, and expanding that system would benefit both current and future residents.

It is recognized that in certain cases and to some degree, upstream floodway conveyance and storage could reduce the need for (or scale of) some types of downstream flood management actions associated with the SPFC. However, opportunities to reduce flood risks on lands protected by the SPFC by increasing floodway conveyance and storage are limited, and depend on a variety of factors:

- The location of a reservoir (or multiple reservoirs) with respect to the downstream actions or target area is important. Multipurpose reservoirs are present along many major tributaries to the Sacramento and San Joaquin rivers, but the hydrology (magnitude of rainfall and timing of peak flows from a watershed) and the operations of these reservoirs are very complex. Floodflows in downstream reaches of mainstem rivers

are often influenced by the operation of multiple reservoirs, and peak flood stages may result from a combination of hydrologic events on different tributaries. Consequently, increasing flood storage in one reservoir may not reduce peak flood stage along a mainstem river reach because of the operations of other reservoirs, contributions from unregulated streams, or hydrology of the various tributary watersheds.

- The volume of floodway conveyance and storage that could be achieved is related to the size of the watershed and floodflows it generates, which can limit the effectiveness of expanding reservoirs or constructing new reservoirs. Expanding a reservoir is typically most effective when the existing reservoir has a small flood storage allocation compared with its tributary watershed. Similarly, it may not be effective to construct or expand a reservoir that controls a relatively small watershed.

- Opportunities to expand a reservoir are typically limited by the existing dam's location, size, and type of construction (concrete versus earthen, for example). A reservoir expansion sufficient to achieve the desired flood risk reduction benefits downstream may not be physically possible at all locations.

- The cost and potential impacts of enlarging a reservoir or constructing a new reservoir vary substantially from location to location. The CVFPP is a conceptual plan, and the PEIR is a program-level document; the site-specific analyses that would be needed to assess feasibility were not conducted as part of the CVFPP or PEIR, and will occur at the project level. See Master Response 24.

- Reservoir ownership varies, and studies of specific opportunities to expand reservoirs must be conducted in partnership with owners and operators.

The above factors indicate that a feasible and cost-effective surface-storage project could be developed only under specific circumstances, and that even if it is feasible, additional surface storage may not provide meaningful flood management benefits. These factors, combined with the conceptual systemwide focus of the 2012 CVFPP, precluded DWR from identifying specific reservoir storage elements to include in the SSIA at this time. These factors limited the ability to formulate an approach/alternative to include in the PEIR that focused primarily on increasing flood storage. Further, increasing storage alone would not achieve many of the CVFPP goals or fulfill legislative intent, such as improving ecosystem functions within the flood management system or achieving an urban level of flood protection for all urban areas.

Studies showed that combining bypass expansion, regional levee improvements, and coordinated operations in the SSIA did not result in systemwide hydraulic impacts that would be substantial enough to require including additional surface storage as a hydraulic mitigation measure. However, the plan does not preclude future consideration of new or additional flood storage by State, federal, or local agencies in the regional flood management planning or two basin feasibility studies, or as independent projects. (See Section 3.5.4 in Appendix A, "Central Valley Flood Protection Plan."). For additional details, see Master Response 10.

As stated in Master Response 24, CEQA requires that an EIR, in addition to analyzing the environmental effects of a proposed project, consider and analyze project alternatives that would reduce adverse environmental impacts (PRC Section 21061; *CALFED Proceedings* at 1143, 1163).

Section 15126.6 of the CEQA Guidelines indicates that an EIR must "describe a range of reasonable alternatives to the project ... which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. ..." An EIR need not consider every conceivable alternative to a project or alternatives that are infeasible. (*Id.*; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 574 (*Goleta*).) "In determining the nature and scope of alternatives to be examined in an EIR, the Legislature has decreed that local agencies shall be guided by the doctrine of 'feasibility.' " *Id.* at 565. CEQA defines "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." (PRC Section 21061.1; see also CEQA Guidelines Section 15364.)

"There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason." CEQA Guidelines Section 15126.6(a). The rule of reason "requires the EIR to set forth only those alternatives necessary to permit a reasoned choice" and to "examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project." CEQA Guidelines Section 15126.6(f). An EIR does not have to consider alternatives "whose effect cannot be reasonably ascertained and whose implementation is remote and speculative." CEQA Guidelines Section 15126.6(f)(3). Further, "an EIR need not study in detail an alternative that is infeasible or that the lead agency has reasonably determined cannot achieve the project's underlying fundamental purpose." *CALFED Proceedings*, *supra*, at 1165 (citing and quoting *Goleta*, *supra*, at 574 ("a project alternative which cannot be feasibly accomplished need not be extensively considered").) Further, "a lead agency may structure its EIR alternative analysis around a reasonable

definition of underlying purpose and need not study alternatives that cannot achieve that basic goal." *CALFED Proceedings, supra*, at 1166.

The DPEIR evaluated a reasonable range of alternatives (seven were considered and five received full analysis, and a sixth alternative is included in the FPEIR for the non-CEQA purpose of helping support a future vegetation variance application to USACE) (see Chapter 5.0, "Alternatives"). The DPEIR explained how additional alternatives were screened and the basis for eliminating some alternatives from more detailed consideration. The scope of the alternatives analysis in the DPEIR was sufficient to "foster informed decision making and public participation." Attachment 7, "Plan Formulation Report," in CVFPP Volume II provides additional information regarding the foundational development of alternatives presented in the DPEIR.

Several commenters specifically requested analysis of an alternative that includes the expansion or construction of new upstream reservoirs. As demonstrated in the discussion of Master Response 10, above, potential development of upstream storage facilities does not offer a feasible alternative to floodplain conveyance and/or storage in relation to the CVFPP. As a result, CEQA does not require that such an alternative be included.

T_CONANT1

T_CONANT1-01

MR. CONANT: Good morning, Mr. President, Board members. Thank you for coming and listening to our comments today. I really appreciate being able to address this Board.

My family has farmed in the Rio Oso area since 1921. My grandparents and their parents built a mule barn to build the levees built by Natomas Company in the 1920s.

I also support what James Gallagher talked about, the three issues the plan that do make a lot of sense for our local communities. However, I have real concerns about the rest of the plan.

T_CONANT1-02

A little bit of my history. I serve on the California Farm Bureau Board. I serve on the Yuba Sutter Farm Bureau Board, South Sutter Water District Board, and I am president of our local high school. So I'm going to put my emphasis on those issues.

First of all, the area of land that will be

T_CONANT1-03

affected by that will reduce our ADA in our local schools, because we're going to lose a lot of homes. A nice community that we are going to disrupt. We're going to lose tax base to the County and the school districts. We're going to lose jobs, because this agricultural land is -- 10,000 is not going to be farmed at all. The other 30,000 acres is not going to be farmed intensively as it is today. Most of that land that's being talked about doing developed is prime agricultural land. In many cases, right next to rivers are our best orchard ground. My family has farmed orchards since the 20s in that area.

Those non-intensely farmed acres are going to be -- people are not going to be working as hard. What are you going to raise on there? What is a flood-tolerant crop? Certainly not orchards. It's not any -- it wouldn't -- we wouldn't want that in our flood basin anyway. It's probably not rice, because you probably won't be able to plant it. Maybe some beans. And it's not going to be alfalfa. It won't stand the flood.

What are we going to raise? Beans and dry land grazing? That's probably about all you're going to be able to raise in that area. It's not -- those are not intensely farmed crops. Therefore, we're going to lose all the jobs in the habitat, plus a lot of the jobs in that area. So those farmers won't be hiring people to run

T_CONANT1-04

T_CONANT1-05

that ground.

Plus, think of how many other jobs are lost in their local communities here. You won't have tractor dealers selling tractors. You won't have chemical dealers selling chemicals. You won't have the local restaurants waiting on tables to support the people that work there, because there won't be as many jobs.

Those are the concerns I have. This system we have has worked for over a hundred years. Maybe not perfectly, but pretty well. There can be some improvements, absolutely. We can improve the structures that we have and build more storage. Those would be better flood protection ideas in my mind.

The -- so any kind of flood storage reduces the flood damage to -- and it reduces the risk. Some storage ideas would be maybe raising Shasta. I read a report probably 20 years ago by the Army Corps that talked about raising Shasta 150 feet. It would more than double the size of Shasta. You would create more water for more habitat, more water for fish, more water for farming and for rural communities to the south. You would have more hydropower. But most important, you would have a huge amount of flood protection.

That study also showed that if you raise that base flood elevation of that dam 150 feet, that it would

T_CONANT1-06

make the entire Sacramento valley with no levee improvements -- and this is 20 years ago, with no levee improvement into a hundred year floodplain.

Those are some things that would be very beneficial. Maybe some other storage projects throughout the State in the north State would be beneficial as well as the south.

We cannot afford a project that costs 15 to 17 billion dollars. What is the real cost of that project by the time we're done with it? We've all noticed what high speed rail has done in the last few years where the price of that rail project has gone up astronomically.

Will our project cost 25 or 50 billion? I don't know that. I just know that we probably won't be able to do it for what we're talking about today, and we can't afford what we're talking about today.

Thank you for your time and listening to me. I really appreciate it. And thank you for being here.

(Applause.)

PRESIDENT EDGAR: Thank you.

Mat Conant, California Farm Bureau, Yuba Sutter Farm Bureau, South Sutter Water District, (Public Hearing, April 6, 2012)

Response

T_CONANT1-01

The comment provides personal information about the commenter and introduces the remarks. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CONANT1-02

The comment raises concerns about losing homes, tax base, and ADA in schools due to the plan. As stated in Master Response 2, some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements. The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable. For additional details, see Master Response 2.

As stated in Master Response 3, these impacts generally are social and economic in nature, and CEQA does not require addressing them except to the extent that they relate to potentially significant adverse effects on the physical environment. Nonetheless, the responses shown below have been prepared to maximize responsiveness to public participation in the CVFPP.

The SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises.

Implementing the SSIA would increase the percentage of the population receiving at least 100-year (1 percent annual chance) flood protection from the current 21 percent to more than 90 percent (CVFPP, page 3-40). The remaining 10 percent of the population would receive benefits through residual risk management actions. Based on initial planning-level cost estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to provide flood stage reduction benefits to many of the areas in the system, including small communities and rural-agricultural areas.

In addition, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and 3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed. For additional details, see Master Response 3.

T_CONANT1-03

The comment raises concerns about job losses resulting from land conversion from agriculture to habitat or placing agricultural land in the floodway. As stated in Master Response 3, these impacts generally are social and economic in nature, and CEQA does not require addressing them except to the extent that they relate to potentially significant adverse effects on the physical environment. Nonetheless, the responses shown below have been prepared to maximize responsiveness to public participation in the CVFPP.

The SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. Implementing the SSIA would increase the percentage of the population receiving at least 100-year (1 percent annual chance) flood protection from the current 21 percent to more than 90 percent (CVFPP, page 3-40). The remaining 10 percent of the population would receive benefits through residual risk management actions. Based on initial planning-level cost

estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to provide flood stage reduction benefits to many of the areas in the system, including small communities and rural-agricultural areas.

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As stated in Master Response 2, the PEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

As stated in Master Response 1, expansions of various bypasses are identified in the SSIA as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and

restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

Regarding the types of agricultural crops that may be grown in an expanded floodway, there is great variability in the frequency of inundation in various floodway areas; therefore, there are various opportunities to grow different types of crops. There are orchards in SPFC floodways that have been present for many decades. These orchards are located in areas where flood frequency and duration is appropriate to allow survival and growth of orchard trees. Corn, rice, and other crops are grown in other existing floodway areas.

T_CONANT1-04

This comment is similar to comment T_CONANT1-03, although it provides additional examples and details regarding the theme of economic impacts. See response to comment T_CONANT1-03, above.

T_CONANT1-05

The comment suggests improving existing structures and building more storage as a mechanism for increasing flood protection. As stated in Master Response 10, in developing the CVFPP and formulating the SSIA, DWR considered various forms of storage for flood management, including operational changes to existing reservoirs with flood storage, new or expanded flood storage in reservoirs, and storage in floodplains. Specifically, one of the preliminary approaches— Enhance Flood System Capacity—included enlarging the flood storage allocation of several multipurpose reservoirs to improve management of flood risks on lands protected by the SPFC. This evaluation found potential benefits from and opportunities for reservoir flood storage and operational changes, such as improving flexibility in managing hydrologic changes (such as climate change) and potentially offsetting the hydraulic effects of certain system improvements on downstream reaches. At the same time, these analyses addressed both the physical limitations of these opportunities and the potential negative effects of increasing flood-storage allocations on water supply and other beneficial uses. The analyses of reservoir storage and flood operations that were conducted in support of the 2012 CVFPP are described in Attachment 8B, "Reservoir Analysis," in Appendix A, "Central Valley Flood Protection Plan."

Storage elements ultimately retained in the SSIA are based on preliminary systemwide analyses conducted for the 2012 CVFPP, legislative direction for the CVFPP, and the findings of prior and ongoing studies. Among those studies are ongoing surface storage investigations and prior local, State, and federal studies such as the Shasta Lake Water Resources Investigation, North-of-the-Delta Offstream Storage (Sites Reservoir), In-Delta Storage Program, Los Vaqueros Reservoir Expansion, and Upper San Joaquin River Basin Storage Investigation (Temperance Flat Reservoir). However, no new site-specific investigations of surface storage were included in the systemwide analyses conducted to support the 2012 CVFPP.

In the 2012 CVFPP, the SSIA includes coordinated reservoir operations aimed at making the most efficient and effective use of current flood storage allocations in existing reservoirs, and implementation of the authorized Folsom Dam Raise (see Section 3.5.4 of the CVFPP). These SSIA storage elements appropriately reflect the conceptual level of detail and systemwide focus of the 2012 CVFPP, without precluding future

consideration of new or expanded storage by the State or local agencies. At this time, the SSIA does not include new reservoirs or expansion of storage (other than at Folsom Dam) solely for the purpose of flood management; however, DWR will continue to consider flood management in the context of, and as an objective of, its ongoing multi-benefit surface storage investigations and systemwide reoperation studies. Should these State investigations or other related efforts by local or federal agencies identify flood management as a component of a feasible reservoir storage project, this may be reflected in future updates to the CVFPP.

Analyses for the 2012 CVFPP and for previous and ongoing studies (such as Reclamation's Shasta Lake Water Resources Investigation) have found that increasing flood storage in Shasta Dam and Reservoir would not significantly reduce flood risks for lands protected by the SPFC, for several reasons. Shasta Reservoir has a sizeable flood-storage allocation capable of managing a 1 percent chance (100-year) flood from its tributary watershed; consequently, the dam and reservoir are already regulating floodflows adequately for all but the most severe and infrequent floods. More importantly, other uncontrolled tributaries (those not regulated by reservoirs) downstream from Shasta Dam, such as Cottonwood Creek, contribute peak flood flows along reaches of the Sacramento River with SPFC levees that exceed the flood releases from Shasta Dam. Additional storage in Shasta Dam and Reservoir would not address the significant flood flows produced by these unregulated tributaries. Previous studies by USACE and others have indicated that a new flood management reservoir on Cottonwood Creek would conflict with goals for watershed management and environmental restoration in the Cottonwood Creek watershed, and would have significant environmental effects. This example indicates that increased storage capacity may not always result in meaningful flood-management benefits, and that increased storage may not be feasible in locations where it is most needed. For additional details, see Master Response 10.

As stated in Master Response 24, several commenters specifically requested analysis of an alternative that includes the expansion or construction of new upstream reservoirs. As demonstrated in Master Response 10, potential development of upstream storage facilities does not offer a feasible alternative to floodplain conveyance and/or storage in relation to the CVFPP. As a result, CEQA does not require that such an alternative be included. For additional details, see Master Response 24.

T_CONANT1-06

The comment raises concerns about the cost of plan implementation. The comment provides no information or evidence challenging the validity of the cost estimates in the CVFPP. DWR and the Board are sensitive to the

costs of plan implementation. As stated in Master Response 15, in recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA "alternatives" for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal

cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

T_CT1-01 MR. KNIGHT: Chair, Board, members of the audience, thank you for the opportunity to comment. My name is Curtis Knight. I'm the Conservation Director for California Trout. We are a 41 year old organization with a long history of working collaboratively with diverse interests.

As a fish group, we see this as a public safety effort, first and foremost. We also recognize the importance of agriculture to the landscape and the economy of the Central Valley. Agriculture lands provide important open space and habitat for fish and wildlife.

We support a flood plan that conserves farm land, improves flood capacity, enhances hunting and fishing opportunities.

Water supply is also an important aspect of this plan. Expanding the capacity of the flood system will allow for greater flexibility. In the management of upstream reservoirs, this flexibility could lead to more water storage. Water supply is an important consideration.

The lack of flood plan habitat, and this is from a fish perspective, is an under-appreciated limiting factor for Central Valley steelhead and salmon. Improved floodplain habitat can be an important part of the rebound Central Valley stocks.

In turn, this can help ease regulatory burden. We commit to working with the agriculture community, develop a plan that can meet both the needs of agriculture and the fish. And I'll provide one quick specific example. We worked with a landowner, a farmer in the Yolo Bypass to flood five acres of a rice field. This winter we put in 10,000 juvenile Chinook salmon to see how they would do. They survived and thrived, quadrupling their weight.

These types of opportunities exist. These win-win types of opportunities exist. Working together

will be necessary to secure the political and fiscal support for a flood plan that works for all.

Thank you.

PRESIDENT EDGAR: Thank you, sir. Appreciate it.

California Trout, Curtis Knight (Public Hearing, April 11, 2012)

Response

T_CT1-01

The comment states that the commenter's organization supports a flood plan that conserves farmland, improves flood capacity, and enhances hunting and fishing opportunities, and that the organization wishes to find opportunities to collaborate with agricultural interests and others to support the CVFPP. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CVFCA1-01

MS. TERRY: Yes. Melinda Terry, Executive Director of Central Valley Flood Control Association.

Sorry, I didn't do it. I'm used to going to Delta meetings. And all of the public agencies that do Delta stuff do it the opposite of you. We hear presentations and then we always -- we're not allowed to comment till after the presentations. So I apologize. I'm just not as familiar with your process.

I think I will -- I think the February 24th meeting is really the appropriate place. We've submitted some earlier comments to the Department, nine areas that we'd like to work on, but those are much more appropriate for February. But we do commend them for the draft that is before you. We do think there's some more to be done and we look forward to that conversation.

T_CVFCA1-02

The one thing though that I will say, and after listening to Jay's last process in particular is I constantly remind people nobody goes to jail if you miss a legislative deadline. Although, the Legislature appreciates that if you miss -- if you make -- you know, meet the deadline, rather.

But when I looked at this schedule and I -- and April I think really strikes me the most as problematic,

because you're looking at then having these meetings of the actual changes that you're going to propose in early April, and then adopting the changes by the end of the month sort of is the way I read that.

So if that's not true, but I guess my point is if you can provide a little bit more time and if that becomes necessary, then the real trick is you just really need to make sure to go over to the Legislature, meet with the leadership of the Legislature to advise them if you need more time, why you need more time, and be sure to give them a new date that really you think you can meet, if you're not going to be able to make that. But that was one concern that I saw looking at that.

Thank you.

PRESIDENT CARTER: Thank you.

Central Valley Flood Control Association, Melinda Terry, Executive Director (Public Hearing, January 27, 2012)

Response

T_CVFCA1-01

The comment introduces the commenter and her professional affiliation. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CVFCA1-02

The comment states concerns about the timing of the plan adoption. As stated in Master Response 22, the CVFPP SSIA is a complex integrated flood management plan that covers a large geographic area. The State Legislature required DWR to prepare the first public draft CVFPP by January 1, 2012, for adoption by the Board by July 1, 2012, or as such other date as may be provided by the Legislature. DWR believes that the CVFPP and DPEIR speak for themselves regarding the magnitude of the required effort in light of these statutory deadlines, and appreciates the compliments from a number of commenters in that regard.

The Public Draft CVFPP was released on time, on December 30, 2011. Several of the attached supporting documents, specifically the *State Plan of Flood Control Descriptive Document* (November 2010) and the *Draft Flood Control System Status Report* (December 2011), were published before the Public Draft CVFPP and informed its development. Most CVFPP attachments were released with the public draft or in early February 2012; exceptions include the “Flood Damage Analysis,” “Riverine Channel Evaluations,” “Cost Estimates,” and “Reservoir Analysis” attachments, which were released between mid-February and the publication of the DPEIR.

T_CVFCA2-01 MR. SHAPIRO: Good afternoon, President Carter Thank you.

My name is Scott Shapiro, and I'm general counsel of the California Central Valley Flood Control Association. I also represent some other clients in the valley, and will be speaking to you a little later today

for a different client. But at this moment, I want to emphasize the values and theories that are being put forward by the Central Valley Flood Control Association. It's a joint powers agency -- excuse me, it's a nonprofit association made up of over 80 local agencies, including levee districts, reclamation districts, joint powers agencies, cities and counties that have a significant interest in flood protection and flood management in the Central Valley in an area almost identical to that which this plan covers.

And just as we've had internal conflicts and debates over deciding our view on the plan, we think you'll be facing those same internal conflicts from comments from this audience and others. And we wish you luck in resolving those. And we think we have developed a path for trying to resolve them as we have done within our own community.

T_CVFCA2-02 I have six comments for you today. The first is the past, the next three are substantive, and then the last two are process issues going forward.

On the past, we wanted to note that we had been very pleased to have a continuing role in the development of this plan, as many of other people, who spoke before you, have. And we had an opportunity to provide comments based on a cursory review of the admin draft in November.

We were able to provide a number of comments to the Department of Water Resources at that time. We were very pleased that the Department addressed many of those comments.

We wanted to speak today just about two that were addressed to share with you where we think the plan was and where it's going, and we think it's a very positive development.

T_CVFCA2-03 The first is that we think the admin draft of the plan did not make sufficiently clear that this needs to be a flood protection plan first. This is not an ecosystem restoration plan. Having said that, our members are absolutely committed to integrating ecosystem restoration into this flood protection plan. And we think it can be done.

We do note, however, that we don't think that you can balance ecosystem restoration flood protection in a flood protection plan. It has to be a plan, as indicated by the Legislature. And then we must do everything we can to properly integrate the ecosystem restoration within it.

Our mission, the Flood Control Association's mission, our members' mission, and this Board's mission is one of flood protection, and we think that needs to be the paramount focus. We think the plan is reflecting that now. We look forward to it continuing to do so.

T_CVFCA2-04 Secondly, the administrative draft of the plan we thought focused too exclusively on facilities of the State Plan of Flood Control, which is a legal fiction, a list of facilities that the State has provided assurances on, when the Legislature's instruction was to develop a flood plan for the valley. And we think that this revised plan, as opposed to the admin draft, does that.

It is -- it now has a systemwide focus. It includes facilities of the State Plan of Flood Control and facilities of the -- that are not part of the State Plan of Flood Control, as testified by Mr. Jim Giottonini of SJAFCA. We think it's a very positive improvement.

So these are two examples of the kinds of changes which have been made of the plan, and the kinds of changes which we supported.

T_CVFCA2-05 So three concrete comments about the plan. And we understand the purpose of this hearing in many parts is for you to hear testimony on what people are concerned about, and then for you to hold hearings about this. So we'd like to offer three concrete items for your thought and for hearings.

The first is funding. You heard comments about funding today. And we think the plan provides a very helpful framework. But at the end of the day implementation is subject to funding. Now, the Department

of Water Resources is supposed to develop a funding plan following the adoption of this plan. And there are many elements in this plan we will support, but that support is obviously contingent or tempered by not knowing what the funding plan is.

T_CVFCA2-06

For example, the draft plan notes that local agencies would be required to provide a cost share for erosion repairs, that the State would take over erosion repair responsibilities in many cases.

Now, from the perspective of local agencies, ensuring that erosion does not threaten the integrity of the levee, at least on the Sacramento system, is the responsibility of the Corps and the State under current law. And so we have significant concerns about a new program, which would shift those costs to local agencies. We have limited dollars to spend.

However, we may be able to support a local cost share on erosion, if erosion is approached in a way and at a time which lowers our operation and maintenance costs, and thus we all save money. And so our support for the plan and the State taking over erosion control is strong. But if the funding plan ultimately increases our cost share, and State law currently provides it's a State responsibility, our support would obviously be tempered. So we think funding is a key issue, which you can

investigate, you can make a topic of workshops, and you can take testimony on and incorporate concrete proposals on funding in the plan to create a framework for the future funding plan.

T_CVFCA2-07 Second concrete proposal, the question of implementation. You heard a lot of comments today on implementation. You hear the rural communities' concern that urban will get fixed first. You hear the environmental concern that ecosystem restoration will come last. And since the beginning of this plan, the Association members have worked with DWR to try to make the plan effective, specific, and implementable. And we had hoped the plan would have very specific projects in it.

Unfortunately, we understand with a lot of competing interests and limited time that didn't happen. And with only four months left till adoption, we recognize the time has passed to make the plan more specific. We do think it's imperative that some questions about how it will be implemented will be addressed.

For example, how will the regional work groups work? Who will convene them? Who's going to be a member in them? How do we make sure environmental groups and other NGOs have a seat at the table in those regional work groups? Will DWR fund the work? How will DWR fund the

work? Will each region be asked to prioritize projects within the region? How will this Board or DWR examine the different priorities in the different regions and try to figure out what the systemwide priorities are?

T_CVFCA2-08 We think these questions are very important, and the Board should take testimony on this, should hold a workshop to talk about what specifics can go in the plan to provide assurances to people who say there's no specifics that we know we're going to be able to live with and support the eventual plan when it comes out.

We think this effort would be most successful if local agencies partner were the State to lead this effort. This is ground-up planning. It has worked effectively for projects in the past. And top-down planning has not worked effectively, in many cases, in the past.

If you hold such a workshop, if you're looking for testimony, we will be prepared to come with concrete suggestions on how this Board could include implementation into the plan.

T_CVFCA2-09 Third and final suggestion on what might go into the plan is the concept of getting better together. It's the view of the association we must all get better together. We have members who from around the valley who straddle every interest group that has come before you today.

(Thereupon a cell phone rang.)

BOARD MEMBER VILLINES: I don't know how to turn this off. I'm sorry. I was trying to go to silent.

(Laughter.)

MR. SHAPIRO: Can you put it near the microphone so we can all hear it.

BOARD MEMBER VILLINES: My kids can do it.

PRESIDENT CARTER: Just take it outside.

(Laughter.)

MR. SHAPIRO: So it is our view we just all get better together. And that includes systemwide improvements, as well as specific improvement actions for the urban and small communities, the ecosystem and the rural areas.

T_CVFCA2-10 While the draft plan offers very specific vision for what will happen in the urban and small communities area, and a programmatic level view of what will happen systemwide and for the ecosystem. There's very little detail and commitment on how our rural stakeholders will benefit from some of the near-term actions in the draft plan.

The draft plan would codify the legislative policy of SB 5, that there will be different levels of flood protection in urban and rural areas. And, of course, the logical extension of that is that the rural

areas will remain at risk, at a high risk, of flooding, and become a de facto pressure relief valve for our system.

And we think that our rural members accept that this is likely to happen in very large flood events. The question becomes is it reasonable for it to happen in much lower level flood events, and should they be taking that relief pressure without some sort of acknowledgement of the exchange that is being made here.

What is the appropriate minimum level standard for rural areas? And what do these rural districts and landowners get in exchange for serving as that de facto relief valve in large events? The plan does not offer specific answers. We think the plan needs to. It should offer greater specificity for what the rural levee standard is. It should commit to a rural levee program. It should commit to funding for the program, and it should commit to the State supporting changes to the National Flood Insurance Program, much as Lewis Bair spoke to you about today.

T_CVFCA2-11 So now moving past those, let me offer two procedural or process comments. The first is we recognize that the Legislature has given this task to you to adopt the plan by the end of June. I think most of us in the room wish you had more time. Those of you up there may

wish you had more time too.

However, that's the deadline. And if you're going to meet that deadline, we respect that you'll meet the deadline. But we are very concerned that there are multiple technological -- technically complex appendices to the plan, which -- some of which we don't even think are out officially yet, where there probably isn't a single stakeholder in this room that's actually read everyone of those documents.

T_CVFCA2-12 And therefore, we really question whether all of those appendices are ready for adoption by this Board. We think that maybe you should consider bifurcating the plan and all of the appendices or including with the plan the appendices that have had thorough review and comment, and delaying the appendices which need more time. Those appendices become the framework, the foundation, the Constitution for what's going to happen over the next five years. We think it's important they have the proper review time.

This is particularly true in light of the fact that the EIR for the plan won't even be released until March, and it itself is going to be thousands of pages of documentation to review by the stakeholders. Therefore, procedurally, you might consider bifurcating what's adopted in June with what's adopted later when the review

can occur.

T_CVFCA2-13 Last procedural comment. I want to inform you that the leadership of the Association has, in the past month, twice met with some members from an environmental coalition with a goal of trying to seek common ground in making recommendations on how the plan could be modified. We found the meetings very helpful, in not only educating each other on what our issues and concerns are, but also in beginning to outline a strategy for issues where we may actually be in close alignment.

And hopefully, if this goes where I at least hope it will, we can come back and jointly speak to you on issues related to the plan. So we'll keep you updated on that.

T_CVFCA2-14 In closing, we very much appreciate the efforts of DWR on what was a very difficult document to draft. We have been committed partners on flood control for decades. In fact, many of our members existed before this Board even existed. We believe in order to move forward, you must focus your attention and efforts on the details for implementation. How will the regional plans work? What will rural areas get in exchange for it being a relief valve in the system? And how will the plan be funded?

We commit to you our promise to actively participate in assisting you in your efforts and

developing answers to these questions.

Thank you for your time.

PRESIDENT CARTER: Thank you, Mr. Shapiro.

Central Valley Flood Control Association, Scott Shapiro, General Counsel (Public Hearing, February 24, 2012)

Response

T_CVFCA2-01

The comment introduces the commenter and his professional affiliation. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CVFCA2-02

The comment describes the organization's previous involvement in development of the CVFPP. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CVFCA2-03

The comment states that the CVFPP must include the elements required by the Legislature and focus primarily on flood protection. The comment further states that the changes made to the plan between the administrative draft and the public draft do reflect that focus. As stated in Master Response 8, the State Legislature enacted comprehensive flood risk management legislation in 2007, including the Central Valley Flood Protection Act of 2008. This law set a clear directive for an integrated systemwide approach to Central Valley flood management, and provided detailed guidance for DWR to follow in formulating the CVFPP. The Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in CWC Sections 9600–9625. For additional details, see Master Response 8.

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. For additional details, see Master Response 7.

T_CVFCA2-04

DWR and the Board appreciate the commenter's opinion regarding improvements to the CVFPP. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CVFCA2-05

The comment expresses concerns about funding for elements of the CVFPP. As stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA "alternatives" for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

T_CVFCA2-06

The comment, which expresses concerns about funding and cost-sharing at the local level, is similar to comment T_CVFCA2-05. See response to comment T_CVFCA2-05, above.

Regarding erosion, which can be related to facility maintenance, as stated in Master Response 6, improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures).

The SSIA promotes efficient and sustainable long-term O&M practices through the following:

- Reforming and consolidating State and local agencies' roles and responsibilities for O&M
- Standardizing criteria by which maintenance practices, procedures, and inspections are performed and reported
- Implementing strategies to adequately and reliably fund routine activities and streamline permitting

Some of the proposed activities may involve legislative action, new institutional arrangements involving local maintaining agencies, modifications to existing State programs, and additional or redirected funding. For additional details, see Master Response 6.

T_CVFCA2-07

The comment raises questions about how the CVFPP will be implemented. As stated in Master Response 14, regional flood management planning, to be conducted in each of nine regions identified in the 2012 CVFPP, is an important next step in identifying specific improvements to rural-agricultural areas, small communities, and urban areas consistent with the SSIA. Upon CVFPP adoption, DWR will work closely with local entities to collect on-the-ground information regarding flood risks and needs, identify potential local and regional improvement projects, assess the performance and feasibility of these projects, and develop proposals that reflect the priorities of local entities in reducing flood risks. Each regional plan will present an assessment of proposed project costs and benefits, considering potential contributions to an integrated and basin-wide

solution. DWR intends to provide guidance as well as technical and financial assistance to local agencies to prepare the regional flood management plans, subject to availability of funds.

Regional flood management plans are anticipated to:

- Assess regional flood risks and management actions (projects) to reduce these risks
- Discuss regional priorities, including criteria used to prioritize individual projects
- Describe specific projects, including their potential costs, regional and systemwide benefits, and beneficiaries
- Provide a financial plan describing how the proposed projects would be funded, including cost sharing and financing for local shares
- Describe regional governance of flood management

Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts. Information and outcomes from the regional planning process will inform the State-led basin-wide feasibility studies, preparation of a financing plan for the CVFPP, and the first update of the CVFPP (scheduled for completion by 2017). This regional effort is scheduled to be launched publicly in June 2012 and is anticipated to continue through 2013.

DWR will engage regional flood planning partners to develop and implement communication strategies with broad interest groups to brief them on flood management planning in their regions. Regional implementing and operating agencies, land use agencies, and interest groups will be invited to participate in the planning process. Each regional planning process will seek input, as appropriate, from agricultural interests, environmental interests, permitting agencies/resource agencies, local emergency responders, tribes, and other stakeholders. DWR anticipates that a regional flood working group will be formed in each region. For additional details, see Master Response 14.

See response to comment T_CVFCA2-05, above, regarding the funding for CVFPP implementation.

T_CVFCA2-08

The comment raises questions about local agency involvement and the planning process. As it relates to future planning, this comment is similar to comment T_CVFCA2-07. See response to comment T_CVFCA2-07, above.

Additionally, as stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP. For additional details, see Master Response 13.

DWR and the Board appreciate the Central Valley Flood Control Association's suggestions regarding future planning efforts and its offer of support.

T_CVFCA2-09

The comment suggests that the CVFPP include systemwide improvements, as well as specific improvement actions for urban and small communities, the ecosystem, and rural areas. As stated in Master Response 5, the State Legislature enacted comprehensive flood risk management legislation in 2007, including the Central Valley Flood Protection Act of 2008. This law set a clear directive for an integrated systemwide approach to Central Valley flood management, and provided detailed guidance for DWR to follow in formulating the CVFPP. The Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in CWC Sections 9600–9625. For additional details, see Master Response 5. The SSIA is consistent with the commenter's suggestion that the CVFPP include "systemwide improvements, as well as specific improvement

actions for the urban and small communities, the ecosystem and the rural areas." The SSIA is a balanced approach that incorporates all these categories of activities.

T_CVFCA2-10

As stated in Master Response 4, the SSIA identifies minimum flood protection targets when State investments are made to protect public safety in urban areas and small communities (protection from 200- and 100-year flood events, respectively). However, the plan acknowledges that State investments alone cannot achieve these targets in all communities without leveraging federal and local funds, and encourages higher levels of flood protection whenever feasible. The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas, and that are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development in floodplains. The SSIA does not target a minimum level of flood protection for State investments in rural-agricultural areas outside of the small communities because conditions and local interests differ from one area to another, and additional regional planning efforts are needed to formulate solutions that meet community needs and State investment priorities. However, the SSIA includes various options for addressing flood risks in rural-agricultural areas, including the following:

- Projects to maintain levee crown elevations for existing rural SPFC levees and provide all-weather access roads for inspection and floodfighting

- Economically feasible projects to resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs

- System elements (such as new and expanded bypasses) that would lower water surface elevations within some rural and urban channels

All areas would benefit from State investments in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery.

In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments would vary from region to region depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, all areas protected by the SPFC would receive flood risk management benefits from fully implementing the SSIA.

Further, the State places a priority on flood management improvement projects that provide multiple benefits to support broad State interests and expand cost-sharing opportunities.

The CVFPP does not include levee design criteria for rural areas, but recognizes that the urban levee design criteria are not always practical or affordable for protecting rural areas. DWR supports future development and implementation of rural levee repair criteria in coordination with local and regional flood management agencies. For additional details, see Master Response 4.

As stated in Master Response 3, the SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. Implementing the SSIA would increase the percentage of the population receiving at least 100-year (1 percent annual chance) flood protection from the current 21 percent to more than 90 percent (CVFPP, page 3-40). The remaining 10 percent of the population would receive benefits through residual risk management actions.

The State supports the continued viability of small communities to preserve cultural and historical continuity and provide important social, economic, and public services to rural populations and agricultural enterprises. The SSIA describes State investment priorities in small community flood protection while avoiding the inducement of imprudent growth within SPFC floodplains. Under the SSIA, many small communities would receive increased flood protection benefits as a result of system improvements focused on protecting nearby urban areas.

The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas outside small communities. These actions are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development or increasing flood risks within lands protected by the SPFC. No target minimum level of flood protection has been established for prioritizing State investments in rural-agricultural areas (see CWC Section 9603). However, the SSIA proposes (1) projects that maintain levee crown elevations for rural SPFC levees and provide all-weather access roads for inspection and floodfighting; (2) economically feasible projects that resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs; (3) system elements (e.g., bypass expansion) that lower peak flood stages within some rural channels; and (4) actions to manage residual flood risks.

The State supports efforts to reform FEMA's NFIP to more equitably reflect corresponding flood risks, including establishing a flood zone for agriculturally based communities to allow replacement of existing structures or reinvestment development in the floodplain. The State also supports identifying a special, lower-premium rate structure that reflects actual flood risks for agricultural buildings in rural-agricultural areas located in Special Flood Hazard Areas. The State will work with local flood management interests to pursue reform of the FEMA NFIP. For additional details, see Master Response 3.

T_CVFCA2-11

As stated in Master Response 22, the State Legislature required DWR to prepare the first public draft CVFPP by January 1, 2012, for adoption by the Board by July 1, 2012, or as such other date as may be provided by the Legislature. DWR believes that the CVFPP and DPEIR speak for themselves regarding the magnitude of the required effort in light of these statutory deadlines, and appreciates the compliments from a number of commenters in that regard.

The Public Draft CVFPP was released, on time, on December 30, 2011. Several of the attached supporting documents, specifically the *State Plan of Flood Control Descriptive Document* (November 2010) and the *Draft Flood Control System Status Report* (December 2011), were published before the Public Draft CVFPP and informed its development. Most CVFPP attachments were released with the public draft or in early February 2012; exceptions include the "Flood Damage Analysis," "Riverine Channel Evaluations," "Cost Estimates," and "Reservoir Analysis" attachments, which were released between mid-February and the publication of the DPEIR. For additional details, see Master Response 22.

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

The Board provided various opportunities for members of the public and agencies to comment on the Public Draft CVFPP, released in December 2011. Hearings were held in 2012 on April 5 (Sacramento), April 6 (Marysville), April 9 (Stockton), and April 11 (Woodland), and public comments were heard and discussed at both regular and special Board meetings. DWR also accepted comments on the DPEIR, which was released in early March 2012. More information on the Board's process for public review and plan adoption can be found on its Web site, http://www.cvfpb.ca.gov. For additional details, see Master Response 13.

T_CVFCA2-12

See response to comment T_CVFCA2-11, above. In addition, the Board is reviewing the issue of adopting individual attachments to the CVFPP. The Board placed a draft resolution on its Web site including the Board's vision for adopting the CVFPP, and it identified opportunities to comment on the draft resolution through early June 2012.

T_CVFCA2-13

The comment describes the commenter's organization's activities to coordinate with other groups regarding the CVFPP and the potential to jointly comment on the plan in the future. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CVFCA2-14

DWR and the Board appreciate the commenter's recognition of the effort required to prepare the CVFPP. The comment summarizes previous comments and asks the Board to focus attention and efforts on the details for implementation in regard to regional plans, rural flooding, and funding. The comment expresses concerns similar to those expressed in comments T_CVFCA2-05 and T_CVFCA2-06 (regarding funding), T_CVFCA2-07 (implementation and regional plans), and T_CVFCA2-10 (rural flood risks). See responses to comments T_CVFCA2-05, T_CVFCA2-06, T_CVFCA2-07, and T_CVFCA2-10, above.

T_CVFCA3-01

MS. TERRY: Good afternoon. Melinda Terry,

Central Valley Flood Control Association.

And after listening to all these speakers, I thought I would add a little context, in particular since there are new members to this Board. But when I started this job as executive director of the Association is right -- it was beginning in 2008 right when the planning process was supposed to begin after the legislation had passed.

And as you can imagine, it was a real priority. My members, every time we met, were asking, you know, when are we going to start these meetings. So I literally spent probably the first 10 months of my job emailing the DWR staff person who was in charge of the plan at that time. It's somebody different now. I think they've changed a couple times. And emailed him every month saying okay my folks are really ready because they really, really want to make sure to avoid having the comp study done again. I don't even really know what that was. That's way before my time. But it was clear to me every time that my members did not want to see that happen again.

So as I said, 10 months I kept emailing. The response that I kept getting was we are working internally with our staff and our consultants on trying to come up with a plan for moving forward with the plan, and doing

public outreach. And I wish I would have brought it with me today, but about the same time a Dilbert cartoon came out. And, you know, they sit around a conference table like they do in all their cartoons. And the one guy says, "We need a plan". And the guy next to him goes, "Yeah, but you know, we need a plan for coming up with a plan". And then the third guy is like, "Yeah, we need a plan for planning the planning plan".

And I guess my point is unfortunately we kind of lost about a year, and it might even be longer, but I think I remember going to at least three of my board member meetings, which are quarterly, and reporting to them sorry they're not ready to get started yet. They're still trying to figure out how to get started.

T_CVFCA3-02 But I think that's important to you, because now you've, you know, got a truncated amount of time to try to deal with these issues. And then in addition, at the back end of the planning -- the planning plan process, as you heard many people say, we ended up skipping over Phase 3 and Phase 4, which is the point, I think, that these individual projects that you've heard so much about really would be -- would have been able to be talked about.

So, as I said at the last meeting, no one goes to jail for missing a statutory deadline. But it is maybe really critical that we really do think about sharing with

the Legislature that, you know, DWR has come up with a good start here, and a good plan for us to move forward on, but that maybe the Board itself deserves a little bit more time and the public that you've heard from today deserves a little bit more time at this point.

As mentioned, there's 30 appendices. There are thousands of pages long. Not all of them -- most -- I think 26 of them were released in January. I think -- I believe there's still four more to be released and then thousands of pages of the EIR. And as I said at the last meeting of the Delta Stewardship Council, when they release their 2000 page EIR, that's when they decided, wow, we've -- you know, we need more time. We're not going to meet our statutory deadline. But, you know, we're going to need to go to the Legislature though and advise them why, and really be sincere about a deadline, because deadlines need to be given so that this doesn't go on and on and on and nobody -- and by the way, my members don't want this to go on and on and on either. I have enough meetings to go to. So that's my suggestion there.

T_CVFCA3-03 The final thing I would say in just listening to the April hearings, you heard our problem for farmers. And I don't recall the exact dates or times and the locations. But maybe one suggestion is maybe look at, particularly the northern one, but maybe the others, but

certainly the northern one is maybe the evening hours might be better. I know it's hard on staff for the State, but I know in the Delta, when we've had those evening meetings, and I talked to a couple of the farmers that are up north of the Delta, they said the same thing, they tend to get really good turn outs at those.

So if we could maybe change it to like a three to eight or something like that. As you know, farmers start really early in the day. And I think by that late afternoon, they might be ready. And so, I'll just leave you with that thought.

Thank you.

PRESIDENT CARTER: Thank you, Ms. Terry.

Central Valley Flood Control Association, Melinda Terry, Executive Director (Public Hearing, February 24, 2012)

Response

T_CVFCA3-01

The comment introduces the commenter and her professional affiliation. The comment further describes the history of her contact with DWR since 2008. As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

Phase 1 of the public engagement planning process focused on identifying problems and needs and crafting specific goals for the CVFPP. A variety of regional and topic-based work groups formed during this phase. Phase 2 focused on identifying individual actions that could be taken to achieve the CVFPP goals, and engaged stakeholders through continued regional and topic-based work groups and public workshops.

After Phase 2, stakeholders indicated that they preferred to review more developed materials and information before continuing with intense working meetings. With that understanding, DWR focused its efforts on content development (considering previously provided input and ongoing analyses) and developed a cohesive working draft document for stakeholder review in fall 2011. Outreach efforts included e-mail communications and updates, workshops, webinar briefings, and meetings with individuals and agencies. Work group members were also given an opportunity to review and comment on a working draft of the CVFPP. However, with a commitment to complete a public draft CVFPP within the legislated time frame, the degree of engagement provided in Phases 1 and 2 was not feasible for Phases 3 and 4.

The Board provided various opportunities for members of the public and agencies to comment on the public draft CVFPP, released in December 2011. Hearings were held in 2012 on April 5 (Sacramento), April 6 (Marysville), April 9 (Stockton), and April 11 (Woodland), and public comments were heard and discussed at both regular and special Board meetings. DWR also accepted comments on the DPEIR, which was released in early March 2012. More information on the Board's process for public review and plan adoption can be found on its Web site, http://www.cvfpb.ca.gov. For additional details, see Master Response 13.

T_CVFCA3-02

See response to comment T_CVFCA3-01, above.

As stated in Master Response 22, the CVFPP SSIA is a complex integrated flood management plan that covers a large geographic area. The State Legislature required DWR to prepare the first public draft CVFPP by January 1, 2012, for adoption by the Board by July 1, 2012, or as such other date as may be provided by the Legislature.

The Public Draft CVFPP was released on time, on December 30, 2011. Several of the attached supporting documents, specifically the *State Plan of Flood Control Descriptive Document* (November 2010) and the *Draft Flood Control System Status Report* (December 2011), were published before the Public Draft CVFPP and informed its development. Most CVFPP attachments were released with the public draft or in early February 2012; exceptions include the "Flood Damage Analysis," "Riverine Channel Evaluations," "Cost Estimates," and "Reservoir Analysis" attachments, which were released between mid-February and the publication of the DPEIR.

DWR believes that the CVFPP and DPEIR speak for themselves regarding the magnitude of the required effort in light of these statutory deadlines, and appreciates the compliments from a number of commenters in that regard.

Additionally, as stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_CVFCA3-03

The comment suggests alternate meeting times for the public hearings in April 2012. This comment provides direction for events that have since passed. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CVFCA4-01 MS. TERRY: Hi. Melinda Terry, Executive Director of the Central Valley Flood Control Association. And we do represent more than 70 local flood control agencies, cities and counties, reclamation districts, levee districts.

And, first, I do want to say welcome to the new members and thank you for your willingness to serve, and

especially jumping in at this point in the process.

We do appreciate the work that DWR has done up to this point. But we also appreciate the fact that the Legislature really provided the opportunity for the Board to refine and improve the Plan through the public input process that we're in right now.

I particularly found the Board staff presentation just so helpful today. Eric, that was just such a good job. Honestly it's kind of what I thought I was going to get on March 22nd when we had that thing. I was hoping DWR was going to explain here was what behind and how we kind of did it. But, Eric, you provided that today.

I agree with you, Mr. Chairman, to repeat it again at the other public hearings, we're going to have so many people show up, it will be difficult. So, Eric, I think you are going to have to condense it down the recommendations. But I think it will help them understand the different roles, if you will, that DWR had in preparing it, your role, and now kind of taking a step back looking at it, taking the public input, and then doing that so if those recommendations are condensed. But that was really a good job.

Because essentially, you know, I heard them really kind of saying here's what we noticed and what we want to highlight for you, the Board. So I'm really

looking forward to that staff report at the end of the month.

But as you heard, the Association of course is working on comments that we will submit on behalf of the Association and our members. But we also, have you heard, been working with some of the environmental organizations to identify some of the things that we had in common in terms of things that we looked at at the plan.

So we may diverge in what our individual comments that are submitted based on particularly some of the testimony I've heard so far. But we eventually will have some common areas that we hope to look at. And they kind of evolve around some basic premises, if you will. Kind of one of them was, we're not sure the Plan is quite realistic particularly for a forward-looking plan, if you think about the realities of whether it's federal funding. We're just even -- our federal partners on how effective or fast they are, we do think there's an opportunity for the state and locals that we've proven over the last few years with some of this Prop 1E and 84 funding that we tend to be more nimble and quick and cost effective essentially.

So we're hoping to kind of look at ways to improve that process, regulatory burden timeline, and the opportunities that are there.

T_CVFCA4-02 The other thing I think that we've looked at and in common areas to look at are these rural-ag issues that you've heard from a lot of public testimony and what the opportunities are there in terms of the funding commitments that we'd like to see beefed up to create some parity and equity and level playing fields. So we'll have some suggestions on the compensation and the cost-share kind of things to be considered.

T_CVFCA4-03 And as well as exploring some additional -- I don't know what the right wording may be -- templates methodologies for the through local stakeholder development of opportunities and benefits that may exist for expanding and improving our flood bypasses and other facilities. But it's really critical that those are developed from the stakeholders up in our -- and then the other thing really that we found in common was concerns with timelines and more specific goals and the process for achieving some of these areas that I've identified. Otherwise the plan does end up a little too vague and empty. I agree. I've worked on -- it seems to be a common theme, frankly, with some of the other planning efforts in the Delta that I'm working with DWR.

So I do agree with John Cain's comment that you do have to have some measurable goals -- you have to have that vision. But you have to measurable goals and

objectives ultimately. And I describe it as a GPS system. My car can only get me to the location if I actually input the address where I need to go. Okay. So you have to know where you're going. And then hopefully the measurable goals and objectives are really the turn-by-turn directions so that you can reach five-year increment, determine if what you were doing is making progress towards what those goals are.

Now, the hard part is what those goals and objectives are, because different stakeholder groups are going to see those differently. So that's where we need to figure out what those are. But it is important in the early timeline as 2012-2015 to try to get there.

And I will close with that. And thank you very much.

PRESIDENT EDGAR: Thanks very much, Melinda.

T_CVFCA4-04 BOARD MEMBER SUAREZ: Mr. President, could I interrupt for a second?

PRESIDENT EDGAR: Yes.

BOARD MEMBER SUAREZ: Ms. Terry?

Actually I just want to take the opportunity to thank you and your organization for help us facilitate discussion with other groups such as the environmental community and the agricultural community.

The common areas that we can find -- and you can

find and share with us will go a long way in helping us as we deliberate.

MS. TERRY: Yeah, we just figured it was really important, because the Legislature unfortunately gave you such a short timeline to try to do your part of this process. And so we thought to the extent we can really identify some of those areas and offer actual suggestions, that will help you because there's just so much with 8,000 pages or what have you. So we're hoping that will provide that.

Central Valley Flood Control Association, Melinda Terry, Executive Director (Public Hearing, April 5, 2012)

Response

T_CVFCA4-01

As stated in Master Response 15, Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the

SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

T_CVFCA4-02

As stated in Master Response 3, these impacts generally are social and economic in nature, and CEQA does not require addressing them except to the extent that they relate to potentially significant adverse effects on the physical environment. Nonetheless, the responses shown below have been prepared to maximize responsiveness to public participation in the CVFPP.

The SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. Implementing the SSIA would increase the percentage of the population receiving at least 100-year (1 percent annual chance) flood protection from the current 21 percent to more than 90 percent (CVFPP, page 3-40). The remaining 10 percent of the population would receive benefits through residual risk management actions. Based on initial planning-level cost estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to provide flood stage reduction benefits to many of the areas in the system, including small communities and rural-agricultural areas.

In addition, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and 3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed. For additional details, see Master Response 3.

As stated in Master Response 4, cost-sharing rules are governed by federal and State laws, regulations, and policies, which have continued to evolve over time. CWC Section 12585.7 identifies the State cost-share of nonfederal capital costs for flood management projects. The State normally

pays 50 percent of the nonfederal cost-share, but will pay up to 20 percent more (for a maximum of 70 percent of the nonfederal cost-share) if the project makes significant contributions to other State interests and objectives (e.g., the ecosystem, recreation, open space, protection for disadvantaged communities, and protection for transportation and water supply facilities).

The 2012 CVFPP includes an estimate of potential cost-sharing by State, federal, and local entities for the SSIA, developed to assist with CVFPP development and analysis. However, cost-sharing for implementation of the SSIA will be refined during feasibility studies and project implementation as additional project-level information is gathered and the interests of the partnering agencies in elements of the SSIA are identified. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, and development of a financing plan for the CVFPP) will address cost-sharing and local capacity to pay.

The CVFPP does not provide funding assurances for any specific project or improvement element, and current bond funding is not sufficient to fully implement the SSIA. A financing plan will be prepared as part of the post-adoption activities (CWC Section 9620(c)). For additional details, see Master Response 4.

T_CVFCA4-03

The comment suggests that the CVFPP should have measurable goals and objectives. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted. However, a response relative to the goals of the CVFPP and how they were developed is provided below.

As stated in Master Response 8, the State Legislature enacted comprehensive flood risk management legislation in 2007, including the Central Valley Flood Protection Act of 2008. This law set a clear directive for an integrated systemwide approach to Central Valley flood management, and provided detailed guidance for DWR to follow in formulating the CVFPP. The Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in CWC Sections 9600–9625. DWR, in coordination with USACE, the Board, and

multiple stakeholders, used this legislative direction to formulate the CVFPP's primary and supporting goals. For additional details, see Master Response 8.

As noted above, CWC Sections 9600–9625 provide specific direction for the preparation of the CVFPP. The following text from CWC Section 9616 refers to the objectives to be considered in the CVFPP:

(a) The plan shall include a description of both structural and nonstructural means for improving the performance and elimination of deficiencies of levees, weirs, bypasses, and facilities, including facilities of the State Plan of Flood Control, and, wherever feasible, meet multiple objectives, including each of the following:

(1) Reduce the risk to human life, health, and safety from flooding, including protection of public safety infrastructure.

(2) Expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey floodwaters away from urban areas.

(3) Link the flood protection system with the water supply system.

(4) Reduce flood risks in currently nonurbanized areas.

(5) Increase the engagement of local agencies willing to participate in improving flood protection, ensuring a better connection between state flood protection decisions and local land use decisions.

(6) Improve flood protection for urban areas to the urban level of flood protection.

(7) Promote natural dynamic hydrologic and geomorphic processes.

(8) Reduce damage from flooding.

(9) Increase and improve the quantity, diversity, and connectivity of riparian, wetland, flood plain, and shaded riverine aquatic habitats, including the agricultural and ecological values of these lands.

(10) Minimize the flood management system operation and maintenance requirements.

(11) Promote the recovery and stability of native species populations and overall biotic community diversity.

(12) Identify opportunities and incentives for expanding or increasing use of floodway corridors.

(13) Provide a feasible, comprehensive, and long-term financing plan for implementing the plan.

(14) Identify opportunities for reservoir reoperation in conjunction with groundwater flood storage.

In addition, the primary and supporting goals/objectives in the CVFPP were influenced by the results of a considerable effort by DWR in obtaining stakeholder feedback and informing a variety of groups and individuals across the CVFPP planning area. As stated in Master Response 13, this extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP. For additional details, see Master Response 13.

The goals and objectives included in the CVFPP are consistent with the legislature's direction for preparing the plan. Prior to the 2017 update to the CVFPP (for the 2017 plan), public and stakeholder feedback will be solicited again, and comments will be accepted on the details of the plan.

T_CVFCA4-04

The Board thanks the commenter for her involvement in the process. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CVFCA5-01

MR. BAIR: Chairman Edgar, members of the Board, Mr. Punia, thanks for the opportunity to speak with you today.

I, too, will again submit written comments. But I'm speaking to you today as a manager of three levee maintaining agencies. We maintain about 90 miles of levee on the Sacramento River system. And it protects about a hundred thousand acres of agricultural land, including the Cities of Colusa, Grimes, and Knights Landing.

I also serve as the Vice President for the Central Valley Flood Control Association and have had the opportunity to work with several colleagues on the Flood Control Action Work Group. And I would like to express our appreciation that DWR certainly made a substantial effort, Jeremy and others, to engage the Flood Control Action Work Group and to work collaboratively in trying to develop this plan.

I heard Jeremy mention something earlier today

that -- and I think what he said was that the plan looks for responsible flood control investments. And I think the plan is larger than that. And the State is charged with this plan, because the investments need to be responsible State investments.

If it's a responsible flood control investment, I think what you'd see is you'd see protect the urban areas and very little else. And I think we're a little bit removed from that with this plan, but I'd suggest today and I'll try to explain it, that we're not investing enough in the rural areas at this point.

So I'd like to touch on a couple of topics. First, is the small communities. And I have read through the small community plan. I think it's Attachment 8J. And when you review the intent of the plan and the strategy, I have some real concerns that it can be carried out.

T_CVFCA5-02 Some of the proposals that are in there are certainly rough, but they consider a 25 percent local cost share. As somebody who's been trying to do rural flood projects in the -- currently now and in the past, I would contend that you'll have a very difficult time getting federal cost share in these small communities.

And why this is important, because that means that the locals are actually paying 25 percent. In

Knights Landing this means approximately a third of everybody's home value will need to be invested to reach a hundred percent -- or a hundred year flood protection.

Most urban projects, on the other hand, have a similar State/local cost share, but then there's a huge portion of that funding that's paid for by the federal government. So in the urban areas, you're asking a much smaller investment from each individual house. Yet, in these rural areas, where it's often, you know, farmworker housing, lower income folks, you're asking a full 25 percent of their home's value, or even a third in Knights Landing's case. And I contend that it would be very, very difficult to ask each of those homeowners to pay that kind of money for their homes or for their flood protection.

And therefore, does the small community program actually deliver flood protection for these small communities? I question that, and I think it needs the attention of the Board.

T_CVFCA5-03 The FEMA program, I certainly appreciate the language that's in the plan. I think it needs to be strengthened. We need leadership from the State. This is going to be a very challenging endeavor. It may require federal action. It may have a State solution that can work within the framework of FEMA. But what I suggest to you is that what I've seen from the State so far is

probably not going to be sufficient as far as leading that effort for us to be successful.

T_CVFCA5-04 You've heard of the AFMO organization. I think the State should be front and center in investing in that process. If we want to protect these deep floodplains for urbanization, that should be our number one strategy is to make them viable, vibrant agricultural areas.

T_CVFCA5-05 And then thirdly, the rural levee standard that's proposed in there, I appreciate that it's in there. It's certainly one of the things that I thought was very important, because right now we're in a situation where the rural levees are forced to go through the only process that's available for a project levee. Those are federal project levees. It's the Corps' process. It's evolved to the point now where it's essentially an urban process and it's unaffordable for rural levee repairs.

Having said that, you're asking the rural area to depart from the design promise of the project. You state that in the tables. You say that that will no longer be the standard. Yet, we don't know what the rural levee standard is going to be in the future. For us, that means substantial investment in that rural levee program. We have 75 percent of the levees would be considered rural levees, and yet we have $100 million of investment shown in the table in the plan. Sounds like a lot of money. I

mean, to me, it's got a lot of zeros and a lot of commas, but when you look at the -- even just Prop 1E, we're talking of, you know, a very, very small fraction of Proposition 1E and three-quarters of the levee system. From here forward, $100 million of the $2 million that's remaining is five percent of the funding for the project. And 75 percent of the leveed area, if you look at all of Prop 1E, it's only two percent.

So, to me, I don't want to look, you know, $100 million in the face and say that that's not a lot of money. I think it is. But proportionally, I don't think it's commensurate with the balance in the system.

T_CVFCA5-06 I think that's especially true when you consider the two tier level of flood protection that was established in SB 5. SB 5 said that the urban areas shall assume that there are no flood -- you know, levee failures upstream and they shall achieve 200-year flood protection according to the design standards that are currently in place for the urban levees.

So when you look at the 75 percent of the system having a much lower level of flood protection, what actually plays out is that the urban levees are so much higher, have such a higher level of protection. The rural levees would probably have protection equal to maybe 20 year level of protection. So the way the system would

actually perform is that the urban areas wouldn't fail, which we all agree with, but the transitory storage from the failure in the rural areas provides significant benefit to those urban areas giving them much higher than 200-year level of protection. I think that has a ton of value, and I think there should be an exchange of resources from the State -- from the urban areas to compensate the rural areas for that benefit.

T_CVFCA5-07 I wanted to touch on a couple of other things. One is certainly the federal funding that is part of this program. Right now, it assumes 46 percent of this program is going to be paid for federally. I'd suggest to you that that's especially problematic in the rural areas. We don't meet Corps cost-benefit programs. And therefore, you're going to have a very, very difficult time ever getting federal funding in those rural areas. So that needs to be called into question. And if that's called into question, how are you financing the plan and how can you think beyond the current existing Prop 1E funds that are available.

Certainly, for the rural areas, our goal would be that you would talk about those five billion -- or the remaining $2 billion there, and you'd start allocating those proportionally.

Currently, the plan talks about investments in

rural areas. And it always talks about if funding available and where feasible. So I try to -- it doesn't have that same language for the urban investments. I tried a little experiment last night. I asked my two children to, they had to feed the dogs and if they had enough energy available, they could clean their room. I think you know the results of that, and I want to make sure that --

(Laughter.)

MR. BAIR: -- rural area isn't left hanging like their rooms were.

(Laughter.)

T_CVFCA5-08 MR. BAIR: So a couple of comments on the bypass. You know, we've got to clean the bottom of the ditch first. I think you've all heard that. I think it was somewhat irresponsible of DWR to include large specific projects like they did with the Cherokee Canal that hadn't been vetted. Imagine one of your homes being proposed for a railroad or a freeway and then imagine that you were going to be selling that home in the next five years. Even though Cherokee Bypass may be 20 years out, you, by including that in this plan, have had very, very significant real impacts on people's properties today. And I'd suggest that removing that and just suggesting that some solution needs to be brought up from a local

level in the future would be a good step forward and a good leap of faith.

T_CVFCA5-09 I also wanted to kind of give a little glimpse into something that we hope will be forthcoming. The Executive Committee of the Central Valley Flood Control Association has been working with some of the NGOs, some of which you've heard speak today, that we think are cooperative and that might be able to come up with a combination of recommendations that we think could positively impact the plan, and we hope you'll be open to suppose.

So thank you very much.

PRESIDENT EDGAR: Thank you, Lewis.

(Applause.)

T_CVFCA5-10 PRESIDENT EDGAR: Lewis, could you come back for a minute. Joe would like to ask you a question.

MR. BAIR: This isn't fair, Joe. Nobody else had questions.

(Laughter.)

BOARD MEMBER COUNTRYMAN: Thank you for -- I'm wondering, do you have a suggestion for a reasonable or attainable cost share for the rural -- not a cost share, but an allocation for the rural levee program. If a hundred million isn't adequate, and it doesn't sound like a lot considering the number of miles of levee, have you

thought at all about what might be a reasonable level?

MR. BAIR: Well, I think there's two things. There's what's the total pot of money? I wouldn't expect that it would be commensurate with the miles of levee, but I think somewhere, you know, in the 15 percent to 25 percent, to me, seems like it might have a chance.

And, you know, when you look at even just small communities, $100 million. The proposal for Knights Landing is $26 million. There's 19 small communities in that plan. If you start adding it up, you know, how do you ever get through something like that. So to me that seems the range.

T_CVFCA5-11 I think the other challenge is the cost share locally. And it's so different depending on your situation. As an example, I mentioned we have 90 miles of levee, but we protect over 100,000 acres of ground. So we have a huge area in which we protect. There are basins which have, you know, half that many miles but protect only a fraction of the period of the land -- or as big of an area of land.

And so while we might be able to afford a cost share that's 10 percent, 15 percent of the total project, which -- you know, right now through the Corps process, it's more like seven and a half, eight percent. So it's still an increased cost share. You know, areas with more

levees and a smaller basin are going to have a really hard time even doing that. So to me it's in the, you know, 10 to 25 percent would be reasonable.

T_CVFCA5-12 BOARD MEMBER COUNTRYMAN: Thank you.

I'm also wondering, I think you are correct when you talk about the likelihood of federal participation in these rural projects. Would you want to consider something like the local share would be as if there was a federal participation. In other -- you know what I'm saying? In other words, it would be seven and a half percent with federal participation, but because the rural area doesn't meet the federal BC ratio requirements that you would still be limited to say the seven and a half percent at the local.

MR. BAIR: Yeah, I think that's where we're headed. I think the Association might be recommending something in that range as well.

BOARD MEMBER COUNTRYMAN: Thank you.

PRESIDENT EDGAR: Thanks very much.

Central Valley Flood Control Association, Lewis Bair, Vice President (Public Hearing, April 6, 2012)

Response

T_CVFCA5-01

The comment expresses concerns about investments in rural areas and flood control in small communities. As stated in Master Response 4, the SSIA identifies minimum flood protection targets when State investments are made to protect public safety in urban areas and small communities (protection from 200- and 100-year flood events, respectively). However, the plan acknowledges that State investments alone cannot achieve these targets in all communities without leveraging federal and local funds, and encourages higher levels of flood protection whenever feasible. The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas, and that are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development in floodplains. The SSIA does not target a minimum level of flood protection for State investments in rural-agricultural areas outside of the small communities because conditions and local interests differ from one area to another, and additional regional planning efforts are needed to formulate solutions that meet community needs and State investment priorities. However, the SSIA includes various options for addressing flood risks in rural-agricultural areas, including the following:

- Projects to maintain levee crown elevations for existing rural SPFC levees and provide all-weather access roads for inspection and floodfighting

- Economically feasible projects to resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs

- System elements (such as new and expanded bypasses) that would lower water surface elevations within some rural and urban channels

All areas would benefit from State investments in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery.

In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments would vary from region to region depending on the assets at

risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, all areas protected by the SPFC would receive flood risk management benefits from fully implementing the SSIA. Further, the State places a priority on flood management improvement projects that provide multiple benefits to support broad State interests and expand cost-sharing opportunities. For additional details, see Master Response 4.

T_CVFCA5-02

The comment expresses concerns about cost-sharing in small communities. As stated in Master Response 4, cost-sharing rules are governed by federal and State laws, regulations, and policies, which have continued to evolve over time. CWC Section 12585.7 identifies the State cost-share of nonfederal capital costs for flood management projects. The State normally pays 50 percent of the nonfederal cost-share, but will pay up to 20 percent more (for a maximum of 70 percent of the nonfederal cost-share) if the project makes significant contributions to other State interests and objectives (e.g., the ecosystem, recreation, open space, protection for disadvantaged communities, and protection for transportation and water supply facilities).

The 2012 CVFPP includes an estimate of potential cost-sharing by State, federal, and local entities for the SSIA, developed to assist with CVFPP development and analysis. However, cost-sharing for implementation of the SSIA will be refined during feasibility studies and project implementation as additional project-level information is gathered and the interests of the partnering agencies in elements of the SSIA are identified. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, and development of a financing plan for the CVFPP) will address cost-sharing and local capacity to pay.

The CVFPP does not provide funding assurances for any specific project or improvement element, and current bond funding is not sufficient to fully implement the SSIA. A financing plan will be prepared as part of the post-adoption activities (CWC Section 9620(c)). For additional details, see Master Response 4.

T_CVFCA5-03

The comment addresses the FEMA program. As stated in Master Response 3, the SSIA proposes FEMA flood insurance reforms to support the sustainability of rural-agricultural enterprises. The State supports efforts to reform FEMA's NFIP to more equitably reflect corresponding flood risks, including establishing a flood zone for agriculturally based communities to

allow replacement of existing structures or reinvestment development in the floodplain. The State also supports identifying a special, lower-premium rate structure that reflects actual flood risks for agricultural buildings in rural-agricultural areas located in Special Flood Hazard Areas. The State will work with local flood management interests to pursue reform of the NFIP. For additional details, see Master Response 3.

T_CVFCA5-04

The comment suggests making floodplains viable agricultural areas. As stated in Master Response 3, the SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises.

In addition, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and 3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed. For additional details, see Master Response 3.

Additionally, as stated in Master Response 2, a portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of levees in rural areas. For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements. For additional details, see Master Response 2.

T_CVFCA5-05

The comment addresses the rural levee standard and the proportion of investment from Proposition 1E. As stated in Master Response 4, the SSIA

identifies minimum flood protection targets when State investments are made to protect public safety in urban areas and small communities (protection from 200- and 100-year flood events, respectively). However, the plan acknowledges that State investments alone cannot achieve these targets in all communities without leveraging federal and local funds, and encourages higher levels of flood protection whenever feasible. The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas, and that are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development in floodplains. The SSIA does not target a minimum level of flood protection for State investments in rural-agricultural areas outside of the small communities because conditions and local interests differ from one area to another, and additional regional planning efforts are needed to formulate solutions that meet community needs and State investment priorities. However, the SSIA includes various options for addressing flood risks in rural-agricultural areas, including the following:

- Projects to maintain levee crown elevations for existing rural SPFC levees and provide all-weather access roads for inspection and floodfighting

- Economically feasible projects to resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs

- System elements (such as new and expanded bypasses) that would lower water surface elevations within some rural and urban channels

All areas would benefit from State investments in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery.

In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments would vary from region to region depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, all areas protected by the SPFC would receive flood risk management benefits from fully implementing the SSIA. Further, the State places a priority on flood management improvement projects that provide multiple benefits to support broad State interests and expand cost-sharing opportunities.

The CVFPP does not include levee design criteria for rural areas, but recognizes that the urban levee design criteria are not always practical or affordable for protecting rural areas. DWR supports future development and implementation of rural levee repair criteria in coordination with local and regional flood management agencies.

Cost-sharing rules are governed by federal and State laws, regulations, and policies, which have continued to evolve over time. CWC Section 12585.7 identifies the State cost-share of nonfederal capital costs for flood management projects. The State normally pays 50 percent of the nonfederal cost-share, but will pay up to 20 percent more (for a maximum of 70 percent of the nonfederal cost-share) if the project makes significant contributions to other State interests and objectives (e.g., the ecosystem, recreation, open space, protection for disadvantaged communities, and protection for transportation and water supply facilities).

The 2012 CVFPP includes an estimate of potential cost-sharing by State, federal, and local entities for the SSIA, developed to assist with CVFPP development and analysis. However, cost-sharing for implementation of the SSIA will be refined during feasibility studies and project implementation as additional project-level information is gathered and the interests of the partnering agencies in elements of the SSIA are identified. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, and development of a financing plan for the CVFPP) will address cost-sharing and local capacity to pay.

The CVFPP does not provide funding assurances for any specific project or improvement element, and current bond funding is not sufficient to fully implement the SSIA. A financing plan will be prepared as part of the post-adoption activities (CWC Section 9620(c)). For additional details, see Master Response 4.

As stated in Master Response 15, as part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA “alternatives” for further

evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning. For additional details, see Master Response 15.

T_CVFCA5-06

As stated in Master Response 5, the flood legislation passed in 2007, including the Central Valley Flood Protection Act of 2008 (part of SB 5) and ABs 162, 70, 2140, and 156, strengthened the link between local land use decisions and regional flood management. The land use planning and related requirements specified in the 2007 flood legislation vary depending on location (State of California, Sacramento and San Joaquin Drainage District, and Sacramento–San Joaquin Valley). Some requirements apply to all areas within a flood hazard zone, whether or not they are protected by SPFC facilities or connected to the CVFPP.

The requirement for an urban (200-year) level of flood protection is included in SB 5, and through that law is triggered by adoption of the CVFPP. State law (SB 5) requires an urban level of flood protection for urban and urbanizing areas within the Sacramento–San Joaquin Valley (as defined in CGC Section 65007(g)) within a flood hazard zone. CGC Sections 65865.5, 65962, and 66474.5 require all cities and counties within the Sacramento–San Joaquin Valley to make findings related to an urban level of flood protection before they may take any of the following actions:

- Enter into a development agreement for a property

- Approve a discretionary permit or entitlement for any property development or use, or approve a ministerial permit that would result in construction of a new residence

- Approve a tentative map/parcel map for a subdivision

Existing developments or remodels are not affected by these requirements unless they require one or more of the covered land use decisions listed above.

DWR developed the *Draft Urban Level of Flood Protection Criteria* (April 2012) to assist cities and counties in making findings related to the urban level of flood protection. DWR also developed the *Urban Levee Design Criteria* (May 2012), which contains the engineering criteria that apply when cities and counties use levees and floodwalls to provide an urban level of flood protection. Those criteria are incorporated by reference into the *Draft Urban Level of Flood Protection Criteria*. For additional details, see Master Response 5.

Additionally, as stated in Master Response 4, The SSIA identifies minimum flood protection targets when State investments are made to protect public safety in urban areas and small communities (protection from 200- and 100-year flood events, respectively). However, the plan acknowledges that State investments alone cannot achieve these targets in all communities without leveraging federal and local funds, and encourages higher levels of flood protection whenever feasible. The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas, and that are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development in floodplains. The SSIA does not target a minimum level of flood protection for State investments in rural-agricultural areas outside of the small communities because conditions and local interests differ from one area to another, and additional regional planning efforts are needed to formulate solutions that meet community needs and State investment priorities. However, the SSIA includes various options for addressing flood risks in rural-agricultural areas, including the following:

- Projects to maintain levee crown elevations for existing rural SPFC levees and provide all-weather access roads for inspection and floodfighting

- Economically feasible projects to resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs

- System elements (such as new and expanded bypasses) that would lower water surface elevations within some rural and urban channels

All areas would benefit from State investments in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery. For additional details, see Master Response 4.

T_CVFCA5-07

As stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA "alternatives" for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed

project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

T_CVFCA5-08

As stated in Master Response 1, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses

conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

The DPEIR recognizes that converting current land uses (particularly agricultural uses) to bypass and related uses (such as habitat and recreation) would result in potentially significant and unavoidable impacts, particularly on agriculture, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments.

Several commenters expressed concern regarding the potential for particular properties to be included in a bypass proposal. Concerns were also expressed that preliminary identification of conceptual bypass designs might create a “cloud” over the properties, making it difficult to manage, obtain loans for, or sell those properties. DWR and the Board wish to make clear that the conceptual designs reflected in the CVFPP do not reflect a determination regarding any specific properties, and that the potential involvement of particular properties in any future bypass project is entirely

speculative at this time. Potential agricultural land conversions and the resulting effects are discussed further in Master Responses 2 and 3.

T_CVFCA5-09

The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CVFCA5-10

As stated in Master Response 15, Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these

guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

Additionally, as stated in Master Response 4, cost-sharing rules are governed by federal and State laws, regulations, and policies, which have continued to evolve over time. CWC Section 12585.7 identifies the State cost-share of nonfederal capital costs for flood management projects. The State normally pays 50 percent of the nonfederal cost-share, but will pay up to 20 percent more (for a maximum of 70 percent of the nonfederal cost-share) if the project makes significant contributions to other State interests and objectives (e.g., the ecosystem, recreation, open space, protection for disadvantaged communities, and protection for transportation and water supply facilities).

The 2012 CVFPP includes an estimate of potential cost-sharing by State, federal, and local entities for the SSIA, developed to assist with CVFPP development and analysis. However, cost-sharing for implementation of the SSIA will be refined during feasibility studies and project implementation as additional project-level information is gathered and the interests of the partnering agencies in elements of the SSIA are identified. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, and development of a financing plan for the CVFPP) will address cost-sharing and local capacity to pay.

The CVFPP does not provide funding assurances for any specific project or improvement element, and current bond funding is not sufficient to fully implement the SSIA. A financing plan will be prepared as part of the post-adoption activities (CWC Section 9620(c)). For additional details, see Master Response 4.

T_CVFCA5-11

See response to comment T_CVFCA5-10, above.

T_CVFCA5-12

See response to comment T_CVFCA5-10, above.

T_CWA1-01

MR. McCAMMAN: Good afternoon, Chair and members. Thank you very much. I am here on behalf of -- John McCamman on behalf of the California Waterfowl Association.

T_CWA1-02

And we've engaged in this acknowledging public

safety is the primary goal and obligation of this plan. But looking for the opportunities that may be there for managed wetlands and other resources for waterfowl.

I think you'll see from the participation here from environmental NGOs and conservation groups that we all see opportunities going forward to meet more than just the public safety interests. So we want to join with you in engaging over the next six months to develop that plan.

Thank you very much and look forward to working with you.

PRESIDENT CARTER: Thank you, Mr. McCamman.

California Waterfowl Association, John McCamman (Public Hearing, January 27, 2012)

Response

T_CWA1-01

The comment identifies the commenter's affiliation. It does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CWA1-02

DWR and the Board appreciate the California Waterfowl Association's offer for continued coordination on the CVFPP. As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form

"alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_CWA2-01

MR. McCAMMAN: President Carter and members of the Board, thank you very much for the opportunity to speak with you today. I wanted to -- I'm John McCamman. I'm here representing the California Waterfowl Association.

And I want to kind of start by saying that the California Waterfowl Association began looking at this plan as -- with the notion that I think you're charged with, which is providing safety first. And so we acknowledge upfront the safety -- public safety is of paramount importance in concluding this plan.

However, there is nothing in the plan that we see that imposes a conflict between public safety, habitat restoration, agriculture and all the other interests that you're going to hear from today. It's a question of working out the conflicts, not acknowledging the conflicts, or there's no apparent conflict at first.

T_CWA2-02

I wanted to talk a bit about today funding, which you've heard quite a few concerns about, the goals and objectives in the plan, and then some outreach issues.

The Flood Board should be concerned with the

first part of the spending called for in this plan, the approximately $3 billion to be spent between now and 2017, the next iteration of the plan. The plan acknowledges the State obligation to take a leadership role in investing State resources in systemwide improvements, the systemwide investment approach, including bypasses, setbacks, floodplain acquisition and other measures which will undoubtedly improve public safety overall, and will enhance ecosystem restoration of the all-important Central Valley habitat.

By prioritizing local investments through an exclusively regional planning process, the next step in the process, the opportunity for investment in these systemwide improvements that will enhance habitat for waterfowl will be diminished. And so it's a concern about how you go about the next step here in making sure some of those existing resources get dedicated for systemwide improvements early.

T_CWA2-03

Secondly, the Flood Board should make sure to solicit and incorporate existing documented numerical goals and objectives, to the degree that they are relevant, and that this planning process can reinforce those objectives through the investments called for in the plan.

T_CWA2-04

One important example of that are the land-use

goals and objectives from the Central Valley Joint Ventures Implementation Plan. That plan calls for habitat improvements, which would help to restore some of the seasonal and managed wetlands which waterfowl and shore birds thrive on, and for which we are finding anadromous fish also rely on. So those two core constituencies can, in part, be helped with actions that you take through this plan.

T_CWA2-05

Finally, there are futures of the flood plan that have caused some concerns for some of our membership, specifically adding more flood waters to already highly impacted areas, such as the Butte Basin, that you've heard about a lot today, may have an adverse impact on hunters, some local hunt clubs, and existing public access wildlife areas.

T_CWA2-06

We will be working with you and your staff to ensure that the appropriate outreach occurs to engage those constituents to minimize the disruption on their operations, and where unavoidable - and I think there are some unavoidable impacts - to mitigate those impacts.

There are many details in this planning process for which -- which warrant the continued interest and engagement of the hunting community and of California Waterfowl specifically, and other conservation organizations. And we look forward to continuing that

engagement to work out those issues going forward.

California Waterfowl Association, John McCamman (Public Hearing, February 24, 2012)

Response

T_CWA2-01

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)). For additional details, see Master Response 7. The concept of addressing and balancing multiple objectives as raised in the comment is implemented in the CVFPP.

T_CWA2-02

As stated in Master Response 15, SB 5 does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA “alternatives” for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of

the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

T_CWA2-03

As stated in Master Response 14, as part of post-adoption activities, the Board and DWR will continue to work collaboratively with local, State, and federal agencies, environmental interests, and other parties to develop regional flood management plans and further refine the proposed elements of the SSIA.

The State has a strong interest in coordinating and implementing integrated projects that achieve multiple benefits. Effective integration across planning efforts means that all programs and projects, when implemented, work together to achieve key goals in a cost-effective manner; are sequenced and prioritized appropriately; and do not adversely affect or interfere with intended benefits. Although effectively integrating planning across programs while considering multiple benefits can be challenging, doing so can also provide opportunities to share knowledge and identify mutually beneficial solutions that might not have been considered otherwise, thus minimizing duplication and reducing costs.

DWR will continue to coordinate with other flood management and ecosystem enhancement efforts during implementation of the CVFPP. A few key examples include the Delta Stewardship Council's Delta Plan, the San Joaquin River Restoration Program, and the BDCP. For additional details, see Master Response 14.

T_CWA2-04

This comment is similar to comment T_CWA2-03. See response to comment T_CWA2-03, above. The comment specifically identifies land use goals from the Central Valley Joint Ventures Implementation Plan. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted. However, a response relative to the goals of the CVFPP and how they were developed is provided below.

As stated in Master Response 8, the State Legislature enacted comprehensive flood risk management legislation in 2007, including the Central Valley Flood Protection Act of 2008. This law set a clear directive for an integrated systemwide approach to Central Valley flood management, and provided detailed guidance for DWR to follow in formulating the CVFPP. The Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in CWC Sections 9600–9625. DWR, in coordination with USACE, the Board, and multiple stakeholders, used this legislative direction to formulate the CVFPP's primary and supporting goals. For additional details, see Master Response 8.

As noted above, CWC Sections 9600–9625 provide specific direction for the preparation of the CVFPP. The following text from CWC Section 9616 refers to the objectives to be considered in the CVFPP:

> The plan shall include a description of both structural and nonstructural means for improving the performance and elimination of deficiencies of levees, weirs, bypasses, and facilities, including facilities of the State Plan of Flood Control, and, wherever feasible, meet multiple objectives, including each of the following:
>
> (1) Reduce the risk to human life, health, and safety from flooding, including protection of public safety infrastructure.
>
> (2) Expand the capacity of the flood protection system in the Sacramento-San Joaquin Valley to either reduce floodflows or convey floodwaters away from urban areas.
>
> (3) Link the flood protection system with the water supply system.
>
> (4) Reduce flood risks in currently nonurbanized areas.
>
> (5) Increase the engagement of local agencies willing to participate in improving flood protection, ensuring a better connection between state flood protection decisions and local land use decisions.
>
> (6) Improve flood protection for urban areas to the urban level of flood protection.
>
> (7) Promote natural dynamic hydrologic and geomorphic processes.
>
> (8) Reduce damage from flooding.
>
> (9) Increase and improve the quantity, diversity, and connectivity of riparian, wetland, flood plain, and shaded riverine aquatic habitats, including the agricultural and ecological values of these lands.
>
> (10) Minimize the flood management system operation and maintenance requirements.
>
> (11) Promote the recovery and stability of native species populations and overall biotic community diversity.
>
> (12) Identify opportunities and incentives for expanding or increasing use of floodway corridors.
>
> (13) Provide a feasible, comprehensive, and long-term financing plan for implementing the plan.
>
> (14) Identify opportunities for reservoir reoperation in conjunction with groundwater flood storage.

In addition, the primary and supporting goals/objectives in the CVFPP were influenced by the results of a considerable effort by DWR in obtaining stakeholder feedback and informing a variety of groups and individuals across the CVFPP planning area. As stated in Master Response 13, this extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP. For additional details, see Master Response 13.

The goals and objectives included in the CVFPP are consistent with the Legislature's direction for plan preparation. Before the 2017 update to the CVFPP (for the 2017 plan), public and stakeholder feedback will be solicited again, and comments will be accepted on the details of the plan.

T_CWA2-05

As stated in Master Response 1, the Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would

benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available.

The PEIR recognizes that converting current land uses (particularly agricultural uses) to bypass and related uses (such as habitat and recreation)

would result in potentially significant and unavoidable impacts, particularly on agriculture, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topic or information was raised in the comments. For additional details, see Master Response 1.

T_CWA2-06

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These

combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

The coment mentions the concept of unavoidable impacts and mitigation of impacts, but gives no details about those impacts or possible mitigation for them. This part of the comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CWA3

T_CWA3-01 MR. HENNELLY: Hello, President Edgar and members of the Board. I'm Mark Hennelly with the California Waterfowl Association. We're a wetland and waterfowl conservation group. Restore habitats up and down the valley, both on private and public land. And I, myself,

do a lot of my hunting and fishing up in these areas in the Sacramento Valley. So I know it quite well, and enjoy it.

Just a couple of general comments. You know, historically flood control projects, you know, while necessary for public safety and the protection of public property, were also a major cause in the decline of riparian and wetland habitat in California. And these are habitats that are very near and dear to the species we care about, which are waterfowl and other game species.

Those habitats have been reduced by about 90 percent. Fortunately, our partners in the agricultural sector have been very good at providing surrogate habitat on their ground. Particularly rice, corn, and wheat cultivation has provided a real good benefit for waterfowl and other wildlife.

As an instance, wintering waterfowl rely heavily on flooded rice in the fall for about half of their caloric needs. And then in the spring, you'd see local mallards will go into the rice fields and use them as brooding areas. So the agricultural sector really, from a waterfowl standpoint, is a great partner. And obviously anything that impacts them we have concerns on as well too.

T_CWA3-02

Fortunately, though, I think this plan, rather

than, you know, as in the past, adversely affecting wildlife habitat, we have a good opportunity to try to do some good things for wetlands and for riparian habitat, and as well to help to protect farm land from catastrophic flooding. So I think there are some good opportunities here that need to be looked at.

Specifically, a couple of things in the plan that kind of caught our attention mostly, was the multiple benefits projects. We agree that flood control should remain the primary purpose of this plan, but do support multiple benefits. We didn't see a whole lot of detail in the plan as to how those benefits would be provided, so we wanted to provide a little input on that.

One thing we'd like to see is integration with existing fish and wildlife conservation plans for the Central Valley. Particularly, the 2006 Central Valley Joint Venture Implementation Plan, which focuses on the protection of wetlands and riparian habitats, as well as flooded agriculture in a non-regulatory landowner friendly manner. That plan provides immeasurable habitat, goals, and objectives for restoring migratory bird populations. And it's also supported by a number of government agencies, including the Department of Water Resources, U.S. Fish and Wildlife Service, Department of Fish and Game, and then a host of non-governmental partners in the

conservation world. So it's definitely something worth looking into to incorporate into the plan.

T_CWA3-03

We'd also like to see the increased -- we'd like to see increased and enhanced wildlife dependent recreational opportunities, particularly hunting and fishing, which are the traditional uses of the rural parts of the Central Valley. And those uses also, of course, generate a lot of local economic activity that's important to the communities around here.

We believe this can be done by, if there are cases where fee title acquisition is involved for habitat purposes, just making sure that hunting and fishing opportunities are apart of those acquisition. That's probably best done by the participation of the Department of Fish and Game. They are usually the ones that handle hunting and fishing public access programs. So it would be nice to see more participation from the Department with this plan.

T_CWA3-04

You can also integrate what are existing State and federal landowner incentive programs into the plan. These are administered by the Department of Fish and Game, U.S. Fish and Wildlife Service, Department of Agriculture. And they're all done, again, in an incentive based landowner friendly manner, and would fit in well, I think, with this plan.

T_CWA3-05

We'd also like to see more clarity on creating a more reliable water supply, which, of course, supports water deliveries for both managed wetlands and wildlife friendly agricultural. We believe this can be accomplished by expanded floodways and setback levees, which allow for more flexibility in upstream reservoir operations. That was touched on a little bit in the plan, but it would probably be good to provide a little more detail on it.

T_CWA3-06

And then on some of the agricultural impacts, we don't believe that there's enough detail in the plan to determine the extent to which and where farm land would be taken out of production, nor is the draft plan adequately identified land how landowners would be compensated for farmland conversion.

We feel the draft plan should consider agriculture's, again, important role in conserving wildlife and achieving ecosystem restoration goals and objectives, and recommend steps to avoid or minimize impacts to farm lands with the high -- with the highest wildlife habitat value, such as flooded rice.

T_CWA3-07

In addition, there needs to be some more discussion, I think, in the draft on the potential third party impacts to local agricultural communities that are going to be affected.

T_CWA3-08

Any acquisition of farm land, you know, for flood control purposes, we believe should occur on a willing seller basis. Where that's not possible, they should also, nevertheless, be fairly compensated that's really important. The agricultural community needs to make sure that they are compensated to the extent possible should they be impacted by this.

T_CWA3-09

And I would also, you know, urge that we try to use some of these activities in flood control projects on a -- focus them on flood prone or marginal crop lands. Don't be taking out the best ag out there. Don't be taken out the highest value crops. Focus where farming is difficult or it's flood prone.

T_CWA3-10

Finally, I know the Cherokee Canal issue has come up. I just wanted to reiterate our concerns with that project. There's number of State, federal, national wildlife refuges and wildlife areas that would be impacted as well as a number of duck clubs. We have a lot of wildlife friendly rice in the Butte Basin, and in the Sutter bypass. So anything you can do to minimize impacts to those folks would be much appreciated.

Thank you.

PRESIDENT EDGAR: Thank you.

California Waterfowl Association, Mark Hennelly (Public Hearing, April 6, 2012)

Response

T_CWA3-01

The comment identifies the commenter's affiliation and experience and provides general information about some habitat and agricultural conditions. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CWA3-02

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework.

Appendix E, "2012 Central Valley Flood Protection Plan Conservation Framework," provides a preview of a long-term Conservation Strategy that DWR is developing to support the 2017 CVFPP Update. The Conservation Framework focuses on promoting ecosystem functions and multi-benefit projects in the context of integrated flood management for near-term implementation actions and projects. The Conservation Framework provides an overview of the floodway ecosystem conditions and trends and key conservation goals that further clarify the CVFPP's ecosystem goal. For additional details, see Master Response 7.

As stated in Master Response 14, as part of post-adoption activities, the Board and DWR will continue to work collaboratively with local, State, and federal agencies, environmental interests, and other parties to develop regional flood management plans and further refine the proposed elements of the SSIA.

The State has a strong interest in coordinating and implementing integrated projects that achieve multiple benefits. Effective integration across planning efforts means that all programs and projects, when implemented, work together to achieve key goals in a cost-effective manner; are sequenced and prioritized appropriately; and do not adversely affect or interfere with intended benefits. Although effectively integrating planning across programs while considering multiple benefits can be challenging, doing so can also provide opportunities to share knowledge and identify mutually beneficial solutions that might not have been considered otherwise, thus minimizing duplication and reducing costs. For additional details, see Master Response 14.

T_CWA3-03

This comment is similar to comment T_CWA3-02. See response to comment T_CWA3-02, above. Additionally, as stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to include multiple objectives, where feasible, when proposing improvements to flood management facilities, including opportunities and incentives for expanding or increasing the use of floodway corridors (CWC Section 9616(a)(12)). The potential for recreational use of the flood control system has long been recognized. The SSIA involves floodplain reconnection and floodway expansion, which would improve ecosystem functions, fish passage, and the quantity, quality, and diversity of natural habitats, all of which would contribute to an increase in recreation opportunities and augment the aesthetic values of those areas. Expanding habitat areas would increase opportunities for fishing, hunting, and wildlife viewing. Recreation-related spending associated with increased use by visitors can be an important contributor to local and regional economies. During post-adoption activities (regional flood management planning and

development of basin-wide feasibility studies), DWR will work with local and regional implementing agencies and partners to refine CVFPP elements, including developing additional details on site-specific recreation features as part of multi-benefit projects. For additional details, see Master Response 7.

T_CWA3-04

This comment discusses concepts similar to those raised in comments T_CWA3-02 and T_CWA3-03. See responses to comments T_CWA3-02 and T_CWA3-03, above.

T_CWA3-05

As stated in Master Response 7, capturing and using floodflows for groundwater recharge is a component of integrated flood and water management in the CVFPP. The State supports programs that use floodflows for groundwater recharge to improve water management throughout California. However, the State also recognizes the limitations of direct groundwater recharge in lowering flood stage and reducing flood risks, especially in the Sacramento River Basin. Considering these limitations, the SSIA identifies opportunities for groundwater recharge within the flood management system (in-channel recharge and in expanded bypass areas). Although no specific recharge projects are recommended in the SSIA at this time, the State encourages further exploration of feasible recharge opportunities in the San Joaquin River Basin, in particular, to capture a portion of high flows from snowmelt.

DWR also recognizes that although expanding a floodway can assist in recharging groundwater by expanding the surface area of inundated ground during high-water events, a meaningful benefit cannot be assured. The inundated soils must be appropriate to allow groundwater infiltration. Depending on hydrologic conditions, an expanded floodway may be inundated only rarely, allowing only limited opportunities for increased groundwater infiltration. The local aquifer may be recharged from lands away from the river, with groundwater flowing toward and draining into the river. In this circumstance, increasing floodway inundation would have little benefit to local groundwater recharge. Therefore, potential groundwater recharge benefits from increasing floodplains, flood bypasses, and setback levees are very dependent on site-specific conditions.

The SSIA includes an F-CO Program that seeks to coordinate flood releases from existing reservoirs located on tributaries to major Central Valley rivers. Considering the timing and magnitude of flood releases from reservoirs, the F-CO Program seeks to optimize the use of downstream channel capacity in balance with total available flood storage space in the

system to reduce overall downstream peak floodflows. The F-CO Program also can modify operation of reservoirs in a way that will improve flood management and provide opportunities for more aggressive refilling of reservoirs during dry years. Such operations could increase water supplies within reservoirs, especially in dry years when the water supply system is most stressed.

Water supply benefits from the F-CO Program would vary depending on current reservoir operations rules, watershed hydrology, flexibility in reservoir operation and physical outlet facilities (i.e., adequate release capacity), quality of reservoir inflow forecasts, and other factors. Therefore, a case-by-case study of flood management and multipurpose reservoirs will be needed to adequately define and quantify the potential benefits. For additional details, see Master Response 7.

T_CWA3-06

As stated in Master Response 1, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public

engagement and input will become available. For additional details, see Master Response 1.

Additionally, as stated in Master Response 2, the CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable. The PEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

Additionally, as stated in Master Response 3, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and 3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. For additional details, see Master Response 3.

The DPEIR identifies the biological resources value provided by agricultural lands. For example, Section 3.6, “Biological Resources—Terrestrial,” provides a description of the potential wildlife habitat functions of agricultural lands, including the following statement:

> The value of agricultural habitat for sensitive and common wildlife species varies greatly among crop types and agricultural practices. Rice fields can provide relatively high-quality agricultural habitat. Seasonal flooding creates surrogate wetlands that can be exploited by a variety of resident and migratory birds, and dry rice fields can attract rodents and their predators (e.g., raptors). Flooded rice fields and irrigation canals also provide important habitat for the giant garter snake, a sensitive

species that, like waterfowl and shorebirds, has had its preferred wetland habitat greatly reduced and now uses rice fields as surrogate habitat.

T_CWA3-07

The comment identifies the concept of "third party impacts," but provides no information or details on the definition of the term, how the CVFPP might be deficient in addressing the issue, or how any perceived deficiencies might be corrected. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_CWA3-08

As stated in Master Response 2, the conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable.

In addition to expansion of the bypass system, levee reconstruction, and other elements, the SSIA includes State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans. These easements would be used to preserve agriculture and prevent urban development in current agricultural areas, discouraging conversion to land uses that would increase flood risks within floodplains protected by SPFC facilities. Agricultural conservation easements could be purchased through various DWR programs; an example is DWR's Flood Corridor Program, which focuses on nonstructural flood risk reduction integrated with

protection of natural resources and agricultural lands. For additional details, see Master Response 2.

T_CWA3-09

As stated in Master Response 2, the PEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

Additionally, as stated in Master Response 3, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and 3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. For additional details, see Master Response 3.

Also see response to comment T_CWA3-06, above, regarding future coordination and planning as part of CVFPP post-adoption implementation. The concepts identified by the commenter would be best addressed on a site and project specific basis during future implementation of the CVFPP.

T_CWA3-10

See response to comment T_CWA3-06. As stated in Master Response 1, the CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for

proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansions of various bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide

feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

T_DURST1

T_DURST1-01

MR. DURST: Good afternoon, Mr. Chairman and Board members. My name is Fritz Durst, and I am a landowner, farmer, conservationist with property in the floodplain of the Sacramento River.

I serve as president of Reclamation District 108, as well as Commissioner for the Sacramento River Westside Levee District, and for the Knights Landing Ridge Drainage District. I'm responsible for the oversight of over 86

miles of project levees.

T_DURST1-02 I would like to go on record as opposing the plan as presented. I feel that the planning process was hurried to a great degree, and that agriculture and its interests were not treated fairly in the process. Far too many details with grave consequences for agriculture were brushed aside.

T_DURST1-03 The number one issue that I have is that urban folks get better flood protection at the cost to rural folks. The Cherokee Canal is -- the Cherokee Canal Project is one such example.

Diverting flood flows from the Feather River into the Butte Basin, without addressing any downstream effects on the bypass system, will seriously jeopardize the Sacramento River levees from above Colusa down to Fremont.

T_DURST1-04 Another example is the fortification of urban levees will add additional stress to weaker rural levees, causing them to breach first. This will result in massive transitory storage protecting urban areas with them having to pay -- without them having to pay for it. This plan effectively kills the longstanding flood control policy of *We All Get Better Together*.

T_DURST1-05 I'd like you to know that I struggle to accept much of the environmental restoration portion of the plan. I believe that the number one purpose of our levees and

bypasses is flood control. The system was managed as such until the late 1960s, when we recognized the need for expanding and improving our region's habitat.

Gradually, we valued habitat higher than flood control, and halted many maintenance activities that helped our flood channels handle over 600,000 plus cubic feet per second flows that make their way past Sacramento.

Once such example is the Central Valley FLOOD Protection Board's neglect in its duties to allow a forest to become established in the Sutter Bypass by the Sutter -- on the Sutter Wildlife refuge.

The habitat was valued more than the surrounding lands, and the Meridian break of 1997 occurred just upstream of this obstruction. We have since convinced the U.S. Fish and Wildlife Service of the problem, and they have removed some of the trees. And your Board is currently working on a two dimensional model of the flows.

Why these trees didn't grow on the other side of the levee in the refuge where it would not impede flood flows is beyond me.

Please slow down this process and listen to us. T_DURST1-06
I think that we can offer many solutions to our region's flood and habitat problems, but we need to develop them in a way that is equitable all.

I thank you for your time.

PRESIDENT CARTER: Thank you, Mr. Durst.

Reclamation District 108, Sacramento River Westside Levee District, Knights Landing Ridge Drainage District, Fritz Durst (Public Hearing, February 24, 2012)

Response

T_DURST1-01

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP. For the Joint Subcommittee on Agricultural Stewardship Scope Definition Subcommittee membership list and charter, see http://www.water.ca.gov/cvfmp/documents.cfm.

The comment provides information on the commenter and his affiliations. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_DURST1-02

The commenter states an opinion but provides no supporting documentation of the concern raised nor does the commenter provide data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts to support their comment. The comment is noted.

T_DURST1-03

As stated in Master Response 4, State law (SB 5) requires an urban level of flood protection for urban and urbanizing areas within the Sacramento–San Joaquin Valley so that these areas will withstand a 1-in-200-year flood event (CGC Sections 65865.5, 65962, and 66474.5). Under the terms of SB

5, adoption of the 2012 CVFPP by the Board would trigger the schedule of compliance actions required for cities and counties to make findings related to an urban level of flood protection.

However, the CVFPP does not create any new requirements or assurances for levels of flood protection in the Central Valley; the local findings requirements regarding the required levels of protection were established by the State Legislature with the passage of SB 5. Similarly, the plan does not change existing State requirements related to new development in nonurbanized areas, including small communities, which must continue to meet the national FEMA standard of flood protection (per CGC Sections 65865.5, 65962, and 66474.5). This national standard corresponds to the minimum level of flood protection (100-year flood) required for participation in the NFIP, and is consistent with the existing Building Code. The Central Valley Flood Protection Act of 2008 further clarifies that the CVFPP is a descriptive document, and neither the development nor the adoption of the CVFPP constitutes a commitment by the State to provide any particular level of flood protection (CWC Sections 9603(a) and 9603(b)). For additional details, see Master Response 4.

As stated in Master Response 12, the State is sensitive to the potential effects of repairs or improvements to SPFC facilities that may result in redirected hydraulic impacts upstream or downstream from these facilities, and is developing more detailed policies to minimize and mitigate potential impacts. Based on current evaluations (see Section 3.13; Attachment 8C, “Riverine Channel Evaluations”; and Attachment 8D, “Estuary Channel Evaluations,” in Appendix A, “Central Valley Flood Protection Plan”), implementing the SSIA as a whole would not result in adverse systemwide hydraulic effects, including any in the Delta. Peak floodflows may increase slightly (over current conditions) in certain reaches, but the expansion of conveyance capacity proposed in the SSIA would attenuate flood peaks and result generally in reduced peak flood stages throughout the system.

The issue of potentially redirecting hydraulic impacts is also addressed in Section 3.13, “Hydrology,” in the DPEIR under Impact HYD-2 (NTMA), Impact HYD-4 (NTMA), Impact HYD-2 (LTMA), and Impact HYD-4 (LTMA). As indicated in these impact discussions, any project proponent implementing a project consistent with the SSIA that would affect flood stage elevations would need to obtain various applicable permits before project implementation (such as Section 408 and 208.10 authorization from USACE and encroachment permits from the Board). The project proponent would need to analyze the potential for the project to locally impede flow or transfer flood risk by causing changes in river velocity, stage, or cross section. Projects would not be authorized if changes in water surface elevation, and thus flooding potential, would increase above the maximum

allowable rise set by these agencies. If the design of a project would result in an unacceptable increase in flooding potential, a project redesign or other mitigation would be required to meet agency standards before the project could be authorized and implemented. For additional details, see Master Response 12.

As stated in Master Response 3, the SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. Implementing the SSIA would increase the percentage of the population receiving at least 100-year (1 percent annual chance) flood protection from the current 21 percent to more than 90 percent (CVFPP, page 3-40). The remaining 10 percent of the population would receive benefits through residual risk management actions. Based on initial planning-level cost estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to provide flood stage reduction benefits to many of the areas in the system, including small communities and rural-agricultural areas.

In addition, the DPEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and 3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed.

The State supports the continued viability of small communities to preserve cultural and historical continuity and provide important social, economic, and public services to rural populations and agricultural enterprises. The SSIA describes State investment priorities in small community flood protection while avoiding the inducement of imprudent growth within SPFC floodplains. Under the SSIA, many small communities would receive increased flood protection benefits as a result of system improvements focused on protecting nearby urban areas. For example,

levee improvements may be constructed upstream from an urban area to prevent a scenario in which floodwaters from an upstream levee breach would flow down gradient into the urban area. The upstream levee improvement that may extend into rural locations would therefore also reduce flood risks for the rural area immediately adjacent to the improved levee segment. Conditions in small communities would also be evaluated on a case-by-case basis to identify appropriate State investments in additional structural and/or nonstructural actions (e.g., levees, flood walls, floodproofing, or relocations).

The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas outside small communities. These actions are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development or increasing flood risks within lands protected by the SPFC. No target minimum level of flood protection has been established for prioritizing State investments in rural-agricultural areas (see CWC Section 9603). However, the SSIA proposes (1) projects that maintain levee crown elevations for rural SPFC levees and provide all-weather access roads for inspection and floodfighting; (2) economically feasible projects that resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs; (3) system elements (e.g., bypass expansion) that lower peak flood stages within some rural channels; and (4) actions to manage residual flood risks.

All areas protected by the SPFC would benefit from State investments included in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery. The SSIA also proposes State investments to preserve agriculture and discourage urban development in rural floodplains (e.g., purchasing agricultural easements from willing landowners, when consistent with local land use planning). In addition, the SSIA proposes FEMA flood insurance reforms to support the sustainability of rural-agricultural enterprises.

The State supports efforts to reform FEMA's NFIP to more equitably reflect corresponding flood risks, including establishing a flood zone for agriculturally based communities to allow replacement of existing structures or reinvestment development in the floodplain. The State also supports identifying a special, lower-premium rate structure that reflects actual flood risks for agricultural buildings in rural-agricultural areas located in Special Flood Hazard Areas. The State will work with local flood management interests to pursue reform of the NFIP.

The State recognizes potential regional differences in the capacity to pay for flood system improvements and O&M. The CVFPP proposes working

with rural interests to develop appropriate criteria for rural levee repairs to cost-effectively address known problems (see CVFPP Sections 3.4.1 and 4.1.4). Further, the plan proposes reviewing O&M roles and responsibilities for SPFC facilities and forming regional maintenance authorities, as appropriate, in the interest of improving maintenance efficiency and more equitably distributing system maintenance costs to beneficiaries. For example, DWR has developed cost-sharing guidelines to promote multiobjective projects and to provide additional financial support for economically disadvantaged areas (http://www.water.ca.gov/floodsafe/docs/Cost_Sharing_Formula_12-29-10_Final.pdf). For additional details, see Master Response 3.

T_DURST1-04

See response to comment T_Durst1-03 above. In addition, as stated in Master Response 4, the Central Valley Flood Protection Act of 2008 establishes legislative requirements for the CVFPP. For example, the legislation directs DWR to consider structural and nonstructural methods for providing an urban level of flood protection (200-year or 0.5 percent chance) to current urban areas (CWC Sections 9614(i) and 9616(a)(6)), and encourages wise use of floodplains through a better connection between State flood protection decisions and local land use decisions (CWC Section 9616(a)(5)). The SSIA proposes flood protection investments for rural-agricultural areas, small communities, and urban areas consistent with legislative direction and commensurate with flood risk to people and property.

The SSIA identifies minimum flood protection targets when State investments are made to protect public safety in urban areas and small communities (protection from 200- and 100-year flood events, respectively). However, the plan acknowledges that State investments alone cannot achieve these targets in all communities without leveraging federal and local funds, and encourages higher levels of flood protection whenever feasible. The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas, and that are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development in floodplains. The SSIA does not target a minimum level of flood protection for State investments in rural-agricultural areas outside of the small communities because conditions and local interests differ from one area to another, and additional regional planning efforts are needed to formulate solutions that meet community needs and State investment priorities. However, the SSIA includes various options for addressing flood risks in rural-agricultural areas, including the following:

- Projects to maintain levee crown elevations for existing rural SPFC levees and provide all-weather access roads for inspection and floodfighting
- Economically feasible projects to resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs
- System elements (such as new and expanded bypasses) that would lower water surface elevations within some rural and urban channels

All areas would benefit from State investments in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery. For additional details, see Master Response 4.

T_DURST1-05

As stated in Master Response 6, improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures).

Local HCPs can be countywide initiatives or can be implemented in response to proposed development. The main objectives of these plans are to protect natural resources, including species and habitat, and to enhance coordination and collaboration of development stakeholders.

Should a place-based project be defined and pursued as part of the proposed program, and should the CEQA lead agency be subject to the authority of local jurisdictions, the applicable county and city policies and ordinances would be addressed in a project-level CEQA document as necessary. Planting of vegetation in the floodway may not be authorized by the Board, USACE, or other agencies if the vegetation would impede flood flows sufficiently that a rise in water surface elevation would cause a significant increase in risk to public safety.

The SSIA promotes efficient and sustainable long-term O&M practices through the following:

- Reforming and consolidating State and local agencies' roles and responsibilities for O&M

- Standardizing criteria by which maintenance practices, procedures, and inspections are performed and reported
- Implementing strategies to adequately and reliably fund routine activities and streamline permitting

Some of the proposed activities may involve legislative action, new institutional arrangements involving local maintaining agencies, modifications to existing State programs, and additional or redirected funding. For additional details, see Master Response 6.

As stated in Master Response 8, the State Legislature enacted comprehensive flood risk management legislation in 2007, including the Central Valley Flood Protection Act of 2008. This law set a clear directive for an integrated systemwide approach to Central Valley flood management, and provided detailed guidance for DWR to follow in formulating the CVFPP. The Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in CWC Sections 9600–9625. DWR, in coordination with USACE, the Board, and multiple stakeholders, used this legislative direction to formulate the CVFPP's primary and supporting goals. For additional details, see Master Response 8.

As noted above, CWC Sections 9600–9625 provide specific direction for the preparation of the CVFPP. The following text from CWC Section 9616 refers to the objectives to be considered in the CVFPP:

(a) The plan shall include a description of both structural and nonstructural means for improving the performance and elimination of deficiencies of levees, weirs, bypasses, and facilities, including facilities of the *State Plan of Flood Control Descriptive Document*, and, wherever feasible, meet multiple objectives, including each of the following:

(1) Reduce the risk to human life, health, and safety from flooding, including protection of public safety infrastructure.

(2) Expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey floodwaters away from urban areas.

(3) Link the flood protection system with the water supply system.

(4) Reduce flood risks in currently nonurbanized areas.

(5) Increase the engagement of local agencies willing to participate in improving flood protection, ensuring a better connection between state flood protection decisions and local land use decisions.

(6) Improve flood protection for urban areas to the urban level of flood protection.

(7) Promote natural dynamic hydrologic and geomorphic processes.

(8) Reduce damage from flooding.

(9) Increase and improve the quantity, diversity, and connectivity of riparian, wetland, flood plain, and shaded riverine aquatic habitats, including the agricultural and ecological values of these lands.

(10) Minimize the flood management system operation and maintenance requirements.

(11) Promote the recovery and stability of native species populations and overall biotic community diversity.

(12) Identify opportunities and incentives for expanding or increasing use of floodway corridors.

(13) Provide a feasible, comprehensive, and long-term financing plan for implementing the plan.

(14) Identify opportunities for reservoir reoperation in conjunction with groundwater flood storage.

In addition, the primary and supporting goals/objectives in the CVFPP were influenced by the results of a considerable effort by DWR in obtaining stakeholder feedback and informing a variety of groups and individuals across the CVFPP planning area.

T_DURST1-06

As stated in Master Response 13, as part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional

improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts. For additional details, see Master Response 13.

As stated in Master Response14, development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts. Information and outcomes from the regional planning process will inform the State-led basin-wide feasibility studies, preparation of a financing plan for the CVFPP, and the first update of the CVFPP (scheduled for completion by 2017). This regional effort is scheduled to be launched publicly in June 2012 and is anticipated to continue through 2013.

DWR will engage regional flood planning partners to develop and implement communication strategies with broad interest groups to brief them on flood management planning in their regions. Regional implementing and operating agencies, land use agencies, and interest groups will be invited to participate in the planning process. Each regional planning process will seek input, as appropriate, from agricultural interests, environmental interests, permitting agencies/resource agencies, local emergency responders, tribes, and other stakeholders. DWR anticipates that a regional flood working group will be formed in each region.

As part of post-adoption activities, the Board and DWR will continue to work collaboratively with local, State, and federal agencies, environmental interests, and other parties to develop regional flood management plans and further refine the proposed elements of the SSIA.

The State has a strong interest in coordinating and implementing integrated projects that achieve multiple benefits. Effective integration across planning efforts means that all programs and projects, when implemented, work together to achieve key goals in a cost-effective manner; are sequenced and prioritized appropriately; and do not adversely affect or interfere with intended benefits. Although effectively integrating planning across programs while considering multiple benefits can be challenging, doing so can also provide opportunities to share knowledge and identify mutually beneficial solutions that might not have been considered

otherwise, thus minimizing duplication and reducing costs. For additional details, see Master Response 14.

T ELLIS1

T_ELLIS1-01

MR. ELLIS: Yes. President Carter, Executive officer Punia and members of the Board, I am Tom Ellis. And I'm here today speaking on behalf of my wife and myself as very concerned farmers and land owners in the Colusa basin. We are aware of the development of the Central Valley Flood Protection Plan. And I participated in all of the upper Sacramento region meetings, all of the ag stewardship subcommittee meetings and three of the management action workshops that have been held during the past two years.

T_ELLIS1-02

My first concern is with the two-tier level of flood protection that was mandated by Senate Bill 5. And it requires a 200-year level of flood protection for urban areas, 100-year level for rural communities, and I'm not certain what level for the rural agricultural areas.

When the Sacramento River Flood Control Project was built, it is my understanding it was -- there was no differentiation -- or no distinction made between these areas.

Later, a memorandum of understanding was executed assuring rural areas of the protection provided by the '57 profile. As a result of Senate Bill 5, rural areas have been put in an untenable position uncertain of their future flood protection. The Sacramento River Flood Control Project has kept us relatively free from significant flooding since its completion, and we have become accustomed to that level of protection.

T_ELLIS1-03

Also, it appears to me that the new flood plan is more of an ecosystem restoration plan than a flood protection plan, which brings to the forefront the need for landowner assurances, so we in production agriculture have some recourse when we find ourselves neighboring a restoration project.

I think conflicts are inevitable in such a situation, and I believe we should have a grievance procedure and a good neighbor policy -- a good neighbor fund in place to address these conflicts. Discussion of this issue was squelched in the ag stewardship subcommittee by plan leadership, because they maintain the plan was a flood protection plan and not an ecosystem

T_ELLIS1-04

restoration plan.

Another area of concern with the plan involves the development of the 90 plus management actions under consideration for inclusion in the 2012 plan. These actions were divided into 11 category-based workshops. I attended three of these workshops where we discussed for about 10 or 12 minutes action items in the two hours allotted.

About 10 or 12 minutes per item, which is not much time for a very important issue like transitory storage. Facilitators hustled us along to meet the time limits with the explanation that we would have the opportunity to go into more detailed discussion in Phase 3 and Phase 4 of the process. Phase 3 and Phase 4 were cancelled. We never had the opportunity for these in-depth discussions that we were promised.

Then when I got the final plan, these management actions appear in Attachment 7, Section 6. I'm sure anyone reading the plan will assume that all of these suggested management actions were fully discussed by the attendees. And I'm telling you this was not the case.

T_ELLIS1-05

Also, the finance and revenue workshop included Management Action number 82, which was to compensate rural areas for accepting lesser flood protection than urban areas.

And this was deleted in the final plan. Of course, this is a huge issue for us, as we believe flood risk is being shifted to the rural areas, and we firmly believe we should be made whole.

T_ELLIS1-06

On pages 2-12 of the plan, a new bypass along the alignment of the Cherokee Canal into the Butte Basin is discussed. Once again, I attended all the upper Sacramento region meetings, never heard this mentioned.

And I've checked with people who attended the lower Sac region meetings, and they never heard it discussed there either. I think it should have been discussed with the local people before it appeared in the plan, as the idea presents significant problems for those of us who live in the area.

T_ELLIS1-07

Another issue for me is that I don't see a history document in the plan. A draft that I was given to read was developed and dated May 15th, 2009. And I read this and I felt it was lacking some very important information. Several of us in the upper Sacramento region group felt quite strongly that there should be a history document accompanying this plan.

T_ELLIS1-08

Unfortunately, I'm speaking ahead of Mr. Bair. But when Mr. Bair comes and speaks to you very shortly, I implore you to listen to him carefully to his comments regarding the shift away from design capacity as a measure

T_ELLIS1-09

of critical need for flood protection in rural agricultural areas. This is very important for us.

And so therefore, in conclusion, I will tell you that I cannot support this plan, as I feel the plan and the planning team had a deaf ear when it came to addressing the concerns of rural agricultural areas. It is unreasonable to expect these areas to absorb the risk of major flood events without being compensated.

And I thank you for your time.

PRESIDENT CARTER: Thank you, Mr. Ellis.

Thomas W. Ellis (Public Hearing, February 24, 2012)

Response

T_ELLIS1-01

DWR and the Board thank the commenter for his continued participation in the public meetings. The comment provides introductory information about the commenter. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR. The comment is noted.

T_ELLIS1-02

As stated in Master Response 4, State law (SB 5) requires an urban level of flood protection for urban and urbanizing areas within the Sacramento–San Joaquin Valley so that these areas will withstand a 1-in-200-year flood event (CGC Sections 65865.5, 65962, and 66474.5). Under the terms of SB 5, adoption of the 2012 CVFPP by the Board would trigger the schedule of compliance actions required for cities and counties to make findings related to an urban level of flood protection.

However, the CVFPP does not create any new requirements or assurances for levels of flood protection in the Central Valley; the local findings requirements regarding the required levels of protection were established by the State Legislature with the passage of SB 5. Similarly, the plan does not change existing State requirements related to new development in nonurbanized areas, including small communities, which must continue to meet the national FEMA standard of flood protection (per CGC Sections 65865.5, 65962, and 66474.5). This national standard corresponds to the minimum level of flood protection (100-year flood) required for participation in the NFIP, and is consistent with the existing Building Code. The Central Valley Flood Protection Act of 2008 further clarifies that the CVFPP is a descriptive document, and neither the development nor the adoption of the CVFPP constitutes a commitment by the State to provide any particular level of flood protection (CWC Sections 9603(a) and 9603(b)).

The SSIA identifies minimum flood protection targets when State investments are made to protect public safety in urban areas and small communities (protection from 200- and 100-year flood events, respectively). However, the plan acknowledges that State investments alone cannot achieve these targets in all communities without leveraging federal and local funds, and encourages higher levels of flood protection whenever feasible. The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural

areas, and that are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development in floodplains. The SSIA does not target a minimum level of flood protection for State investments in rural-agricultural areas outside of the small communities because conditions and local interests differ from one area to another, and additional regional planning efforts are needed to formulate solutions that meet community needs and State investment priorities. However, the SSIA includes various options for addressing flood risks in rural-agricultural areas, including the following:

- Projects to maintain levee crown elevations for existing rural SPFC levees and provide all-weather access roads for inspection and floodfighting

- Economically feasible projects to resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs

- System elements (such as new and expanded bypasses) that would lower water surface elevations within some rural and urban channels

All areas would benefit from State investments in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery. For additional details, see Master Response 4.

T_ELLIS1-03

As stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction,

including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated. For additional details, see Master Response 2.

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework. For additional details, see Master Response 7.

Regarding the reference to habitat conflicting with adjacent agricultural land, little potential seems to exist for meaningful conflicts between habitat created as part of the plan and existing agricultural uses. Where DWR, the Board, or others create habitat, the land would be part of a specific project

and owned in fee title by an appropriate agency to preserve and maintain the habitat. Where this habitat is in an expanded floodway, DWR or another appropriate agency would own the surrounding land in the floodway in fee title and land would be leased for agricultural production as appropriate. In this circumstance, the habitat would not conflict with continuing nearby agricultural operations owned by a private entity. If habitat were created on the edge of an existing or expanded floodway, typically a levee and associated maintenance easements would separate the habitat from any privately held agricultural land on the landside of the levee, minimizing the potential for conflicts between sensitive species that might occupy the habitat and agricultural operations.

T_ELLIS1-04

The comment expresses concerns with the commenter's experience participating in early public involvement steps of CVFPP development. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_ELLIS1-05

See responses to comments T_Elllis1-02 and T_Ellis1-04, above.

T_ELLIS1-06

As stated in Master Response 1, the CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of various bypasses was identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the

south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

T_ELLIS1-07

The commenter states an opinion, although it is unclear what deficiencies are being expressed. The comment provides no supporting documentation of the concern raised, nor does the commenter provide data or references

offering facts, reasonable assumptions based on facts, or expert opinion supported by facts to support his comment. The comment is noted.

T_ELLIS1-08

The comment requests that special attention be provided to a future commenter at the public hearing. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR. The comment is noted.

T_ELLIS1-09

The comment expresses an opinion regarding the plan. This part of the comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted. The comment also summarizes themes expressed in previous comments. See the responses to comments provided above.

PRESIDENT EDGAR: Good morning, Tom.

T_ELLIS2-01

MR. ELLIS: Good morning, Mr. Edgar, members of the Board. I Tom Ellis. I'm here today speaking on behalf of my wife and I as concerned landowners in the Colusa Basin. I have submitted my comments to you earlier, in written form.

T_ELLIS2-02

But my first concern today is the two tiered level of flood protection that was mandated by Senate Bill 5 requiring a 200-year level of flood protection for urban and urbanizing areas and 100-year level of protection for rural communities. And I'm not certain what level for rural, agricultural areas.

When the Sacramento River Flood Control Project was built, it is my understanding that there was no such distinction made. And later, a memorandum of understanding was executed assuring rural areas of the protection provided by the '57 profile. As a result of SB 5, rural areas have been put in an untenable position, uncertain of their future flood protection.

The Sacramento River Flood Control Project has kept us relatively free from significant flooding since its completion, and we have become accustomed to that level of protection.

T_ELLIS2-03

Also, it appears to me the new flood plan is more

of an ecosystem restoration plan than a flood protection plan, which brings to the forefront the need for landowner assurances, so we in production agricultural have some recourse when we find ourselves neighboring a restoration project.

I think conflicts are inevitable in such a situation, and believe that we should have a grievance procedure and a good neighbor fund in place to address these conflicts. Discussion of this issue was squelched in the ag stewardship committee by plan leadership because they maintain the plan is definitely a flood protection plan and not an ecosystem plan. However, I would point out that a good portion of the number of pages in this plan is devoted to ecosystem issues.

T_ELLIS2-04

Another area of concern with the plan involves the development of the 90-plus management actions that were under consideration for inclusion in the 2012 plan. These actions were divided into about 11 category based workshops, and I attended three of these workshops where we discussed about 10 or 12 of these action items in two hours, or about 10 or 12 minutes per item, which is not much time for such a significant issue as transitory storage. For those of us in the Colusa Basin, Sutter Basin, these basin areas, transitory storage is a huge issue.

Facilitators hustled us along to meet the time limits with the explanation that we would go into more detailed discussion in Phase 3 and Phase 4 of the planning process, and then Phase 3 and Phase 4 were cancelled. I'm encouraged to hear that they will be reinstated down the line, but it kind of was an awkward situation. It certainly caused us to lose a little faith and trust in the plan, because we were told that when we had the opportunity to discuss them in these workshops that we couldn't do a thorough job of it, but we would have this opportunity later on, and then it was cancelled. It really challenged us to put much faith in the plan.

And then when I got the final plan, I happened to notice I didn't know how these management actions would be handled in the final edition of the plan. And, lo and behold, here they are all nice and neat about that far down in the plan. So I would think the casual reader of the plan would assume that all of the participants had a chance to put their two bits worth in on these management actions, and that was not the case. So I want the folks in the audience that read this document to understand that those of us who participated really didn't have a chance to review those issues.

T_ELLIS2-05

A special issue in my mind, it was Management Action number 82 in the revenue and finance workshop. It

T_ELLIS2-06

was to compensate rural areas for accepting a lesser flood protection than the urban areas. And then I see it was deleted in the final plan. And this is a huge issue for us, as we believe flood risk is being shifted to the rural areas, and we firmly believe we should be made whole.

And then a slight comment on the alignment of the Cherokee Canal that's mentioned on page 2-12 of the plan in the -- this Cherokee Canal in the Butte Basin. And I'm really concerned, because I attended all of the upper Sacramento region meetings, and never heard this item mentioned. I also know some folks in the lower Sacramento region meetings, and I don't think it was mentioned there.

And, Mr. Edgar, I know you were part of that. I don't -- anyway. It was really unfortunate when we saw that it was in the plan, and I think it presents some real problems, because I think you're transferring risk from the east side of the Buttes to the west side of the Buttes, and we already have some issues over that there as Mr. Akin referred to with the Sutter Bypass unable to handle some of the huge flood flows now because of vegetation build up within that channel.

So if we bring that water across behind the Buttes and dump it down on the west side, we're going to have problems. And it's a significant amount of water. I would point out to you that they want to increase it to a

capacity of, what I think mentioned is, 32,000 cubic feet per second. The main stem of the Sacramento River from Tisdale to Fremont, the capacity is only 30,000 -- or is 30,000 and that's a lot of water.

T_ELLIS2-07

Another issue that I have is I don't see a history document accompanying this plan. And there were several of us in the Upper Sacramento region group that felt quite strongly about the inclusion of a good history document with the plan. And I'm concerned about the period from the gold rush when things really started happening, and the reasons why things are the way they are and. And I think such a plan -- or this plan should have such a document.

T_ELLIS2-08

So with that, I would like to also comment on Mr. Akin's comment about the bypass channels. And I would tell you that we finally -- he'd skipped over the Tisdale Bypass. Dick, a little concerned about that.

(Laughter.)

MR. ELLIS: But anyway, we had a considerable problem there. And we finally got it cleaned out in 2007, and it had made a remarkable improvement in the Sacramento River below Tisdale down through Knights Landing.

So with that, I thank you.

PRESIDENT EDGAR: Thank you, Tom.

(Applause.)

Thomas W. Ellis (Public Hearing, April 6, 2012)

Response

T_ELLIS2-01

DWR and the Board thank the commenter for his continued participation in the public meetings. The comment provides introductory information about the commenter. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR. The comment is noted.

T_ELLIS2-02

As stated in Master Response 4, State law (SB 5) requires an urban level of flood protection for urban and urbanizing areas within the Sacramento–San Joaquin Valley so that these areas will withstand a 1-in-200-year flood event (CGC Sections 65865.5, 65962, and 66474.5). Under the terms of SB 5, adoption of the 2012 CVFPP by the Board would trigger the schedule of compliance actions required for cities and counties to make findings related to an urban level of flood protection.

However, the CVFPP does not create any new requirements or assurances for levels of flood protection in the Central Valley; the local findings requirements regarding the required levels of protection were established by the State Legislature with the passage of SB 5. Similarly, the plan does not change existing State requirements related to new development in nonurbanized areas, including small communities, which must continue to meet the national FEMA standard of flood protection (per CGC Sections 65865.5, 65962, and 66474.5). This national standard corresponds to the minimum level of flood protection (100-year flood) required for participation in the NFIP, and is consistent with the existing Building Code. The Central Valley Flood Protection Act of 2008 further clarifies that the CVFPP is a descriptive document, and neither the development nor the adoption of the CVFPP constitutes a commitment by the State to provide any particular level of flood protection (CWC Sections 9603(a) and 9603(b)).

The SSIA identifies minimum flood protection targets when State investments are made to protect public safety in urban areas and small communities (protection from 200- and 100-year flood events, respectively). However, the plan acknowledges that State investments alone cannot achieve these targets in all communities without leveraging federal and local funds, and encourages higher levels of flood protection whenever feasible. The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural

areas, and that are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development in floodplains. The SSIA does not target a minimum level of flood protection for State investments in rural-agricultural areas outside of the small communities because conditions and local interests differ from one area to another, and additional regional planning efforts are needed to formulate solutions that meet community needs and State investment priorities. However, the SSIA includes various options for addressing flood risks in rural-agricultural areas, including the following:

- Projects to maintain levee crown elevations for existing rural SPFC levees and provide all-weather access roads for inspection and floodfighting
- Economically feasible projects to resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs
- System elements (such as new and expanded bypasses) that would lower water surface elevations within some rural and urban channels

All areas would benefit from State investments in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery. For additional details, see Master Response 4.

T_ELLIS2-03

As stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction,

including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated. For additional details, see Master Response 2.

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework. For additional details, see Master Response 7.

Regarding the reference to habitat conflicting with adjacent agricultural land, little potential seems to exist for meaningful conflicts between habitat created as part of the CVFPP and existing agricultural uses. Where DWR, the Board, or others created habitat, the land would be part of a specific

project and owned in fee title by an appropriate agency to preserve and maintain the habitat. Where this habitat was in an expanded floodway, DWR or another appropriate agency would own the surrounding land in the floodway in fee title, and the land would be leased for agricultural production as appropriate. In this circumstance, the habitat would not conflict with continuing nearby agricultural operations owned by a private entity. If habitat were created on the edge of an existing or expanded floodway, typically a levee and associated maintenance easements would separate the habitat from any privately held agricultural land on the landside of the levee, minimizing the potential for conflicts between sensitive species that might occupy the habitat and agricultural operations.

T_ELLIS2-04

The comment states the commenter's experience, participating in early public involvement steps of CVFPP development. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_ELLIS2-05

See responses to comments T_Elllis1-02 and T_Ellis1-04, above.

T_ELLIS2-06

As stated in Master Response 1, the CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of various bypasses was identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the

south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

T_ELLIS2-07

The comment states an opinion, although it is unclear what deficiencies are being expressed. The comment provides no supporting documentation of the concern raised nor does the commenter provide data or references

offering facts, reasonable assumptions based on facts, or expert opinion supported by facts to support the comment. The comment is noted.

T_ELLIS2-08

The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_ELLIS3-01

MR. ELLIS: Yes. I turned in my green card this morning. I thought maybe we should resubmit.

Yeah. I'm Tom Ellis a landowner in the Colusa Basin. And thank you, President Edgar, for allowing us to speak and members of the Board.

This afternoon my concern is with the DPEIR. And I'm referring to the cumulative impacts section of the DPEIR. During the ag stewardship committee meeting in December of 2009, the issue of landowner assurances for a farmer whose farming operation adjacent to an ecosystem restoration project and they experience wildlife intrusion on his property resulting in crop losses. Plan leadership emphatically rejected the idea saying it was irrelevant because this was a flood protection plan not an ecosystem restoration plan. Therefore, the issue was dropped at that time.

However, when I saw the draft plan released in December of 2011, it appeared to me to be more of an ecosystem restoration plan than a flood protection plan.

Therefore, in my mind, the landowner assurances

T_ELLIS3-02 issue became front and center again. When the Draft Environmental Impact Report came out, I noticed in the cumulative impacts portion of the report, a section regarding hazards and hazardous materials. It's on page 4-43. And there's a discussion about birds being -- and they indicate waterfowl and shorebirds near airports that could increase bird strike hazards for aircraft. If this hazard was significant, the project proponent would be required to prepare and implement a, and I quote, "Wildlife Hazard Management Plan". And I have never heard of this before.

T_ELLIS3-03 The SRCA has dealt with these landowner assurances over a long period of time. And every time we came up with a program, we would all - I mean both sides of the issue - agree on the problems. But it would come to the point of establishing a grievance procedure and then some kind of a good neighbor fund to maybe fund some -- to take care of these problems. And we were told that it will never happen by the wildlife agencies.

And so my question is why couldn't this kind of plan, that's the Wildlife Hazard Management Plan, be used to address wildlife problems that are affecting adjacent farm operations?

Or maybe it's because the airport is handling -- it's a public safety issue. I think deer on an airstrip

would be a public safety issue. But just the same, deer on my alfalfa fields is an issue for me. And I think if there's hazard -- or a Wildlife Hazard Management Plan for airports, why not for adjacent farming operations. And I did notice this morning that you talked about safe harbor agreements. I'm a little concerned about that, because I think some of those -- there's some misunderstanding about some of these safe harbor agreements as to who's protected. And so I think I want a little bit more of -- in the way of landowner assurances before I can be comfortable.

T_ELLIS3-04

And that's the conclusion of my remarks on that issue.

PRESIDENT EDGAR: Thank you, Tom.

Thomas W. Ellis (Public Hearing, April 6, 2012)

Response

T_ELLIS3-01

Because the location of future ecosystem restoration efforts conducted as part of the CVFPP is not known at this time, the issue of compatibility of ecosystem restoration and adjacent land uses is speculative. Details regarding compatibility of habitat and adjacent land uses will be addressed as needed as plan implementation proceeds. However, little potential is apparent for meaningful conflicts between habitat created as part of the plan and existing agricultural uses, particularly conflicts severe enough to result in incidents of inverse condemnation as implied by the comment. Where DWR, the Board, or others created habitat, the land would be part of a specific project and owned in fee title by an appropriate agency to preserve and maintain the habitat. Where this habitat was in an expanded floodway, DWR or another appropriate agency would own the surrounding land in the floodway in fee title, and the land would be leased for agricultural production as appropriate. In this circumstance, the habitat would not conflict with continuing nearby agricultural operations owned by a private entity. If habitat were created on the edge of an existing or expanded floodway, typically a levee and associated maintenance easements would separate the habitat from any privately held agricultural land on the landside of the levee, minimizing the potential for conflicts between sensitive species that might occupy the habitat and agricultural operations.

Regarding the role of ecosystem restoration in the CVFPP, as stated in Master Response 8, the Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in CWC Sections 9600–9625.

DWR, in coordination with USACE, the Board, and multiple stakeholders, used this legislative direction to formulate the CVFPP's primary and supporting goals, listed below.

CVFPP Primary Goal:

- *Improve Flood Risk Management*—Reduce the chance of flooding and damages, once flooding occurs, and improve public safety, preparedness, and emergency response through the following:

- Identifying, recommending, and implementing structural and nonstructural projects and actions that benefit lands currently receiving protection from facilities of the SPFC

- Formulating standards, criteria, and guidelines to facilitate implementation of structural and nonstructural actions for protecting urban areas and other lands of the Sacramento and San Joaquin river basins and the Delta

CVFPP Supporting Goals:

- *Improve Operations and Maintenance*—Reduce systemwide maintenance and repair requirements by modifying the flood management systems in ways that are compatible with natural processes, and adjust, coordinate, and streamline regulatory and institutional standards, funding, and practices for operations and maintenance, including significant repairs.

- *Promote Ecosystem Functions*—Integrate the recovery and restoration of key physical processes, self-sustaining ecological functions, native habitats, and species into flood management system improvements.

- *Improve Institutional Support*—Develop stable institutional structures, coordination protocols, and financial frameworks that enable effective and adaptive integrated flood management (designs, operations and maintenance, permitting, preparedness, response, recovery, and land use and development planning).

- *Promote Multi-Benefit Projects*—Describe flood management projects and actions that also contribute to broader integrated water management objectives identified through other programs.

In addition, the DPEIR includes the following specific statutory objectives:

- *Maximize Flood Risk Reduction Benefits within the Practical Constraints of Available Funds*—Ensure that technically feasible and cost-effective solutions are implemented to maximize the flood-risk reduction benefits given the practical limitations of available funding, and provide a feasible, comprehensive, and long-term financing plan for implementing the plan.

- *Adopt the CVFPP by July 1, 2012*—Complete all steps necessary to develop and adopt the CVFPP by July 1, 2012, or such other date as may be provided by the Legislature.

- *Meet Multiple Objectives Established in Section 9616 of the California Water Code, as Feasible.*

In accordance with legislative direction and reflecting stakeholder input, DWR prepared the 2012 CVFPP to describe the State's vision for flood management in the Central Valley. This vision for flood management in the Central Valley is for a sustainable flood management system that provides a high degree of public safety, promotes long-term economic stability, and supports restoration of compatible riverine and floodplain ecosystems.

In the CVFPP, DWR describes the SSIA, which is a proposal for achieving the State's vision for flood management. The SSIA helps achieve the State's vision for flood management in a balanced manner by promoting responsible investment of public funds, commensurate with flood risks, in projects that integrate multiple benefits, in proactive maintenance of SFPC facilities and residual risk management, and in wise management of floodplains protected by the SPFC. For additional details, see Master Response 8.

As stated in Master Response 7, the SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework. For additional details, see Master Response 7.

T_ELLIS3-02

The comment correctly quotes from the DPEIR. The comment provides background information that supports comment T_ELLIS3-03. See response to comment T_ELLIS3-03, below. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_ELLIS3-03

The comment suggests development and use of a plan to avoid and address conflicts between landowners and adjacent habitat. The comment is noted.

As described in response to comment T_ELLIS3-01, assessing the nature of such conflicts at this time would be speculative. Addressing this issue and consideration of a plan to minimize or avoid potential conflicts would be best addressed in CVFPP post-adoption activities, where more detailed plans and specific project proposals will be considered. As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion

and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13. The commenter is encouraged to participate in public involvement aspects of these post-adoption activities.

T_ELLIS3-04

The comment responds to testimony provided earlier in the public hearing and states concerns about the concept of Safe Harbor agreements. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_ELLIS4-01

MR. ELLIS: Good afternoon, Mr. President and members of the Board, and members of the audience.

I'm here today to comment on behalf of my wife and I as very concerned farmers and landowners in the Grimes area. And we do farm in northern Yolo County, but also southern Colusa County.

I also participated in the flood plan process. And I must ask the Board to kind of bear with me today. You've heard these comments before, but there are folks in the audience that I think should hear these comments, so I hope you'll bear with me.

I did participate in the upper Sacramento region group meetings, the agricultural stewardship committee, and on three of the management action workshops.

T_ELLIS4-02

My first concern is the two-tiered level of flood protection that was mandated by Senate Bill 5 requiring a 200-year level of flood protection for urban and urbanizing areas, 100-year level for rural communities,

and really I'm not certain what it requires for the ag areas.

When the Sacramento River Flood Control Project was built, it was my understanding there was no such distinction made. Later a memorandum of understanding was executed assuring rural areas of the protection provided by the '57 profile. And as a result of SB 5, rural areas have been put in an untenable position, uncertain of their future flood protection.

The Sacramento River Flood Control Project has kept us relatively free from significant flooding since its completion. And we have become accustomed to that level of protection.

T_ELLIS4-03 Also, it appears to me that the new flood plan is more of an ecosystem restoration plan than a flood protection plan, which brings to the forefront the need for landowner assurances, so we in production agriculture have some resource when we find ourselves neighboring a restoration project.

I think conflicts are inevitable in such a situation, and I believe that we should have a grievance procedure and a good neighbor fund in place to address these conflicts.

Discussion of this issue was squelched in the ag stewardship committee by plan leadership, because they

maintained the plan is a flood protection plan, not an -- and is definitely not an ecosystem plan.

T_ELLIS4-04 Another area of concern with the plan involves the development of the 90 plus management actions under consideration for inclusion in the 2012 plan. These actions were divided into 11 category-based workshops. I attended three of these workshops where we discussed about 10 or 12 suggested actions items in a two-hour period, allocating about 10 or 12 minutes per item. And you can imagine to try to address an issue as contentious and as important as transitory storage in 10 minutes, it just -- you can't do it justice.

Facilitators hustled us along to meet the time limits with the explanation that we would go into more detailed discussion in Phase 3 and 4 of the planning process. Then Phase 3 and 4 were cancelled. We never had the opportunity for these in-depth discussions.

Then when I got the final plan, these management actions appear in Attachment 7, Section 6. And I'm sure anyone that is reading this plan will assume that all of these suggested management actions were fully discussed by the attendees, and this was not the case.

T_ELLIS4-05 Also, the finance and revenue workshop included Management Action 82. And I brought the original list of management actions, so I can show you that it was there.

Ms. Dolan asked me about this on -- when we were in Marysville, so I did bring those with me today, so I can prove to you that it was there. But when the final plan came out, this was deleted.

And, of course, this is a huge issue for us as we believe flood risk is being shifted to the rural areas and we firmly believe that we should be made whole. And if you're talking about trust, this issue alone certainly made me distrust the process.

T_ELLIS4-06 Then on pages 2-12 of the plan, a new bypass along the alignment of the Cherokee Canal into Butte Basin is discussed. And this is becoming a very contentious issues, and I realize that it really mentioned and detailed in the preliminary approaches to the plan. And then it seems to be kind of sidelined in the final system investment process, the final approach that was used, where they don't mention the Cherokee Canal particularly, but they certainly do mention a Feather River Bypass.

And this is a huge issue for us in our area. And I think even folks down to Knights Landing should be concerned, because they're talking about bringing an additional slug of water behind the Buttes and dropping it into the Butte Sink, which then will add to pressures on the Sutter Bypass, and we're having problems there as it is. The volume of water that -- the Cherokee Canal now

hands about 12,500 cubic feet per second. They want to increase it to 32,000 cubic feet per second, and I will tell you that the main stem of the river from Tisdale south to the Fremont Weir the design capacity is only 30,000 cubic feet per second. So they're talking about a lot of water. Those of you who live in the area have seen that river, and it's a lot of water.

T_ELLIS4-07 Another concern of mine is that I don't see a history plan -- or history document in the plan. And there were several of us in the upper Sacramento region group that felt there should be a rather detailed history document that accompanies this plan. I did see a draft done in 2008, I think it was, or 2009 -- I can't remember -- but it left out some significant information, as far as I'm concerned.

T_ELLIS4-08 So in conclusion, I cannot support the plan as I feel the plan and the planning team have had a deaf ear when it came to addressing the current concerns of our agricultural areas. And I think it's unfair to expect these areas to absorb the risk of major flood events without being made whole.

T_ELLIS4-09 And, Mr. Chairman, I did want to address the environmental impact document too. And I can either do it now or later. It will take a few moments though.

PRESIDENT EDGAR: Well, Tom, are you going

to be --

MR. ELLIS: I will be around.

PRESIDENT EDGAR: Okay. We're going to open that separately, if you don't mind.

MR. ELLIS: That's fine.

PRESIDENT EDGAR: Thank you.

MR. ELLIS: And thank you for your time and attention.

PRESIDENT EDGAR: Thank you, Tom.

Thomas W. Ellis (Public Hearing, April 11, 2012)

Response

T_ELLIS4-01

DWR and the Board thank the commenter for his continued participation in the public meetings. The comment provides introductory information about the commenter. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR. The comment is noted.

T_ELLIS4-02

As stated in Master Response 4, State law (SB 5) requires an urban level of flood protection for urban and urbanizing areas within the Sacramento–San Joaquin Valley so that these areas will withstand a 1-in-200-year flood event (CGC Sections 65865.5, 65962, and 66474.5). Under the terms of SB 5, adoption of the 2012 CVFPP by the Board would trigger the schedule of compliance actions required for cities and counties to make findings related to an urban level of flood protection.

However, the CVFPP does not create any new requirements or assurances for levels of flood protection in the Central Valley; the local findings requirements regarding the required levels of protection were established by the State Legislature with the passage of SB 5. Similarly, the plan does not change existing State requirements related to new development in nonurbanized areas, including small communities, which must continue to meet the national FEMA standard of flood protection (per CGC Sections 65865.5, 65962, and 66474.5). This national standard corresponds to the minimum level of flood protection (100-year flood) required for participation in the NFIP, and is consistent with the existing Building Code. The Central Valley Flood Protection Act of 2008 further clarifies that the CVFPP is a descriptive document, and neither the development nor the adoption of the CVFPP constitutes a commitment by the State to provide any particular level of flood protection (CWC Sections 9603(a) and 9603(b)).

The SSIA identifies minimum flood protection targets when State investments are made to protect public safety in urban areas and small communities (protection from 200- and 100-year flood events, respectively). However, the plan acknowledges that State investments alone cannot achieve these targets in all communities without leveraging federal and local funds, and encourages higher levels of flood protection whenever feasible. The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural

areas, and that are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development in floodplains. The SSIA does not target a minimum level of flood protection for State investments in rural-agricultural areas outside of the small communities because conditions and local interests differ from one area to another, and additional regional planning efforts are needed to formulate solutions that meet community needs and State investment priorities. However, the SSIA includes various options for addressing flood risks in rural-agricultural areas, including the following:

- Projects to maintain levee crown elevations for existing rural SPFC levees and provide all-weather access roads for inspection and floodfighting

- Economically feasible projects to resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs

- System elements (such as new and expanded bypasses) that would lower water surface elevations within some rural and urban channels

All areas would benefit from State investments in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery. For additional details, see Master Response 4.

T_ELLIS4-03

As stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction,

including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated. For additional details, see Master Response 2.

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework. For additional details, see Master Response 7.

Regarding the reference to habitat conflicting with adjacent agricultural land, little potential seems to exist for meaningful conflicts between habitat created as part of the plan and existing agricultural uses. Where DWR, the Board, or others created habitat, the land would be part of a specific project

and owned in fee title by an appropriate agency to preserve and maintain the habitat. Where this habitat was in an expanded floodway, DWR or another appropriate agency would own the surrounding land in the floodway in fee title, and the land would be leased for agricultural production as appropriate. In this circumstance, the habitat would not conflict with continuing nearby agricultural operations owned by a private entity. If habitat were created on the edge of an existing or expanded floodway, typically a levee and associated maintenance easements would separate the habitat from any privately held agricultural land on the landside of the levee, minimizing the potential for conflicts between sensitive species that might occupy the habitat and agricultural operations.

T_ELLIS-04

The comment regards the commenter's experience, participating in early public involvement steps of CVFPP development. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_ELLIS4-05

See responses to comments T_Ellis4-02 and T_Ellis-04, above.

T_ELLIS4-06

As stated in Master Response 1, the CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of various bypasses was identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the

south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

T_ELLIS4-07

The commenter states an opinion, although it is unclear what deficiencies are being expressed. The comment provides no supporting documentation of the concern raised nor does the commenter provide data or references

offering facts, reasonable assumptions based on facts, or expert opinion supported by facts to support the comment. The comment is noted.

T_ELLIS4-08

The comment states an opinion regarding the plan. This part of the comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted. See response to comment T_Ellis4-01, above.

T_ELLIS4-09

DWR and the Board appreciate the commenter's involvement in the public participation process. The comment is noted.

MR. ELLIS: Yes.

PRESIDENT EDGAR: There he is. And anybody else that wishes to speak are welcome to fill out some sign-in sheets, if we have.

MR. ELLIS: You caught me a little short. I didn't think I'd be the first one.

PRESIDENT EDGAR: You were the only one I really knew was going to talk on it. And thanks for staying, Tom. I appreciate it.

T_ELLIS5-01

MR. ELLIS: You bet. Tom Ellis. I'm a landowner in the Grimes area of the Colusa Basin. And I'm glad Lynnel stayed, because, Lynnel, you had a lot of experience with the Sacramento River Conservation Area, as has Ms. Dolan. And my concern has to do with the cumulative impacts section of the EIR. And I would just comment that during the ag stewardship committee meeting in December of 2009, the issue of landowner assurances for a farmer whose farming operation is adjacent to an ecosystem restoration project and experiences wildlife intrusion on his property, resulting in crop losses, plan leadership, at that time, emphatically rejected the idea stating it was irrelevant, because this was a flood plan, not an ecosystem restoration plan. Therefore, I kind of -- the issue was dropped.

However, when I saw the draft plan that was

released in of December of 2011, it appeared to me to be more of an ecosystem restoration plan than a flood plan. This, in my mind, the landowner assurance issues came back to front and center.

When the Draft Environmental Impact Report came out, I noticed in the cumulative impacts portion, regarding hazards and hazardous materials on page 4-43, there was a discussion about birds. That's waterfowl and shorebirds, near airports that could increase bird strike hazards for aircraft. If this hazard was determined to be significant, the project proponent would be required to prepare and implement a wildlife hazard management plan, and they identified that.

My question is why couldn't such a plan be used to address wildlife problems affecting adjacent farming operations? And the Sacramento River Conservation Area folks had a difficult time. A lot of blood, sweat, and tears was shed over this issue, because we got -- we were able to develop all of the problems and the NGOs agreed, that wildlife agencies agreed with some problems. We, from the farmer's standpoint, and them from their standpoint being neighbors to a farming operation. We agreed on the problems.

But when it came to developing a grievance procedure and then some kind of a funding mechanism to

provide funds to address these problems, we hit a stone wall, and I think Lynnel remembers that.

And so I'm thinking that maybe there's a way out of this, a way to address these. And I can assure you that if we could address this problem, it would certainly have an effect on my outlook toward the plan. So I think that we ought to look into that. And with those comments, Mr. Chairman, I'm finished, but I wanted to bring that to your attention.

PRESIDENT EDGAR: Thanks, Tom. That's very helpful.

Thomas W. Ellis (Public Hearing, April 11, 2012)

Response

T_ELLIS5-01

Because the locations of future ecosystem restoration efforts conducted as part of the CVFPP are not known at this time, the issue of compatibility of ecosystem restoration and adjacent land uses is speculative. Details regarding compatibility of habitat and adjacent land uses will be addressed as needed as plan implementation proceeds. However, there seems to be little potential for meaningful conflicts between habitat created as part of the plan and existing agricultural uses, particularly conflicts severe enough to result in incidents of inverse condemnation as implied by the commenter. Where DWR, the Board, or others create habitat, the land would be part of a specific project and owned in fee title by an appropriate agency to preserve and maintain the habitat. Where this habitat is in an expanded floodway, DWR or another appropriate agency would own the surrounding land in the floodway in fee title, and land would be leased for agricultural production as appropriate. In this circumstance, the habitat would not conflict with continuing nearby agricultural operations owned by a private entity. If habitat were created on the edge of an existing or expanded floodway, typically a levee and associated maintenance easements would separate the habitat from any privately held agricultural land on the landside of the levee, minimizing the potential for conflicts between sensitive species that might occupy the habitat and agricultural operations.

The commenter's suggestion regarding development and use of a plan to avoid and address conflicts between landowners and adjacent habitat is noted. As described above, assessing the nature of such conflicts at this time would be speculative. Addressing this issue and consideration of a plan to minimize or avoid potential conflicts would be best addressed in CVFPP post-adoption activities where more detailed plans and specific project proposals will be considered. As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities);

agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13. The commenter is encouraged to participate in public involvement aspects of these post-adoption activities.

Regarding the role of ecosystem restoration in the CVFPP, as stated in Master Response 8, the Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in CWC Sections 9600–9625.

DWR, in coordination with USACE, the Board, and multiple stakeholders, used this legislative direction to formulate the CVFPP's primary and supporting goals, listed below.

CVFPP Primary Goal:

- *Improve Flood Risk Management*—Reduce the chance of flooding and damages, once flooding occurs, and improve public safety, preparedness, and emergency response through the following:

  – Identifying, recommending, and implementing structural and nonstructural projects and actions that benefit lands currently receiving protection from facilities of the SPFC

  – Formulating standards, criteria, and guidelines to facilitate implementation of structural and nonstructural actions for protecting urban areas and other lands of the Sacramento and San Joaquin river basins and the Delta

CVFPP Supporting Goals:

- *Improve Operations and Maintenance*—Reduce systemwide maintenance and repair requirements by modifying the flood management systems in ways that are compatible with natural processes, and adjust, coordinate, and streamline regulatory and institutional standards, funding, and practices for operations and maintenance, including significant repairs.

- *Promote Ecosystem Functions*—Integrate the recovery and restoration of key physical processes, self-sustaining ecological functions, native habitats, and species into flood management system improvements.

- *Improve Institutional Support*—Develop stable institutional structures, coordination protocols, and financial frameworks that enable effective and adaptive integrated flood management (designs, operations and maintenance, permitting, preparedness, response, recovery, and land use and development planning).

- *Promote Multi-Benefit Projects*—Describe flood management projects and actions that also contribute to broader integrated water management objectives identified through other programs.

In addition, the DPEIR includes the following specific statutory objectives:

- *Maximize Flood Risk Reduction Benefits within the Practical Constraints of Available Funds*—Ensure that technically feasible and cost-effective solutions are implemented to maximize the flood-risk

reduction benefits given the practical limitations of available funding, and provide a feasible, comprehensive, and long-term financing plan for implementing the plan.

- *Adopt the CVFPP by July 1, 2012*—Complete all steps necessary to develop and adopt the CVFPP by July 1, 2012, or such other date as may be provided by the Legislature.

- *Meet Multiple Objectives Established in Section 9616 of the California Water Code, as Feasible.*

In accordance with legislative direction and reflecting stakeholder input, DWR prepared the 2012 CVFPP to describe the State's vision for flood management in the Central Valley. This vision for flood management in the Central Valley is for a sustainable flood management system that provides a high degree of public safety, promotes long-term economic stability, and supports restoration of compatible riverine and floodplain ecosystems.

In the CVFPP, DWR describes the SSIA, which is a proposal for achieving the State's vision for flood management. The SSIA helps achieve the State's vision for flood management in a balanced manner by promoting responsible investment of public funds, commensurate with flood risks, in projects that integrate multiple benefits, in proactive maintenance of SFPC facilities and residual risk management, and in wise management of floodplains protected by the SPFC. For additional details, see Master Response 8.

As stated in Master Response 7, the SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption

activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework. For additional details, see Master Response 7.

T_FSRG1-01

MR. GORFAIN: Good afternoon, Mr. President and honorable members of the Board. My name is Dan Gorfain and I'm representing today the Friends of the Sacramento River Greenway. Our group is dedicated to seeing the completion of the Sacramento River greenway in multi-use -- including a multi-use trail on both sides of the Sacramento River between the Pioneer Bridge and Freeport -- the town of Freeport.

More immediately, however, we're working toward the completion of the Sacramento River Parkway, the multi-use trail planned by the City of Sacramento for each side of the levee.

We appear today to urge the Board to consider enhanced regard for so-called bicycle trails atop levees as a means of multiple -- of serving multiple goals and interests expressed in the Central Valley Flood Protection Plan.

T_FSRG1-02

Our group will soon submit specific comments on the working draft of the proposed regulations. These comments are consistent with our message today and will

also be embodied in our written comments on the plan.

First, let me explain why I call these so-called bicycle trails. In reality, these are multiple use trails for the benefit of walkers, joggers, and runners in addition to bicyclists. The Friends group has expressed our concern to your current regulations allowing -- to allow bicycle trails, but urges the trails -- the current regulations urge that the trails be off levees when feasible.

We believe that the trails on the levees serve the plan stated goals of fostering multiple use of floodplain protection -- of flood protection assets. More importantly, for flood protection purposes, they provide a paved roadway that is far superior to the existing gravel roadways on most levees.

While a maintenance road built to the Board's highest standards for such roads must be -- might be preferable, a paved bike trail is preferable to gravel, which limits the speed and safety for workers surveying the levees during routine, as well as maintenance of flood fighting.

Because the funds for these trails are available from local, State, and federal transportation, recreation funds, even private sources -- even private sources they serve the plan goal of encouraging cost sharing. Because

these trails required paved access roads, they also serve the planned goals to increase all-weather access to roads on the levees.

T_FSRG1-03

Under the current regulations, bike trails are to be located off levees when feasible. As a result, planners -- as a result, planners more often fail to consider the levee crown as a better placement for bike trails. As we say in our written comments to the working draft of amendments to Title 23, we urge the Board to drop the presumption against bicycle trails on levees and take at least a neutral stand, so that the issue can be addressed on a case-by-case basis.

T_FSRG1-04

But we also urge the Board to consider a more positive approach and maybe active encouragement of bike trails on levees because of multiple advantages that they create. This may also serve another -- this may also serve another project, the legislatively mandated Great Delta Trail currently in planning and development by the California Delta Protection Commission.

In addition to serving the paramount goals of enhancing flood protection, bike trails enhance societal needs. It will grow even larger as populations increase, including the need for alternative means of transportation and their desire to provide recreational alternatives for health of its citizenry -- sorry. I have a bit of a cold,

so I'm having a little trouble.

As I said, we will be submitting comments on this issue, but we hope that our comments today will at least spur the Board to consider the synergistic opportunity before you.

Thank you.

PRESIDENT CARTER: Thank you, Mr. Gorfain.

Friends of Sacramento River Greenway, Dan Gorfain (Public Hearing, February 24, 2012)

Response

T_FSRG1-01

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to include multiple objectives, where feasible, when proposing improvements to flood management facilities, including opportunities and incentives for expanding or increasing the use of floodway corridors (CWC Section 9616(a)(12)). The potential for recreational use of the flood control system has long been recognized. The SSIA involves floodplain reconnection and floodway expansion, which would improve ecosystem functions, fish passage, and the quantity, quality, and diversity of natural habitats, all of which would contribute to an increase in recreation opportunities and augment the aesthetic values of those areas. Expanding habitat areas would increase opportunities for fishing, hunting, and wildlife viewing. Recreation-related spending associated with increased use by visitors can be an important contributor to local and regional economies. During post-adoption activities (regional flood management planning and development of basin-wide feasibility studies), DWR will work with local and regional implementing agencies and partners to refine CVFPP elements, including developing additional details on site-specific recreation features as part of multi-benefit projects. For additional details, see Master Response 7. The concept of bicycle or multi-use trails on top of levees could be considered as individual projects are implemented.

T_FSRG1-02

See response to comment T_FSRG1-01, above. The working drafts of proposed regulations are outside the scope of the CVFPP and are not part of the CVFPP. The comment is noted, but it does not raise issues or concerns specific to the environmental analysis presented in the DPEIR. No further response is required.

T_FSRG1-03

See response to comment T_FSRG1-02. This comment is on the Board's regulations related to levee design standards. The Board will consider these comments. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_FSRG1-04

See response to comment T_FSRG1-01, above.

T_FWA1

T_FWA1-01

MS. INDRIERI: Good afternoon, President Carter and members of the Board. I am Ashley Indrieri representing the Family Water Alliance. We are a nonprofit in the Sacramento valley dedicated to addressing issues that impact rural communities and the sustainability of agriculture. As such, we represent thousands of family farmer, ranchers, private property owners, and businesses.

T_FWA1-02

I was a member of the upper Sacramento work group. I was also asked to participate in the

environmental stewardship group to give an agricultural perspective.

T_FWA1-03

For nearly a century when flood improvements were made, urban and rural communities got better together. This plan now shifts flood risk to rural communities in an effort to reduce the State's liability. We oppose massive setback levees and taking ag land out of production. And I think we saw this when the comp study came out many years ago.

The fact that this plan proposes over 35,000 acres of land to be flooded, will only further hurt our economies. The vitality of agriculture in rural communities is paramount. Furthermore, the private

T_FWA1-04

property owners who would be impacted by the widening of bypasses and setback levees were not consulted by DWR prior to this plan being released. This plan impacts their way of life, their ability to make a living, and support their families.

I think there is assumption that since there was a two-year public process that went into developing this plan, that all these issues were thoroughly discussed. And as somebody who's donated a tremendous amount of my time towards this planning effort, I can assure you that was not the case.

The Cherokee Canal and other bypass expansions

are a primary example of projects that were not fully vetted during the public process.

T_FWA1-05

Over the last couple of months, I have been in discussions with many property owners who are now realizing that they would be negatively impacted by these projects, and they don't know what the future holds for their private property. I have the following recommendations on the plan:

Thoroughly analyze the impacts to rural and agricultural communities; assure these communities are compensated for accepting a lower level of flood protection; assure rural communities and ag lands receive increased flood protection by eliminating phrases such as, "to the extent feasible", and "when funding is available".

T_FWA1-06

The majority of the appendices of this plan were not developed with public input, and should not be adopted as part of this plan. No project should be included in this plan that impacts private property without the consent of those landowners.

T_FWA1-07

I recognize the development of this plan was a huge undertaking by the Department of Water Resources. I look forward to working with the Department and the Board in the future to address these issues.

PRESIDENT CARTER: Thank you Ms. Indrieri.

Family Water Alliance, Ashley Indrieri (Public Hearing, February 24, 2012)

Response

T_FWA1-01

The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_FWA1-02

The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_FWA1-03

As stated in Master Response 3, these impacts generally are social and economic in nature, and CEQA does not require addressing them except to the extent that they relate to potentially significant adverse effects on the physical environment. Nonetheless, the responses shown below have been prepared to maximize responsiveness to public participation in the CVFPP.

The SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. Implementing the SSIA would increase the percentage of the population receiving at least 100-year (1 percent annual chance) flood protection from the current 21 percent to more than 90 percent (CVFPP, page 3-40). The remaining 10 percent of the population would receive benefits through residual risk management actions. Based on initial planning-level cost estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to provide flood stage reduction benefits to many of the areas in the system, including small communities and rural-agricultural areas.

In addition, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and

3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed.

The State supports the continued viability of small communities to preserve cultural and historical continuity and provide important social, economic, and public services to rural populations and agricultural enterprises. The SSIA describes State investment priorities in small community flood protection while avoiding the inducement of imprudent growth within SPFC floodplains. Under the SSIA, many small communities would receive increased flood protection benefits as a result of system improvements focused on protecting nearby urban areas. For example, levee improvements may be constructed upstream from an urban area to prevent a scenario in which floodwaters from an upstream levee breach would flow down gradient into the urban area. The upstream levee improvement that may extend into rural locations would therefore also reduce flood risks for the rural area immediately adjacent to the improved levee segment. Conditions in small communities would also be evaluated on a case-by-case basis to identify appropriate State investments in additional structural and/or nonstructural actions (e.g., levees, flood walls, floodproofing, or relocations). For additional details, see Master Response 3.

As stated in Master Response 4, State law (SB 5) requires an urban level of flood protection for urban and urbanizing areas within the Sacramento–San Joaquin Valley so that these areas will withstand a 1-in-200-year flood event (CGC Sections 65865.5, 65962, and 66474.5). Under the terms of SB 5, adoption of the 2012 CVFPP by the Board would trigger the schedule of compliance actions required for cities and counties to make findings related to an urban level of flood protection.

However, the CVFPP does not create any new requirements or assurances for levels of flood protection in the Central Valley; the local findings requirements regarding the required levels of protection were established by the State Legislature with the passage of SB 5. Similarly, the plan does not change existing State requirements related to new development in nonurbanized areas, including small communities, which must continue to meet the national FEMA standard of flood protection (per CGC Sections 65865.5, 65962, and 66474.5). This national standard corresponds to the

minimum level of flood protection (100-year flood) required for participation in the NFIP, and is consistent with the existing Building Code. The Central Valley Flood Protection Act of 2008 further clarifies that the CVFPP is a descriptive document, and neither the development nor the adoption of the CVFPP constitutes a commitment by the State to provide any particular level of flood protection (CWC Sections 9603(a) and 9603(b)).

The Central Valley Flood Protection Act of 2008 establishes legislative requirements for the CVFPP. For example, the legislation directs DWR to consider structural and nonstructural methods for providing an urban level of flood protection (200-year or 0.5 percent chance) to current urban areas (CWC Sections 9614(i) and 9616(a)(6)), and encourages wise use of floodplains through a better connection between State flood protection decisions and local land use decisions (CWC Section 9616(a)(5)). The SSIA proposes flood protection investments for rural-agricultural areas, small communities, and urban areas consistent with legislative direction and commensurate with flood risk to people and property. For additional details, see Master Response 4.

As stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and

geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

A portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of levees in rural areas. For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements. For additional details, see Master Response 2.

T_FWA1-04

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

Phase 1 of the public engagement planning process focused on identifying problems and needs and crafting specific goals for the CVFPP. A variety of regional and topic-based work groups formed during this phase. Phase 2 focused on identifying individual actions that could be taken to achieve the CVFPP goals, and engaged stakeholders through continued regional and topic-based work groups and public workshops.

After Phase 2, stakeholders indicated that they preferred to review more developed materials and information before continuing with intense working meetings. With that understanding, DWR focused its efforts on content development (considering previously provided input and ongoing analyses) and developed a cohesive working draft document for

stakeholder review in fall 2011. Outreach efforts included e-mail communications and updates, workshops, webinar briefings, and meetings with individuals and agencies. Work group members were also given an opportunity to review and comment on a working draft of the CVFPP. However, with a commitment to complete a public draft CVFPP within the legislated time frame, the degree of engagement provided in Phases 1 and 2 was not feasible for Phases 3 and 4.

The Board provided various opportunities for members of the public and agencies to comment on the public draft CVFPP, released in December 2011. Hearings were held in 2012 on April 5 (Sacramento), April 6 (Marysville), April 9 (Stockton), and April 11 (Woodland), and public comments were heard and discussed at both regular and special Board meetings. DWR also accepted comments on the DPEIR, which was released in early March 2012. More information on the Board's process for public review and plan adoption can be found on its Web site, http://www.cvfpb.ca.gov. For additional details, see Master Response 13.

As stated in Master Response 1, the Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing

peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

T_FWA1-05

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and

stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

As stated in Master Response 14, the 2012 CVFPP describes the State's vision for a sustainable flood management system in the Central Valley that provides a high degree of public safety, promotes long-term economic stability, and supports restoration of compatible riverine and floodplain

ecosystems. The SSIA prioritizes State investments and other activities to contribute to achieving this vision on a systemwide scale, recognizing current funding limitations.

Regional flood management planning, to be conducted in each of nine regions identified in the 2012 CVFPP, is an important next step in identifying specific improvements to rural-agricultural areas, small communities, and urban areas consistent with the SSIA. Upon CVFPP adoption, DWR will work closely with local entities to collect on-the-ground information regarding flood risks and needs, identify potential local and regional improvement projects, assess the performance and feasibility of these projects, and develop proposals that reflect the priorities of local entities in reducing flood risks. Each regional plan will present an assessment of proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. DWR intends to provide guidance as well as technical and financial assistance to local agencies to prepare the regional flood management plans, subject to availability of funds.

Regional flood management plans are anticipated to:

- Assess regional flood risks and management actions (projects) to reduce these risks
- Discuss regional priorities, including criteria used to prioritize individual projects
- Describe specific projects, including their potential costs, regional and systemwide benefits, and beneficiaries
- Provide a financial plan describing how the proposed projects would be funded, including cost sharing and financing for local shares
- Describe regional governance of flood management

Post-adoption activities will include development of two State-led basin-wide feasibility studies—one in the Sacramento River Basin and one in the San Joaquin River Basin—that will refine the broad description of the SSIA contained in the 2012 CVFPP. The basin-wide feasibility studies will (1) identify State interest in and articulate refinements to system elements and regional elements, (2) inform development of the CVFPP Financing Plan and the 2017 CVFPP update, and (3) help define the State's locally preferred plan for consideration in ongoing and planned USACE federal feasibility studies. The basin-wide feasibility studies will focus on system elements, which may take longer to study and implement than other regional plan elements because of their scale and complexity.

State-led feasibility studies are intended to support State decision making, regardless of the corresponding level of federal participation. They do not necessarily cover the scope of a federal feasibility study; however, these State-led studies will be conducted to minimize, to the extent possible, additional federal study needed to determine federal participation and facilitate subsequent authorization by Congress, if appropriate.

The basin-wide feasibility studies will be conducted in two primary phases. The first phase will be conducted concurrently with regional planning, and will focus on developing specific objectives and analyzing physical options for system elements (such as bypass expansion and new bypasses). The second phase will combine the most promising options for system elements with the prioritized list of regional elements identified in the regional flood management plans. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale, representing refined alternatives for implementing the SSIA.

Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. The studies will be conducted in coordination with USACE (and ongoing cost-share feasibility studies) and local implementing agencies. It is anticipated that working groups will form to help evaluate and refine bypass expansion options, identify implementation challenges, and provide input in the planning process.

The State intends to complete both studies by mid-2015 to provide time to incorporate information and findings into the 2017 CVFPP Update. Interactions with other key planning efforts, such as regional flood management planning, the CVFPP Financing Plan, and Central Valley Floodplain Evaluation and Delineation, are important to meeting the anticipated schedule. For additional details, see Master Response 14.

As stated in Master Response 2, State law (SB 5) requires an urban level of flood protection for urban and urbanizing areas within the Sacramento–San Joaquin Valley so that these areas will withstand a 1-in-200-year flood event (CGC Sections 65865.5, 65962, and 66474.5). Under the terms of SB 5, adoption of the 2012 CVFPP by the Board would trigger the schedule of compliance actions required for cities and counties to make findings related to an urban level of flood protection.

However, the CVFPP does not create any new requirements or assurances for levels of flood protection in the Central Valley; the local findings requirements regarding the required levels of protection were established by the State Legislature with the passage of SB 5. Similarly, the plan does not change existing State requirements related to new development in

nonurbanized areas, including small communities, which must continue to meet the national FEMA standard of flood protection (per CGC Sections 65865.5, 65962, and 66474.5). This national standard corresponds to the minimum level of flood protection (100-year flood) required for participation in the NFIP, and is consistent with the existing Building Code. The Central Valley Flood Protection Act of 2008 further clarifies that the CVFPP is a descriptive document, and neither the development nor the adoption of the CVFPP constitutes a commitment by the State to provide any particular level of flood protection (CWC Sections 9603(a) and 9603(b)). For additional details, see Master Response 2.

T_FWA1-06

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

Anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed

project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

As stated in Master Response 2, the conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to

implement the SSIA will comply with State and federal laws, as applicable. For additional details, see Master Response 2.

T_FWA1-07

The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_GALLAGHER1-01

SUTTER COUNTY SUPERVISOR GALLAGHER: Thank you, Mr. Chairman and members of the Board.

This morning I wish to offer my comments, individual comments, on the Draft Central Valley Flood Protection Plan, from I think the unique perspective of someone who's been intimately involved in flood control in the Sacramento valley, having served on two urban levee improvement agencies, the Sacramento Area Flood Control Association, and currently Vice Chairman of the Sutter Butte Flood Control agency, and also as a County Supervisor who represents areas protected by over 100 miles of rural levees.

First, I wish to identify for the Board three areas in the plan, which I do believe are very positive developments, and are worthy of support.

First, I'm encouraged and supportive of the plan setting aside $100 million for a rural levee program. This will be vital to ensuring that our rural levees and

T_GALLAGHER1-02

areas receive flood improvements under the plan, and that we all get better together.

Second, I am also very much appreciative of DWR's support in the plan of a much needed -- of much needed reforms to FEMA's National Flood Insurance Program, especially as it pertains to our agricultural basins, who are struggling to remain viable after being remapped into special flood hazard areas.

T_GALLAGHER1-03

And third, Sutter and Butte County are very supportive of the commitment in the plan to fund vital urban levee projects, and specifically to incorporate the West Feather River Levee Project which will provide urban levels of protection to Yuba City, Live Oak, Gridley and Biggs.

T_GALLAGHER1-04

However, there are significant concerns with this plan that I hope will be addressed before final adoption by the Board. First, your conceptual plans and conservation framework will have a tremendous negative impact on agriculture. And I assume you're going to hear a lot of that today.

T_GALLAGHER1-05

The taking of 40,000 acres of prime productive agricultural land would be a tragedy and should be reconsidered in the final plan. Please understand that under the current draft plan, agriculture would be severely impacted by, one, ecological mitigation that is

either incompatible with or takes productive agricultural lands out of production; two, agriculture bearing the sole burden of FEMA floodplain insurance and regulations; three, taking out -- taking of ag lands for setbacks or bypass expansions, and; four, increased risk of flood if rural levees are not also improved at the same time.

T_GALLAGHER1-06

Secondly, I would also encourage you to increase the funding for and make a more firm commitment to the rural levee program. Without a more firm commitment, our region remains at substantial risk without any mechanism with which to fund critical levee repairs.

T_GALLAGHER1-07

We would also encourage the Board and DWR to join the Agricultural Floodplain Management Alliance, and become a supporter, financial and otherwise, of much needed reforms to the National Flood Insurance Program.

T_GALLAGHER1-08

Third, before considering bypass expansions, the plan must provide for the maximization of the existing bypasses and channels to ensure that we are getting the most out of what we already have. If a need for bypass expansions are identified, the project should begin at the bottom of the system and should provide for substantial local direction and input.

We're willing to work with the State on providing enhancement to the system. I would remind the Board that we have been and will continue to be your partners in

T_GALLAGHER1-09

flood protection, and in preserving and protecting our vital water resources.

For well over a hundred years, we have given a lot to this partnership with the State of California. Sutter County was the site of the very first levee districts, Levee District number 1, in which local citizens taxed themselves to build the very first levees in the system.

Landowners in Sutter County, Colusa County, and Yolo County were the very first to give up their land to develop the bypass system, which is the keystone of our current flood protection in the Sacramento Valley. Our reclamation districts, our levee districts, our water districts have contributed scarce resources to vital projects, including pump stations, fish screens, weirs, channels, dams, conservation easements, all with the goal to help water resources, flood protection, and ecological sustainability. We've also kept our floodplains in agriculture, and kept risks low in the floodplain.

The question for us as your partners under this plan is this, are we valued?

We are worth so much more to the State than incidental flood protection, and our farms are already providing the ecological sustainability that is needed to achieve the mission of the plan. Under this current plan,

it appears that urban environmental interests get better at the expense of agriculture and the rurals

That is not getting better together. We need a commitment that our rural levees will also be improved. We need recognition and credit for the fact that our farming operations and agricultural lands are ecological. We want the plan to prioritize enhancement through removal of vegetation and sediment from the river channels and the bypasses that we have already given up to the mission of capacity. Setback and expansion proposals need a lot more study, and they should be driven by local input and concerns.

These are the things that we must have and need from the plan. Considering all that we have given and will continue to give to the mission of flood protection in the Central Valley, it seems a pretty small ask.

Thank you for your time.

PRESIDENT EDGAR: Thank you, James.

James Gallagher, Landowner (Public Hearing, April 6, 2012)

Response

T_GALLAGHER1-01

This comment is an introductory statement and identifies the commenter's professional affiliations and experience. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted. DWR and the Board appreciate the commenter's identification of positive aspects of the CVFPP.

T_GALLAGHER1-02

DWR and the Board appreciate the commenter's identification of positive aspects of the CVFPP. The comment is noted.

T_GALLAGHER1-03

DWR and the Board appreciate the commenter's identification of positive aspects of the CVFPP. The comment is noted.

T_GALLAGHER1-04

The comment is a transitional statement between identifying positive aspects of the plan and identifying areas where the commenter has concerns. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted

T_GALLAGHER1-05

As stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not

identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated. For additional details, see Master Response 2.

As stated in Master Response 3, the SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. Implementing the SSIA would increase the percentage of the population receiving at least 100-year (1 percent annual chance) flood protection from the current 21 percent to more than 90 percent (CVFPP, page 3-40). The remaining 10 percent of the population would receive benefits through residual risk management actions. Based on initial planning-level cost estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to provide flood stage reduction benefits to many of the areas in the system, including small communities and rural-agricultural areas.

In addition, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and 3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed.

The State supports the continued viability of small communities to preserve cultural and historical continuity and provide important social, economic, and public services to rural populations and agricultural enterprises. The SSIA describes State investment priorities in small community flood protection while avoiding the inducement of imprudent growth within SPFC floodplains. Under the SSIA, many small communities would receive increased flood protection benefits as a result of system improvements focused on protecting nearby urban areas. For example, levee improvements may be constructed upstream from an urban area to prevent a scenario in which floodwaters from an upstream levee breach would flow down gradient into the urban area. The upstream levee improvement that may extend into rural locations would therefore also reduce flood risks for the rural area immediately adjacent to the improved levee segment. Conditions in small communities would also be evaluated on a case-by-case basis to identify appropriate State investments in additional structural and/or nonstructural actions (e.g., levees, flood walls, floodproofing, or relocations).

The State supports efforts to reform FEMA's NFIP to more equitably reflect corresponding flood risks, including establishing a flood zone for agriculturally based communities to allow replacement of existing structures or reinvestment development in the floodplain. The State also supports identifying a special, lower-premium rate structure that reflects actual flood risks for agricultural buildings in rural-agricultural areas located in Special Flood Hazard Areas. The State will work with local flood management interests to pursue reform of the FEMA NFIP. For additional details, see Master Response 3.

T_GALLAGHER1-06

See response to comment T_Gallagher2-05, above, regarding the management of rural flood risk in the CVFPP. In addition, as stated in Master Response 4, in recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments would vary from region to region depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, all areas protected by the SPFC would receive flood risk management benefits from fully implementing the SSIA. Further, the State places a priority on flood management improvement projects that provide multiple benefits to support broad State interests and expand cost-sharing opportunities.

The 2012 CVFPP includes an estimate of potential cost-sharing by State, federal, and local entities for the SSIA, developed to assist with CVFPP development and analysis. However, cost-sharing for implementation of

the SSIA will be refined during feasibility studies and project implementation as additional project-level information is gathered and the interests of the partnering agencies in elements of the SSIA are identified. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, and development of a financing plan for the CVFPP) will address cost-sharing and local capacity to pay.

The CVFPP does not provide funding assurances for any specific project or improvement element, and current bond funding is not sufficient to fully implement the SSIA. A financing plan will be prepared as part of the post-adoption activities (CWC Section 9620(c)). For additional details, see Master Response 4.

T_GALLAGHER1-07

As stated in Master Response 3, the State supports efforts to reform FEMA's NFIP to more equitably reflect corresponding flood risks, including establishing a flood zone for agriculturally based communities to allow replacement of existing structures or reinvestment development in the floodplain. The State also supports identifying a special, lower-premium rate structure that reflects actual flood risks for agricultural buildings in rural-agricultural areas located in Special Flood Hazard Areas. The State will work with local flood management interests to pursue reform of the FEMA NFIP. For additional details, see Master Response 3. The DWR and the Board will consider the suggestion regarding participation in the Agricultural Floodplain Management Alliance.

T_GALLAGHER1-08

As stated in Master Response 1, the CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would

benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

As stated in Master Response 6, DWR recognizes the importance of proper maintenance to protect State, local, and federal investments in the flood management system. However, maintenance activities alone do not meet

current needs or legislative requirements for the CVFPP (e.g., urban level of protection, systemwide approach, and providing multiple benefits). This is highlighted in the evaluation conducted for the preliminary approach called "Achieve SPFC Design Flow Capacity."

The Achieve SPFC Design Flow Capacity preliminary approach focuses on reconstructing SPFC facilities to meet current engineering criteria without making major changes to facility footprints or operations. To achieve the design flow capacity, reconstruction is required because the original specifications focused primarily on levee prism geometry, and current evaluations have shown them to be insufficient in passing design flows if geotechnical and other engineering conditions (e.g., underseepage) are not improved. This approach was formulated to address legislation that required DWR to consider structural actions necessary to reconstruct SPFC facilities to their design standard (CWC Section 9614(g)). It also addresses requests from stakeholders to consider reconstructing the existing flood management system in place, or without major modification to facility locations.

Based on an initial assessment, this preliminary approach is estimated to cost approximately $19 billion to $23 billion and take 30–35 years to implement. This approach would improve the reliability of SPFC facilities compared to existing conditions. However, in many locations, upstream levee reconstruction would increase peak flows and stages downstream because upstream levee failures would be reduced compared to existing conditions. Further, the level of protection would be highly variable throughout the system and would not be linked to the current public safety needs and legislated requirements, and to assets at risk within the floodplain. Consequently, this approach would only partially address the primary CVFPP goal of improving flood risk management.

Investments in SPFC reconstruction would initially reduce SPFC O&M costs, but long-term costs to maintain the system would remain high. Thus, this approach would only partially contribute to the goal of improving O&M. Opportunities to integrate ecosystem restoration and enhancement would be limited and would not contribute to improved ecosystem functions on a systemwide scale. There would also be few opportunities to promote multipurpose benefits including incorporating new groundwater recharge or other water-related benefits, and promoting ecosystem functions, recreation, or agricultural sustainability. Consequently, an approach focusing on maintenance, repair, and reconstruction of existing facilities would contribute in only a minor way to the supporting goals of multi-benefit projects.

Improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures). For additional details, see Master Response 6.

T_GALLAGHER1-09

DWR and the Board acknowledge the vital role that rural and agricultural communities play, and have played in the development and operation of the SPFC. See response to comment T_Gallagher2-05, above, regarding the management of rural flood risk in the CVFPP. As stated in Master Response 4, the SSIA identifies minimum flood protection targets when State investments are made to protect public safety in urban areas and small communities (protection from 200- and 100-year flood events, respectively). However, the plan acknowledges that State investments alone cannot achieve these targets in all communities without leveraging federal and local funds, and encourages higher levels of flood protection whenever feasible. The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas, and that are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development in floodplains. The SSIA does not target a minimum level of flood protection for State investments in rural-agricultural areas outside of the small communities because conditions and local interests differ from one area to another, and additional regional planning efforts are needed to formulate solutions that meet community needs and State investment priorities. However, the SSIA includes various options for addressing flood risks in rural-agricultural areas, including the following:

- Projects to maintain levee crown elevations for existing rural SPFC levees and provide all-weather access roads for inspection and floodfighting

- Economically feasible projects to resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs

- System elements (such as new and expanded bypasses) that would lower water surface elevations within some rural and urban channels

All areas would benefit from State investments in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery.

In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments would vary from region to region depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, all areas protected by the SPFC would receive flood risk management benefits from fully implementing the SSIA. Further, the State places a priority on flood management improvement projects that provide multiple benefits to support broad State interests and expand cost-sharing opportunities.

The CVFPP does not include levee design criteria for rural areas, but recognizes that the urban levee design criteria are not always practical or affordable for protecting rural areas. DWR supports future development and implementation of rural levee repair criteria in coordination with local and regional flood management agencies. DWR currently is working with local maintaining agencies to draft guidelines for nonurban levee repair criteria. Suggestions may be presented during various elements of future implementation of the CVFPP. For additional details, see Master Responses 4 and 14.

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated

with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_GARNER1

T_GARNER1-01

MR. GARNER: My name is John Garner. And although I'm a director of the Colusa Basin Flood Control District and the Colusa County Farm Bureau, I'd like to speak today more as a farmer. I grow rice and walnuts. Our farm is in the floodplain. And so many times when we hear about agricultural ground, it's not necessary -- it's not given the same importance in flood protection. And we recognize the value in the urban areas and how important it is to reach that 200-year protection, but we feel a

T_GARNER1-02

little bit slighted in the rural areas when we look at our farms.

And the story I like to tell is our farms -- I look at my farm as no different than a Ford factory that produces cars. You know, ours looks open space. And the reality of it is, it just looks like a piece of ground sitting out there, but we have invested millions of dollars in our infrastructure, irrigation systems to provide the produce out of California that feeds, you know, much of the -- well, it feeds a lot of the United States, but Canada, Mexico, and the Pacific Rim.

And I just -- to have it anymore threatened or less protected than another area, just doesn't seem right to me, particularly when you look at what we do for habitat, and wildlife that we support on our farms. And if we happen to lose an acreage on a flood event, then we also lose the habitat, because we don't go ahead and use the irrigation water.

T_GARNER1-03

The other part of it is, is when we're talking about expanding bypasses and doing that kind of planning, it's taking more agricultural ground out of production. And as any industry is, is we reduce our size, as far as our participants and growers. We also reduce our ability to economically stay viable. You know, if the acreage decreases enough all of a sudden the big equipment dealers

leave, the fertilizer people leave, and the service, like airplanes, crop dusters, have to charge more because they're dealing with less.

And so it's the ramifications of allowing the urban -- or the ag areas just to be good enough with a hundred year production is just not acceptable. And so we'd like to be considered as equal, in terms of what we receive.

T_GARNER1-04

The history has shown that we've repaired weaknesses in our levee system. We've also maintained our bypasses. And the system can work pretty well, maybe better than pretty well, if we don't allow jungles to grow up in our bypass system, rather than to just decrease the size of our bypass system and then allow more habitat -- or more foliage going in there. I'm not against habitat, but it can be managed to allow for maximum flood flows.

And so I heartily hope that you look at the system, maybe return to a time when we maintain the bypass systems to where they're functioning as they were meant to be and we'd reduce some of the more risk on the urban areas.

T_GARNER1-05

Another thing that we need to -- I would ask you to be more proactive about is some of the retention basins and -- I'm speaking now as the Colusa Basin Flood Control District Director. Some of the retention basins that

we've proposed and actually have them on the drawing board in north, in Glenn County, also the Sites Reservoir and all these things would have a dramatic impact on an event like occurred in 1986, when you had these tremendous spring rains and all that water came down and headed out toward the Yolo Bypass. And because of the outflows, at that point in time, it puts more pressure on the Yolo Bypass, and our water then backs up from the ridge cut back up into Colusa county and damages more property.

One would say, well, that happened before, and you guys handled it. FEMA came in, at that time, and really helped the counties by offering millions of dollars extra to repair roads, bridges, and all the damage that was done to infrastructure.

FEMA informed us, at that time, is that we're not going to keep doing that. And so by allowing more flood waters to back up in the Yolo Bypass and then to back up through our area, you're really putting us in a bad situation.

T_GARNER1-06

So I would take a look at that history and see what the indirect affects are on our community and our industry. Actually, if you want to know, it's one of the only industries that gives the economy of California a non-deficit. It actually adds to the economy of California.

T_GARNER1-07

I think that just about covers it, and I appreciate the opportunity to speak in front of you.

Those hearings are good. You're having this one in February. The one you're having in April, I'd hope that more farmers would show up today, but not everybody is aware of what's going on and the ramifications that could have on their own farms. But having hearings in April are really tough. I mean, we're farming then. We're out there doing our jobs. And so maybe it would work better if you came into our area, rather than us to have to come down here and pay $50 for a tank of gas and 20 bucks for parking.

So at any rate, I don't know how you fix that, but thank you.

PRESIDENT CARTER: Thank you, Mr. Garner.

John Garner, Director, Colusa County Farm Bureau (Public Hearing, February 24, 2012)

Response

T_GARNER1-01

The comment identifies the commenter's professional affiliations and experience and provides the opinion of the commenter. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR. The comment is noted.

T_GARNER1-02

As stated in Master Response 3, the SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. Implementing the SSIA would increase the percentage of the population receiving at least 100-year (1 percent annual chance) flood protection from the current 21 percent to more than 90 percent (CVFPP, page 3-40). The remaining 10 percent of the population would receive benefits through residual risk management actions. Based on initial planning-level cost estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to provide flood stage reduction benefits to many of the areas in the system, including small communities and rural-agricultural areas.

In addition, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and 3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed.

The State supports the continued viability of small communities to preserve cultural and historical continuity and provide important social, economic, and public services to rural populations and agricultural enterprises. The SSIA describes State investment priorities in small community flood protection while avoiding the inducement of imprudent growth within SPFC floodplains. Under the SSIA, many small communities would receive increased flood protection benefits as a result of system improvements focused on protecting nearby urban areas. For example, levee improvements may be constructed upstream from an urban area to prevent a scenario in which floodwaters from an upstream levee breach would flow down gradient into the urban area. The upstream levee improvement that may extend into rural locations would therefore also reduce flood risks for the rural area immediately adjacent to the improved levee segment. Conditions in small communities would also be evaluated on a case-by-case basis to identify appropriate State investments in additional structural and/or nonstructural actions (e.g., levees, flood walls, floodproofing, or relocations).

The State supports efforts to reform FEMA's NFIP to more equitably reflect corresponding flood risks, including establishing a flood zone for agriculturally based communities to allow replacement of existing structures or reinvestment development in the floodplain. The State also supports identifying a special, lower-premium rate structure that reflects actual flood risks for agricultural buildings in rural-agricultural areas located in Special Flood Hazard Areas. The State will work with local flood management interests to pursue reform of the FEMA NFIP. For additional details, see Master Response 3.

T_GARNER1-03

See response to comment T_Garner1-03, above. In addition, as stated in Master Response 1, the Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and

maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide

feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available.

The PEIR recognizes that converting current land uses (particularly agricultural uses) to bypass and related uses (such as habitat and recreation) would result in potentially significant and unavoidable impacts, particularly on agriculture, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments.

Several commenters expressed concern regarding the potential for particular properties to be included in a bypass proposal. Concerns were also expressed that preliminary identification of conceptual bypass designs might create a "cloud" over the properties, making it difficult to manage, obtain loans for, or sell those properties. DWR and the Board wish to make clear that the conceptual designs reflected in the CVFPP do not reflect a determination regarding any specific properties, and that the potential involvement of particular properties in any future bypass project is entirely speculative at this time. For additional details, see Master Response 1.

T_GARNER1-04

As stated in Master Response 6, DWR recognizes the importance of proper maintenance to protect State, local, and federal investments in the flood management system. However, maintenance activities alone do not meet current needs or legislative requirements for the CVFPP (e.g., urban level of protection, systemwide approach, and providing multiple benefits). This is highlighted in the evaluation conducted for the preliminary approach called "Achieve SPFC Design Flow Capacity."

The Achieve SPFC Design Flow Capacity preliminary approach focuses on reconstructing SPFC facilities to meet current engineering criteria without making major changes to facility footprints or operations. To achieve the

design flow capacity, reconstruction is required because the original specifications focused primarily on levee prism geometry, and current evaluations have shown them to be insufficient in passing design flows if geotechnical and other engineering conditions (e.g., underseepage) are not improved. This approach was formulated to address legislation that required DWR to consider structural actions necessary to reconstruct SPFC facilities to their design standard (CWC Section 9614(g)). It also addresses requests from stakeholders to consider reconstructing the existing flood management system in place, or without major modification to facility locations.

Based on an initial assessment, this preliminary approach is estimated to cost approximately $19 billion to $23 billion and take 30–35 years to implement. This approach would improve the reliability of SPFC facilities compared to existing conditions. However, in many locations, upstream levee reconstruction would increase peak flows and stages downstream because upstream levee failures would be reduced compared to existing conditions. Further, the level of protection would be highly variable throughout the system and would not be linked to the current public safety needs and legislated requirements, and to assets at risk within the floodplain. Consequently, this approach would only partially address the primary CVFPP goal of improving flood risk management.

Investments in SPFC reconstruction would initially reduce SPFC O&M costs, but long-term costs to maintain the system would remain high. Thus, this approach would only partially contribute to the goal of improving O&M. Opportunities to integrate ecosystem restoration and enhancement would be limited and would not contribute to improved ecosystem functions on a systemwide scale. There would also be few opportunities to promote multipurpose benefits including incorporating new groundwater recharge or other water-related benefits, and promoting ecosystem functions, recreation, or agricultural sustainability. Consequently, an approach focusing on maintenance, repair, and reconstruction of existing facilities would contribute in only a minor way to the supporting goals of multi-benefit projects.

Improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures). For additional details, see Master Response 6.

T_GARNER1-05

The commenter's suggestion to support detention basin projects is noted. Interim storage via detention basins could be consistent with elements of the CVFPP. Such suggestions may be presented during various elements of future implementation of the CVFPP; however, no change to the current version of the CVFPP was made.

As stated in Master Response 12, the State is sensitive to the potential effects of repairs or improvements to SPFC facilities that may result in redirected hydraulic impacts upstream or downstream from these facilities, and is developing more detailed policies to minimize and mitigate potential impacts. Based on current evaluations (see Section 3.13; Attachment 8C, "Riverine Channel Evaluations"; and Attachment 8D, "Estuary Channel Evaluations," in Appendix A, "Central Valley Flood Protection Plan"), implementing the SSIA as a whole would not result in adverse systemwide hydraulic effects. Peak floodflows may increase slightly (over current conditions) in certain reaches, but the expansion of conveyance capacity proposed in the SSIA would attenuate flood peaks and result generally in reduced peak flood stages throughout the system.

Future feasibility studies are needed to refine the proposed elements of the SSIA, and the ultimate configuration of facilities may vary from those presented in the 2012 CVFPP. Only at that time will the State have project-specific modeling results that indicate the specific magnitude and extent of hydraulic impacts, if any, from planned improvements within the system. Cost estimates for the SSIA in the 2012 CVFPP include an allowance for features to mitigate potential significant hydraulic impacts caused by project implementation.

The issue of potentially redirecting hydraulic impacts is also addressed in Section 3.13, "Hydrology," in the DPEIR under Impact HYD-2 (NTMA), Impact HYD-4 (NTMA), Impact HYD-2 (LTMA), and Impact HYD-4 (LTMA). As indicated in these impact discussions, any project proponent implementing a project consistent with the SSIA that would affect flood stage elevations would need to obtain various applicable permits before project implementation (such as Section 408 and 208.10 authorization from USACE and encroachment permits from the Board). The project proponent would need to analyze the potential for the project to locally impede flow or transfer flood risk by causing changes in river velocity, stage, or cross section. Projects would not be authorized if changes in water surface elevation, and thus flooding potential, would increase above the maximum allowable rise set by these agencies. If the design of a project would result in an unacceptable increase in flooding potential, a project redesign or other mitigation would be required to meet agency standards before the

project could be authorized and implemented. For additional details, see Master Response 12.

T_GARNER1-06

The comment suggests addressing indirect effects of the CVFPP on agricultural communities and the agricultural industry; however, it does not identify any specific areas for analysis or any need for additional information or analysis in DPEIR. See response to comment T_Garner1-02 regarding rural and agricultural communities and the CVFPP. Indirect effects are evaluated and disclosed in various sections of the DPEIR, such as in Section 3.14, "Land Use and Planning"; Section 3.16, "Population, Employment, and Housing"; and Section 6.1, "Growth-Inducing Impacts."

T_GARNER1-07

DWR and the Board appreciate the commenter's participation in the public involvement process and encourage his future participation. As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts. For additional details, see Master Response 13.

T_GARNER2

T_GARNER2-01

MR. GARNER: Mr. Edgar and Board, thank you for coming uphill to us. I only wish that we had this hearing two years ago, a little more time in between your deadline to adopt this plan.

T_GARNER2-02

A couple things in your staff's presentation bothered me. One was that the engineering and science studies were acceptable and within the bounds of whatever the wording was. But I've personally been involved with some of the Sacramento in the Colusa area. We went in and did a conservation plan, in that -- and in that plan, we did a modeling, a 3D hydraulic modeling on the river.

And what that indicated is that the bypass system, as originally designed, really is quite sufficient to maintain the flood control in the Sacramento valley. And that was before Oroville was built. And so now, it just seems the people in the local area who understand the river and seen the flooding things happen, that it seems fairly evident, and you've heard that today. I'm not

going to reiterate what Assembly Nielsen said or Dick Akin or Tom Ellis, because what we're really talking about is maintenance in the bypass system.

And one of the things that becomes evident is that the system is in disrepair. And not only -- and I have nothing against habitat. The thing that bothers me the most is the fact that when they did clean out the Tisdale Weir, they had to go and mitigate for all the habitat that they removed. T_GARNER2-03

And, quite frankly, it's a flood control structure. And to have to spend more money to go upstream or downstream to mitigate what they did there, just seemed like a waste of money. There's a lot of habitat restoration going on in the Sacramento River, and as you all know the San Joaquin River. And it's done with funds that come from different sources.

But it doesn't -- it seems to me if your agency is concerned about flood control, then you shouldn't be -- should spending your resources on flood control, and not necessarily being a habitat board. You're a flood control board.

And I think that's the thing that bothers a lot of people, is that the system we've been told that California has lost 80 percent of its habitat from 1,800 to whenever it was, pre-levees. And the reality of it is

T_GARNER2-04

is certainly the native habitat is gone. But agriculture is never given one acre of credit for the habitat that we've created with a half million acres of rice, all the other fields, orchards, or whatever that accommodates all the critters out there, birds, that -- you know, it's like we're just -- we're not like the city. It's not just asphalt jungle. We've got habitat there. We can bring you out to those farms and show you the critters.

And so, at any rate, I think in your plan, I would like you to acknowledge that the habitat contribution of agricultural has to be weighed in to how you spend your resources, and that you should focus on floods, flood control maintenance versus habitat.

I'm sorry. And I don't have a thing against habitat. I reiterate that. I've been involved with processes where they create habitat, and it's great, but it should not be in a flood bypass.

T_GARNER2-05

And as far as the Cherokee, we've heard a lot about the Cherokee drainage ditch over there. It's my understanding that you review this plan every five years. And so just for the sake of a little trust from the public, why not take that whole Cherokee wording out of there, with the footnote that you'll look at it for the next five years and talk to the local people involved. And then if it warrants it in five years, put it back in.

T_GARNER2-06

But right now, it really does leave a bad taste.

And so I guess my parting words are please act like a flood control board and not a habitat board.

Thank you.

PRESIDENT EDGAR: Thank you.

(Applause.)

John Garner, Colusa County Farm Bureau (Public Hearing, April 6, 2012)

Response

T_GARNER2-01

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP. For additional details, see Master Response 13.

The State Legislature required DWR to prepare the first public draft CVFPP by January 1, 2012, for adoption by the Board by July 1, 2012, or as such other date as may be provided by the Legislature. The schedule for preparation of the CVFPP has been implemented to be consistent with this legislative direction.

T_GARNER2-02

As stated in Master Response 6, DWR recognizes the importance of proper maintenance to protect State, local, and federal investments in the flood management system. However, maintenance activities alone do not meet current needs or legislative requirements for the CVFPP (e.g., urban level of protection, systemwide approach, and providing multiple benefits). This is highlighted in the evaluation conducted for the preliminary approach called "Achieve SPFC Design Flow Capacity."

The Achieve SPFC Design Flow Capacity preliminary approach focuses on reconstructing SPFC facilities to meet current engineering criteria without making major changes to facility footprints or operations. To achieve the design flow capacity, reconstruction is required because the original specifications focused primarily on levee prism geometry, and current evaluations have shown them to be insufficient in passing design flows if

geotechnical and other engineering conditions (e.g., underseepage) are not improved. This approach was formulated to address legislation that required DWR to consider structural actions necessary to reconstruct SPFC facilities to their design standard (CWC Section 9614(g)). It also addresses requests from stakeholders to consider reconstructing the existing flood management system in place, or without major modification to facility locations.

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Improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures).

The SSIA promotes efficient and sustainable long-term O&M practices through the following:

- Reforming and consolidating State and local agencies' roles and responsibilities for O&M
- Standardizing criteria by which maintenance practices, procedures, and inspections are performed and reported
- Implementing strategies to adequately and reliably fund routine activities and streamline permitting

Some of the proposed activities may involve legislative action, new institutional arrangements involving local maintaining agencies, modifications to existing State programs, and additional or redirected funding. For additional details, see Master Response 6.

T_GARNER2-03

Regarding system maintenance, see response to comment T_Garner2-02, above.

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies,

completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework. For additional details, see Master Response 7.

Ecosystem restoration activities could potentially provide mitigation for individual projects or programs. Mitigation for biological resources is most typically driven by the need for compliance with existing State and federal laws, including the ESA, CESA, CWA, and CEQA. Additional laws and regulations may also generate the need for mitigation, such as the National Historic Preservation Act and the California Fish and Game Code. DWR and the Board have no role in the enforcement of these laws.

T_GARNER2-04

The DPEIR identifies the value of agricultural lands to biological resources. For example, on page 3.6-34 in Section 3.6, "Biological Resources—Terrestrial," is a description of the potential wildlife habitat functions of agricultural lands, including the following:

The value of agricultural habitat for sensitive and common wildlife species varies greatly among crop types and agricultural practices. Rice fields can provide relatively high-quality agricultural habitat. Seasonal flooding creates surrogate wetlands that can be exploited by a variety of resident and migratory birds, and dry rice fields can attract rodents and their predators (e.g., raptors). Flooded rice fields and irrigation canals also provide important habitat for the giant garter snake, a sensitive species that, like waterfowl and shorebirds, has had its preferred wetland habitat greatly reduced and now uses rice fields as surrogate habitat.

The discussion of Impact BIO-T-3 (NTMA) on page 3.6-78 includes the following:

> Construction-related activities of NTMAs may also affect special-status species that are associated with grassland and agriculture. These include 12 species of special-status plants (such as Red Hills vervain and heartscale) and seven species of birds (among them northern harrier and white-tailed kite). Some special-status species associated with grasslands and agriculture—such as western pond turtle, giant garter snake, and Swainson's hawk—are also associated with wetland and riparian habitats. These species could also be affected by the construction of levee improvements, particularly landside seepage and stability berms.

T_GARNER2-05

As stated in Master Response 1, the existing bypass system in the Sacramento River Basin (including the Sutter and Yolo bypasses and associated inflow weirs) forms the central backbone of the Sacramento River Flood Control Project and redirects damaging floodflows away from the main channels of the Sacramento and Feather rivers. The considerable capacity of the bypass system (up to 490,000 cfs) also slows the movement of floods, effectively attenuating flood peaks and flows into the Delta. The existing bypass system also supports a vibrant seasonal agricultural economy and provides important habitat for multiple terrestrial and aquatic species. In the San Joaquin River Basin, the bypass system includes the Chowchilla, Eastside, and Mariposa bypasses.

The Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and

restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

T_GARNER2-06

The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_HARLAN1-01

MS. HARLAN: Good afternoon. Thank you very much for giving us the opportunity to speak before you today. My name is Christine Harlan and my family has been farming in Yolo County since the mid-1850's. And as a landowner, our roots tend to go deep. We invest a lot into these properties. They're our homes. They're our livelihoods. They impact California. They've helped California grow and become a great state.

I think that when cities come up, obviously flood control is important, and we need to protect those, but I think unfortunately it's always at the demise of the local and the rural landowners, who end up shouldering the greater burden for other people's decisions that may have been not really well thought out.

So, first, you know, again I would just ask you to perhaps consider delaying your decision until later. I think that the Board members here, our supervisors have talked about the fact that they haven't even been included in this, and they feel like they haven't had an opportunity to provide considerable feedback.

T_HARLAN1-02

I think in addition to that, many of the landowners here are very familiar with their land. They're familiar with the property, and they're willing to make perhaps some suggestion that you may not have thought

of because you work in a vacuum and in a silo. And I think that that would benefit everyone. You would get more buy-in. You would have less people at meetings who are feeling frustrated and demoralized by the process. And you would have more buy-in. And you might actually come up with some great solutions that people hadn't considered, because they aren't as familiar with the ground as we are.

T_HARLAN1-03 Second, the other thing I would ask is that you consider looking at some of the proposals that people have said today as far as raising some of the storage capacity currently. I know that there are huge reservoirs that we have within this State that have the potential to actually increase their storage, if we did some construction there.

And I know that that would also benefit not only the plant life and the wildlife around, which are some of the goals of this proposal, but they'll also benefit -- they'll provide recreation opportunities and bring more people and more resources into California, and help, you know, also maintain some of our farm lands without resulting in the flooding.

T_HARLAN1-04 So again, thank you very much four your time today, and I hope that you consider everything that people have made, and that you'll delay your decisions, because I think one of the things that frustrates people is while

you say you have an open and honest discussion and you're allowing people to provide input, by allowing people to provide input at the 12th hour, you don't really allow people to give you considerable recommendations and for you to consider. At least that's the way it feels like from this standpoint.

So again thank you and hopefully the rest of your day will go well.

Christine Harlan, Landowner (Public Hearing, April 11, 2012)

Response

T_HARLAN1-01

As stated in Master Response 3, the SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. Implementing the SSIA would increase the percentage of the population receiving at least 100-year (1 percent annual chance) flood protection from the current 21 percent to more than 90 percent (CVFPP, page 3-40). The remaining 10 percent of the population would receive benefits through residual risk management actions. Based on initial planning-level cost estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to provide flood stage reduction benefits to many of the areas in the system, including small communities and rural-agricultural areas.

In addition, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and 3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed.

The State supports the continued viability of small communities to preserve cultural and historical continuity and provide important social, economic, and public services to rural populations and agricultural enterprises. The SSIA describes State investment priorities in small community flood protection while avoiding the inducement of imprudent growth within SPFC floodplains. Under the SSIA, many small communities would receive increased flood protection benefits as a result of system improvements focused on protecting nearby urban areas. For example, levee improvements may be constructed upstream from an urban area to

prevent a scenario in which floodwaters from an upstream levee breach would flow down gradient into the urban area. The upstream levee improvement that may extend into rural locations would therefore also reduce flood risks for the rural area immediately adjacent to the improved levee segment. Conditions in small communities would also be evaluated on a case-by-case basis to identify appropriate State investments in additional structural and/or nonstructural actions (e.g., levees, flood walls, floodproofing, or relocations).

The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas outside small communities. These actions are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development or increasing flood risks within lands protected by the SPFC. No target minimum level of flood protection has been established for prioritizing State investments in rural-agricultural areas (see CWC Section 9603). However, the SSIA proposes (1) projects that maintain levee crown elevations for rural SPFC levees and provide all-weather access roads for inspection and floodfighting; (2) economically feasible projects that resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs; (3) system elements (e.g., bypass expansion) that lower peak flood stages within some rural channels; and (4) actions to manage residual flood risks.

All areas protected by the SPFC would benefit from State investments included in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery. The SSIA also proposes State investments to preserve agriculture and discourage urban development in rural floodplains (e.g., purchasing agricultural easements from willing landowners, when consistent with local land use planning). In addition, the SSIA proposes FEMA flood insurance reforms to support the sustainability of rural-agricultural enterprises. For additional details, see Master Response 3.

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, “Engagement Record,” in Appendix A, “Central Valley Flood Protection

Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP. For additional details, see Master Response 13.

The State Legislature required DWR to prepare the first public draft CVFPP by January 1, 2012, for adoption by the Board by July 1, 2012, or as such other date as may be provided by the Legislature. The Legislature has not modified the date for CVFPP adoption, and DWR and the Board intend to fulfill the legislatively mandated schedule.

T_HARLAN1-02

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will

form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_HARLAN1-03

As stated in Master Response 10, in developing the CVFPP and formulating the SSIA, DWR considered various forms of storage for flood management, including operational changes to existing reservoirs with flood storage, new or expanded flood storage in reservoirs, and storage in floodplains. Specifically, one of the preliminary approaches—Enhance Flood System Capacity—included enlarging the flood storage allocation of several multipurpose reservoirs to improve management of flood risks on lands protected by the SPFC. This evaluation found potential benefits from and opportunities for reservoir flood storage and operational changes, such as improving flexibility in managing hydrologic changes (such as climate change) and potentially offsetting the hydraulic effects of certain system improvements on downstream reaches. At the same time, these analyses addressed both the physical limitations of these opportunities and the potential negative effects of increasing flood-storage allocations on water supply and other beneficial uses. The analyses of reservoir storage and flood operations that were conducted in support of the 2012 CVFPP are described in Attachment 8B in Appendix A, "Central Valley Flood Protection Plan."

Storage elements ultimately retained in the SSIA are based on preliminary systemwide analyses conducted for the 2012 CVFPP, legislative direction for the CVFPP, and the findings of prior and ongoing studies. Among those studies are ongoing surface storage investigations and prior local, State, and federal studies such as the Shasta Lake Water Resources Investigation, North-of-the-Delta Offstream Storage (Sites Reservoir), In-Delta Storage Program, Los Vaqueros Reservoir Expansion, and Upper San Joaquin River Basin Storage Investigation (Temperance Flat Reservoir). However, no new site-specific investigations of surface storage were included in the systemwide analyses conducted to support the 2012 CVFPP.

In the 2012 CVFPP, the SSIA includes coordinated reservoir operations aimed at making the most efficient and effective use of current flood storage allocations in existing reservoirs, and implementation of the authorized Folsom Dam Raise (see Section 3.5.4 of the CVFPP). These SSIA storage elements appropriately reflect the conceptual level of detail and systemwide focus of the 2012 CVFPP, without precluding future consideration of new or expanded storage by the State or local agencies. At this time, the SSIA does not include new reservoirs or expansion of storage (other than at Folsom Dam) solely for the purpose of flood management; however, DWR will continue to consider flood management in the context of, and as an objective of, its ongoing multi-benefit surface storage investigations and systemwide reoperation studies. Should these State investigations or other related efforts by local or federal agencies identify flood management as a component of a feasible reservoir storage project, this may be reflected in future updates to the CVFPP.

During the early and mid-20th century, most of the major rivers and tributaries draining into the Central Valley were dammed, providing both intentional and incidental flood management benefits. The aggregate benefit of these reservoirs to flood management has been substantial, and has contributed to the success of the existing flood system in reducing or avoiding damage from major flood events during the past century. However, California's topography and geology limit opportunities for reservoir construction, and most of the feasible locations have already been developed with the existing major dams (e.g., Shasta, Oroville, Folsom). The remaining opportunities are much more limited.

Specifically, unlike the situation that existed at the beginning of the 20th century, only a few remaining dam sites, spread throughout the Central Valley watersheds, offer the potential to provide large volumes of flood storage capacity. Other than for a few specifics, such as raising Shasta Dam or constructing Sites Reservoir, commenters on this topic did not provide a more detailed proposal or recommendation for implementing upstream storage projects. In particular, commenters provided no specific information regarding the feasibility of using an upstream-reservoir approach to meet the requirements of SB 5.

DWR recognizes the importance of developing additional water storage capacity in California to support an increasing population, to help compensate for the anticipated loss of snowpack storage as a result of climate change, and to maintain the important role of Central Valley agriculture for the nation and the world. For these reasons, multipurpose reservoir projects will likely continue to be proposed and, if successful, may help to meet needs for flood storage capacity.

However, these proposals face daunting challenges. Despite their benefits, new or expanded reservoirs generally face considerable opposition given their environmental effects, costs, perceived risks, and other factors. Also, environmental laws established mostly in the 1970s now apply to these proposals. Among these laws is the requirement under Section 404 of the CWA that any project affecting waters of the United States can be approved only if it is demonstrated to be the least environmentally damaging practicable alternative. Many other laws also present permitting challenges.

It is significant that no new major onstream reservoir has been constructed in the Central Valley watershed since New Melones Dam was completed in 1978. The Auburn Dam project, which commenced construction in 1968, was never completed because of several factors, including its cost, geologic problems with the site, and potential harm to recreational and ecological values. Recently, successful projects have consisted largely of projects to provide offstream storage (such as Los Vaqueros Reservoir), which can provide only limited flood control benefits outside their watersheds given the need for pumping, and projects to increase the capacity of existing reservoirs (which by their nature are only incremental).

Moreover, to serve as a substitute for floodway conveyance and storage, upstream reservoir capacity would have to be developed throughout the Central Valley watershed. The extreme weather events (i.e., atmospheric rivers) that create the greatest risk of a severe flood are often localized. Floodplain storage protects against floodwaters originating from all upstream areas, but by definition, upstream reservoirs can store only the floodwaters that originate from a particular area or tributary watershed. For example, an increase in the capacity of Shasta Lake would provide little or no benefit in the event of a major atmospheric rivers event focused on the central or southern Sierra Nevada. There is simply no reasonable scenario under which an array of new reservoir projects spread throughout the Central Valley watershed would be feasible and could serve as an effective substitute for floodplain storage. Suitable and feasible remaining sites do not exist, the costs would likely be prohibitive and the opposition substantial, and environmental permits would be difficult if not impossible to obtain. It would be both speculative and imprudent for the CVFPP to rely on such an approach. None of the comments on the topic have addressed, much less rebutted, the substantial evidence that such an alternative could not feasibly meet the objectives of the CVFPP as directed by SB 5.

Failing to reserve adequate floodway conveyance and storage capacity now would leave future generations with limited options for addressing their flood protection needs. The current generation has benefited from the

existing bypass system, and expanding that system would benefit both current and future residents.

It is recognized that in certain cases and to some degree, upstream floodway conveyance and storage could reduce the need for (or scale of) some types of downstream flood management actions associated with the SPFC. However, opportunities to reduce flood risks on lands protected by the SPFC by increasing floodway conveyance and storage are limited, and depend on a variety of factors:

- The location of a reservoir (or multiple reservoirs) with respect to the downstream actions or target area is important. Multipurpose reservoirs are present along many major tributaries to the Sacramento and San Joaquin rivers, but the hydrology (magnitude of rainfall and timing of peak flows from a watershed) and the operations of these reservoirs are very complex. Flood flows in downstream reaches of mainstem rivers are often influenced by the operation of multiple reservoirs, and peak flood stages may result from a combination of hydrologic events on different tributaries. Consequently, increasing flood storage in one reservoir may not reduce peak flood stage along a mainstem river reach because of the operations of other reservoirs, contributions from unregulated streams, or hydrology of the various tributary watersheds.

- The volume of floodway conveyance and storage that could be achieved is related to the size of the watershed and flood flows it generates, which can limit the effectiveness of expanding reservoirs or constructing new reservoirs. Expanding a reservoir is typically most effective when the existing reservoir has a small flood storage allocation compared with its tributary watershed. Similarly, it may not be effective to construct or expand a reservoir that controls a relatively small watershed.

- Opportunities to expand a reservoir are typically limited by the existing dam's location, size, and type of construction (concrete versus earthen, for example). A reservoir expansion sufficient to achieve the desired flood risk reduction benefits downstream may not be physically possible at all locations.

- The cost and potential impacts of enlarging a reservoir or constructing a new reservoir vary substantially from location to location. The CVFPP is a conceptual plan, and the PEIR is a program-level document; the site-specific analyses that would be needed to assess feasibility were not conducted as part of the CVFPP or PEIR, and will occur at the project level. See Master Response 24.

- Reservoir ownership varies, and studies of specific opportunities to expand reservoirs must be conducted in partnership with owners and operators.

The above factors indicate that a feasible and cost-effective surface-storage project could be developed only under specific circumstances, and that even if it is feasible, additional surface storage may not provide meaningful flood management benefits. These factors, combined with the conceptual systemwide focus of the 2012 CVFPP, precluded DWR from identifying specific reservoir storage elements to include in the SSIA at this time. These factors limited the ability to formulate an approach/alternative to include in the PEIR that focused primarily on increasing flood storage. Further, increasing storage alone would not achieve many of the CVFPP goals or fulfill legislative intent, such as improving ecosystem functions within the flood management system or achieving an urban level of flood protection for all urban areas.

Studies showed that combining bypass expansion, regional levee improvements, and coordinated operations in the SSIA did not result in systemwide hydraulic impacts that would be substantial enough to require including additional surface storage as a hydraulic mitigation measure. However, the plan does not preclude future consideration of new or additional flood storage by State, federal, or local agencies in the regional flood management planning or two basin feasibility studies, or as independent projects. (See Section 3.5.4 in Appendix A, "Central Valley Flood Protection Plan.") For additional details, see Master Response 10.

Several commenters specifically requested analysis of an alternative that includes expanding or constructing new upstream reservoirs. As demonstrated above, potential development of upstream storage facilities does not offer a feasible alternative to floodplain conveyance and/or storage in relation to the CVFPP. As a result, CEQA does not require that such an alternative be included.

T_HARLAN1-04

The concluding comment summarizes several topics brought up in previous comments. See responses to comments T_HARLAN1-01 and T_HARLAN1-02, above.

T_HOFF1-01

MR. HOFF: Thank you very much to the Board for being willing to hear the comments of landowners and stakeholders in the north valley here. I wanted to -- I've submitted my comments in a letter form, but I also wanted to take maybe a more stepback approach, because we talked about, at the beginning, that this is a conceptual plan, and that we're going to be looking at providing more details down the road.

And I guess if I was going to look at a conceptual plan and I wanted to step back and see what are the issues that we face here in California. Well, this State is in dire need of revenue. It is in dire need of water, and it does need flood protection. And if you look at those three goals and you say, well, how can we accomplish that?

In reading this document, I see that we're going to take ag land out of production, which is going to reduce tax revenue to the State. And it's also going to hit -- impact the local communities, because we're going to lower property tax values because they're going to be taken into habitat or to expanding the bypasses, and

they'll be reduced tax revenues there.

T_HOFF1-02 And I said secondly, a lack of water has caused Idle acreage in this State, which causes unemployment. So you've got only not a lost tax revenue base to the State, but we've increased unemployment costs to the State by idle acreage, especially in the San Joaquin Valley, when you look at areas like Mendota.

T_HOFF1-03 And then I looked at the document, it says that climate change models are going to -- are at least projecting the fact that the snowpack is going to go away and we're going to have additional rainfall. And the snowpack has been kind of our added reservoir storage over the last few years.

So again, keeping in concept with that, the big issues of this State, I said why can't we focus on reservoir storage as part of this flood control package? We've done that in the past with Shasta and with Oroville. And the document specifically speaks to that on several pages in the document. Just one it talks about on page 116, "In addition as a monitoring effect of snowpack on runoff decrease, there will be a need for more water supply storage putting greater pressure on California's multipurpose flood control reservoirs".

And I looked on DWR's own website, and if flood control is key to this whole message that we want to

impact, I look at Sites Reservoir as an example. It talks about this would provide enhanced water supply reliability for urban agricultural and environmental uses, improve Delta water quality, mitigation of snowpack storage losses due to climate change, contribution to flood damage, reduction in the Central Valley.

And we believe adding to the new reservoir storage would be key to this document. It talks about the Folsom Dam raise, but it doesn't talk -- but that was already allocated. And so, in my mind, the effect of tax

T_HOFF1-04 revenue losses to the State, which is key -- we need revenue from this State, so we've got to keep ag land in a productive state. We need more water, so that will generate more tax revenue and help restore the Delta through environmental flows, and I think that it will add the flood protection.

So again, conceptually, I think these are areas that could be focused on that could enhance the value down the road.

Thank you.

PRESIDENT EDGAR: Thank you.

(Applause.)

Carl Hoff, Landowner (Public Hearing, April 6, 2012)

Response

T_HOFF1-01

Several issues raised in the comment are social and economic in nature, and CEQA does not require addressing them except to the extent that they relate to potentially significant adverse effects on the physical environment. Nonetheless, the responses shown below have been prepared to maximize responsiveness to public participation in the CVFPP.

As stated in Master Response 2, The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

A portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of levees in rural areas. For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to

floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements.

The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable.

In addition to expansion of the bypass system, levee reconstruction, and other elements, the SSIA includes State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans. These easements would be used to preserve agriculture and prevent urban development in current agricultural areas, discouraging conversion to land uses that would increase flood risks within floodplains protected by SPFC facilities. Agricultural conservation easements could be purchased through various DWR programs; an example is DWR's Flood Corridor Program, which focuses on nonstructural flood risk reduction integrated with protection of natural resources and agricultural lands.

The PEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that

might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topic or information was raised in the comments. For additional details, see Master Response 2.

As stated in Master Response 3, the SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. Implementing the SSIA would increase the percentage of the population receiving at least 100-year (1 percent annual chance) flood protection from the current 21 percent to more than 90 percent (CVFPP, page 3-40). The remaining 10 percent of the population would receive benefits through residual risk management actions. Based on initial planning-level cost estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to provide flood stage reduction benefits to many of the areas in the system, including small communities and rural-agricultural areas.

In addition, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and 3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed.

The State supports the continued viability of small communities to preserve cultural and historical continuity and provide important social, economic, and public services to rural populations and agricultural enterprises. The SSIA describes State investment priorities in small community flood protection while avoiding the inducement of imprudent growth within SPFC floodplains. Under the SSIA, many small communities would receive increased flood protection benefits as a result of system improvements focused on protecting nearby urban areas. For example,

levee improvements may be constructed upstream from an urban area to prevent a scenario in which floodwaters from an upstream levee breach would flow down gradient into the urban area. The upstream levee improvement that may extend into rural locations would therefore also reduce flood risks for the rural area immediately adjacent to the improved levee segment. Conditions in small communities would also be evaluated on a case-by-case basis to identify appropriate State investments in additional structural and/or nonstructural actions (e.g., levees, flood walls, floodproofing, or relocations).

The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas outside small communities. These actions are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development or increasing flood risks within lands protected by the SPFC. No target minimum level of flood protection has been established for prioritizing State investments in rural-agricultural areas (see CWC Section 9603). However, the SSIA proposes (1) projects that maintain levee crown elevations for rural SPFC levees and provide all-weather access roads for inspection and floodfighting; (2) economically feasible projects that resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs; (3) system elements (e.g., bypass expansion) that lower peak flood stages within some rural channels; and (4) actions to manage residual flood risks.

All areas protected by the SPFC would benefit from State investments included in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery. The SSIA also proposes State investments to preserve agriculture and discourage urban development in rural floodplains (e.g., purchasing agricultural easements from willing landowners, when consistent with local land use planning). In addition, the SSIA proposes FEMA flood insurance reforms to support the sustainability of rural-agricultural enterprises.

The State supports efforts to reform FEMA's NFIP to more equitably reflect corresponding flood risks, including establishing a flood zone for agriculturally based communities to allow replacement of existing structures or reinvestment development in the floodplain. The State also supports identifying a special, lower-premium rate structure that reflects actual flood risks for agricultural buildings in rural-agricultural areas located in Special Flood Hazard Areas. The State will work with local flood management interests to pursue reform of the NFIP. For additional details, see Master Response 3.

T_HOFF1-02

The commenter describes conditions in some areas related to water supply and agriculture. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_HOFF1-03

As stated in Master Response 10, in developing the CVFPP and formulating the SSIA, DWR considered various forms of storage for flood management, including operational changes to existing reservoirs with flood storage, new or expanded flood storage in reservoirs, and storage in floodplains. Specifically, one of the preliminary approaches—Enhance Flood System Capacity—included enlarging the flood storage allocation of several multipurpose reservoirs to improve management of flood risks on lands protected by the SPFC. This evaluation found potential benefits from and opportunities for reservoir flood storage and operational changes, such as improving flexibility in managing hydrologic changes (such as climate change) and potentially offsetting the hydraulic effects of certain system improvements on downstream reaches. At the same time, these analyses addressed both the physical limitations of these opportunities and the potential negative effects of increasing flood-storage allocations on water supply and other beneficial uses. The analyses of reservoir storage and flood operations that were conducted in support of the 2012 CVFPP are described in Attachment 8B in Appendix A, "Central Valley Flood Protection Plan."

Storage elements ultimately retained in the SSIA are based on preliminary systemwide analyses conducted for the 2012 CVFPP, legislative direction for the CVFPP, and the findings of prior and ongoing studies. Among those studies are ongoing surface storage investigations and prior local, State, and federal studies such as the Shasta Lake Water Resources Investigation, North-of-the-Delta Offstream Storage (Sites Reservoir), In-Delta Storage Program, Los Vaqueros Reservoir Expansion, and Upper San Joaquin River Basin Storage Investigation (Temperance Flat Reservoir). However, no new site-specific investigations of surface storage were included in the systemwide analyses conducted to support the 2012 CVFPP.

In the 2012 CVFPP, the SSIA includes coordinated reservoir operations aimed at making the most efficient and effective use of current flood storage allocations in existing reservoirs, and implementation of the authorized Folsom Dam Raise (see Section 3.5.4 of the CVFPP). These SSIA storage elements appropriately reflect the conceptual level of detail

and systemwide focus of the 2012 CVFPP, without precluding future consideration of new or expanded storage by the State or local agencies. At this time, the SSIA does not include new reservoirs or expansion of storage (other than at Folsom Dam) solely for the purpose of flood management; however, DWR will continue to consider flood management in the context of, and as an objective of, its ongoing multi-benefit surface storage investigations and systemwide reoperation studies. Should these State investigations or other related efforts by local or federal agencies identify flood management as a component of a feasible reservoir storage project, this may be reflected in future updates to the CVFPP.

Ongoing investigations are being conducted to determine the feasibility of surface storage and consider potential environmental effects. The analyses included in these surface-storage studies are more detailed than those conducted at a systemwide scale for the 2012 CVFPP. Consequently, these studies are developing more comprehensive information about the potential costs and benefits of site-specific increases in flood storage. Some specific examples of ongoing multipurpose surface-storage investigations and related investigations that are examining the feasibility of adding new flood storage are the Upper San Joaquin River Basin Storage Investigation, the North-of-Delta Offstream Storage Investigation, and the Shasta Lake Water Resources Investigation.

Transitioning from water storage to flood protection, during the early and mid-20th century, most of the major rivers and tributaries draining into the Central Valley were dammed, providing both intentional and incidental flood management benefits. The aggregate benefit of these reservoirs to flood management has been substantial, and has contributed to the success of the existing flood system in reducing or avoiding damage from major flood events during the past century. However, California's topography and geology limit opportunities for reservoir construction, and most of the feasible locations have already been developed with the existing major dams (e.g., Shasta, Oroville, Folsom). The remaining opportunities are much more limited.

Specifically, unlike the situation that existed at the beginning of the 20th century, only a few remaining dam sites, spread throughout the Central Valley watersheds, offer the potential to provide large volumes of flood storage capacity. Other than for a few specifics, such as raising Shasta Dam or constructing Sites Reservoir, commenters on this topic did not provide a more detailed proposal or recommendation for implementing upstream storage projects. In particular, commenters provided no specific information regarding the feasibility of using an upstream-reservoir approach to meet the requirements of SB 5.

DWR recognizes the importance of developing additional water storage capacity in California to support an increasing population, to help compensate for the anticipated loss of snowpack storage as a result of climate change, and to maintain the important role of Central Valley agriculture for the nation and the world. For these reasons, multipurpose reservoir projects will likely continue to be proposed and, if successful, may help to meet needs for flood storage capacity.

However, these proposals face daunting challenges. Despite their benefits, new or expanded reservoirs generally face considerable opposition given their environmental effects, costs, perceived risks, and other factors. Also, environmental laws established mostly in the 1970s now apply to these proposals. Among these laws is the requirement under CWA Section 404 that any project affecting waters of the United States can be approved only if it is demonstrated to be the least environmentally damaging practicable alternative. Many other laws also present permitting challenges.

It is significant that no new major onstream reservoir has been constructed in the Central Valley watershed since New Melones Dam was completed in 1978. The Auburn Dam project, which commenced construction in 1968, was never completed because of several factors, including its cost, geologic problems with the site, and potential harm to recreational and ecological values. Recently, successful projects have consisted largely of projects to provide offstream storage (such as Los Vaqueros Reservoir), which can provide only limited flood control benefits outside their watersheds given the need for pumping, and projects to increase the capacity of existing reservoirs (which by their nature are only incremental).

Moreover, to serve as a substitute for floodway conveyance and storage, upstream reservoir capacity would have to be developed throughout the Central Valley watershed. The extreme weather events (i.e., atmospheric rivers) that create the greatest risk of a severe flood are often localized. Floodplain storage protects against floodwaters originating from all upstream areas, but by definition, upstream reservoirs can store only the floodwaters that originate from a particular area or tributary watershed. For example, an increase in the capacity of Shasta Lake would provide little or no benefit in the event of a major atmospheric rivers event focused on the central or southern Sierra Nevada. There is simply no reasonable scenario under which an array of new reservoir projects spread throughout the Central Valley watershed would be feasible and could serve as an effective substitute for floodplain storage. Suitable and feasible remaining sites do not exist, the costs would likely be prohibitive and the opposition substantial, and environmental permits would be difficult if not impossible to obtain. It would be both speculative and imprudent for the CVFPP to rely on such an approach. For additional details, see Master Response 10.

T_HOFF1-04

This concluding comment reiterates topics provided in the previous comments. See responses to comments T_HOFF1-01 and T_HOFF1-03, above.

T_HOPPIN1-01

MR. HOPPIN: Chairman Edgar, Board Members. It's nice to be before you. I'm Charlie Hoppin. I've farmed in and around the Sutter Bypass in the Sacramento River

for the last 40 years. And for the last five years, I've had the pleasure, I believe, of Chairing the State Water Resources Control Board. But I'm not here today to speak to you in that capacity, but in the former.

I'm concerned that this Board is being drug into a habitat enhancement issue. I fully appreciate, problem more than most, the role that all of you play, and I appreciate it a great deal. I was reminded of this last night when I looked at our local paper, and there was a list of three supporters Trout Unlimited, Environmental Defense, and The Nature Conservancy. And I understand why they would be supportive of habitat enhancement activities. But I need to remind all of you that habitat and flood control don't necessarily go hand in hand.

T_HOPPIN1-02

I'd like to speak to you specifically about the Sutter Bypass. Dick Akin and Tom Ellis have touched on it. In 1997, I had the pleasure of serving as an advisor to Governor Wilson on his flood recovery plan. And so I have an opportunity to see firsthand what had happened.

And what Mr. Akin said is exactly right, when you looked at it from a helicopter from the air, what had happened was the barrier of trees on the upstream side of the Sutter Wildlife Refuge acted as a dam with all the flotsam that was coming out of the Butte Sink. And unfortunately, it was a bit of a diagonal. It created an

eddy that headed right for the west bank of the bypass. And the bypass actually breached at the site of the old Wadsworth Slough, which is next to the Department of Water Resources office in Sutter.

But when we looked at the 2000 -- or the 19 -- early 1900s maps where the breach was, was in a weak spot in the levee anyhow, and it was enhanced by the refuge.

T_HOPPIN1-03

So my concern is that the bypass system isn't inadequate, the big problem to me really is the agencies that are involved. And I'll name U.S. Fish and Wildlife, Fish and Game, DWR to an extent, the Corps of Engineers, Bureau of Reclamation, and CalTrans. And I'll give you an example of that as it relates to the 1997 flood.

Mr. Ellis mentioned that in 2007 the Tisdale neck of the bypass was cleaned. I'm very well aware of that, because I farm immediately adjacent to it. What he didn't mention is that it had been cleaned of approximately the same amount of spoil about 10 years prior to that. And what had happened in the initial cleaning was that Fish and Game controls the center of the Tisdale portion of bypass. They allowed vegetation to grow, cottonwood trees, vines, and reeds. And on the uphill side or the upstream side of the bypass, silt began to accumulate at almost at a diagonal from these barriers, and they didn't clean the flotsam out of the system after flooding and it

just gradually build up.

And in a 10 or 12 year period, there was the same amount of debris that needed to be cleaned out of the bypass. To their credit, and to the credit of Mr. Beckley at the Sutter Yard, they're now maintaining the center of the bypass since it's been cleaned. They're keeping the vegetation on the periphery of the bypass where it protects and buffers from flood flows, but they're keeping the center clean and allowing for flows.

There isn't a visual difference today between today and 2007 when it was cleaned. But, you know, getting to other agencies. I mentioned CalTrans. There was a bridge put over the Tisdale portion of the bypass in the last couple of years. It has six pillars underneath it. Four of them are in the center of the floodplain, and they allow for flotsam to go through the bypass pretty much unobstructed.

T_HOPPIN1-04

If you go a couple of miles down on Reclamation Road, CalTrans put a bridge in, I'm going to say, five years prior to that. It has four pillars on it. It's a little narrower portion of the bypass. But several years after that, there were funds available to retrofit something in the Sutter County for earthquake protection. CalTrans came in and basically put another bridge beneath that. And instead of having four pilings on it, they

added another -- there's 17 now -- or an additional 17 for a total of 21 pilings.

Last year, the bypass almost breached by that bridge, because there was so much flotsam that had abutted it that it created a redirection of the current to the Sutter Basin side. They cleaned it out, but that dynamic still exists. And it concerns me that we're in a process potentially of abandoning the flood control system that we have, when a goodly portion of the problem is maintaining the system that's functioned for a long period of time.

T_HOPPIN1-05

And I don't want to say this as I'm -- that I'm opposed to the habitat. I enjoy going through the Sutter Wildlife Refuge probably as much as anybody and seeing what's there, but when the Department of Water Resources -- or excuse me, when the Bureau of Fish and Wildlife is allowed to plant cottonwood trees in the center of the bypass and plant tules, it looks nice to people that are driving through and looking at it. But I'll leave you with one message, you don't push water through a dirty ditch. And that's exactly what had happened there. And I hope you take all that into consideration as you move forward.

Thank you for your time.

PRESIDENT EDGAR: Thank you, Charlie, very much.

(Applause.)

Charlie Hoppin (Public Hearing, April 6, 2012)

Response

T_HOPPIN1-01

As stated in Master Response 8, the primary goal of the CVFPP is to improve flood risk management through the following:

- Identifying, recommending, and implementing structural and nonstructural projects and actions that benefit lands currently receiving protection from facilities of the SPFC

- Formulating standards, criteria, and guidelines to facilitate implementation of structural and nonstructural actions for protecting urban areas and other lands of the Sacramento and San Joaquin river basins and the Delta

In addition to the primary goal, the CVFPP includes the following supporting goals:

- *Improve Operations and Maintenance*—Reduce systemwide maintenance and repair requirements by modifying the flood management systems in ways that are compatible with natural processes, and adjust, coordinate, and streamline regulatory and institutional standards, funding, and practices for operations and maintenance, including significant repairs.

- *Promote Ecosystem Functions*—Integrate the recovery and restoration of key physical processes, self-sustaining ecological functions, native habitats, and species into flood management system improvements.

- *Improve Institutional Support*—Develop stable institutional structures, coordination protocols, and financial frameworks that enable effective and adaptive integrated flood management (designs, operations and maintenance, permitting, preparedness, response, recovery, and land use and development planning).

- *Promote Multi-Benefit Projects*—Describe flood management projects and actions that also contribute to broader integrated water management objectives identified through other programs.

In addition, the DPEIR includes the following specific statutory objectives:

- *Maximize Flood Risk Reduction Benefits within the Practical Constraints of Available Funds*—Ensure that technically feasible and cost-effective solutions are implemented to maximize the flood-risk

reduction benefits given the practical limitations of available funding, and provide a feasible, comprehensive, and long-term financing plan for implementing the plan.

- *Adopt the CVFPP by July 1, 2012*—Complete all steps necessary to develop and adopt the CVFPP by July 1, 2012, or such other date as may be provided by the Legislature.

- *Meet Multiple Objectives Established in Section 9616 of the California Water Code, as Feasible.*

In accordance with legislative direction and reflecting stakeholder input, DWR prepared the 2012 CVFPP to describe the State's vision for flood management in the Central Valley. This vision for flood management in the Central Valley is for a sustainable flood management system that provides a high degree of public safety, promotes long-term economic stability, and supports restoration of compatible riverine and floodplain ecosystems.

In the CVFPP, DWR describes the SSIA, which is a proposal for achieving the State's vision for flood management. The SSIA helps achieve the State's vision for flood management in a balanced manner by promoting responsible investment of public funds, commensurate with flood risks, in projects that integrate multiple benefits, in proactive maintenance of SFPC facilities and residual risk management, and in wise management of floodplains protected by the SPFC. For additional details, see Master Response 8.

T_HOPPIN1-02

The comment describes the commenter's experience with a past flood event that is used to provide supporting evidence for later comments. This comment itself does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_HOPPIN1-03

As stated in Master Response 6, DWR recognizes the importance of proper maintenance to protect State, local, and federal investments in the flood management system. However, maintenance activities alone do not meet current needs or legislative requirements for the CVFPP (e.g., urban level of protection, systemwide approach, and providing multiple benefits). This is highlighted in the evaluation conducted for the preliminary approach called "Achieve SPFC Design Flow Capacity."

The Achieve SPFC Design Flow Capacity preliminary approach focuses on reconstructing SPFC facilities to meet current engineering criteria without making major changes to facility footprints or operations. To achieve the design flow capacity, reconstruction is required because the original specifications focused primarily on levee prism geometry, and current evaluations have shown them to be insufficient in passing design flows if geotechnical and other engineering conditions (e.g., underseepage) are not improved. This approach was formulated to address legislation that required DWR to consider structural actions necessary to reconstruct SPFC facilities to their design standard (CWC Section 9614(g)). It also addresses requests from stakeholders to consider reconstructing the existing flood management system in place, or without major modification to facility locations.

Based on an initial assessment, this preliminary approach is estimated to cost approximately $19 billion to $23 billion and take 30–35 years to implement. This approach would improve the reliability of SPFC facilities compared to existing conditions. However, in many locations, upstream levee reconstruction would increase peak flows and stages downstream because upstream levee failures would be reduced compared to existing conditions. Further, the level of protection would be highly variable throughout the system and would not be linked to the current public safety needs and legislated requirements, and to assets at risk within the floodplain. Consequently, this approach would only partially address the primary CVFPP goal of improving flood risk management.

Investments in SPFC reconstruction would initially reduce SPFC O&M costs, but long-term costs to maintain the system would remain high. Thus, this approach would only partially contribute to the goal of improving O&M. Opportunities to integrate ecosystem restoration and enhancement would be limited and would not contribute to improved ecosystem functions on a systemwide scale. There would also be few opportunities to promote multipurpose benefits including incorporating new groundwater recharge or other water-related benefits, and promoting ecosystem functions, recreation, or agricultural sustainability. Consequently, an approach focusing on maintenance, repair, and reconstruction of existing facilities would contribute in only a minor way to the supporting goals of multi-benefit projects.

Improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the

Sacramento River channel and levees, bank protection, and rehabilitation of flood structures).

The SSIA promotes efficient and sustainable long-term O&M practices through the following:

- Reforming and consolidating State and local agencies' roles and responsibilities for O&M
- Standardizing criteria by which maintenance practices, procedures, and inspections are performed and reported
- Implementing strategies to adequately and reliably fund routine activities and streamline permitting

Some of the proposed activities may involve legislative action, new institutional arrangements involving local maintaining agencies, modifications to existing State programs, and additional or redirected funding. For additional details, see Master Response 6.

T_HOPPIN1-04

The comment continues the topic of facility maintenance. The comment notes localized channel size reductions caused by bridges in the bypasses have restricted conveyance of floodflows. These were identified during the Outreach and Engagement process (see page 3-17 of the *Regional Conditions Report—A Working Document* (March 2010), available online at http://www.water.ca.gov/cvfmp/docs/RegionalConditionsReportCVFPP201003.pdf). Specific areas that have experienced a significant reduction in conveyance capacity because of obstruction include a number of bridge crossings on the lower San Joaquin River; the Garmire Road bridge over Tisdale Weir, which restricted the passage of debris during the January 1997 flood and previous high-water events but has since been removed; the Town of Tehama (may be caused by a railway obstruction); and the SR 162 bridge near Willows, where a large berm directs floodflows onto the highway. In the Lower Sacramento River Region, the I-80 causeway and railroad tracks create a significant downstream restriction to peak floodflows down the Yolo Bypass. Specific flow restrictions will be considered in future planning studies. See response to comment T_HOPPIN1-03, above.

T_HOPPIN1-05

As stated in Master Response 12, the 2012 CVFPP does not include new State policy or guidance for considering hydraulic effects of CVFPP actions such as repairing or reconstructing existing SPFC facilities; the Central Valley Flood Protection Act of 2008 (SB 5) did not require preparation of such a policy. However, the State will continue to develop

policies and guidance to support SPFC repair and improvement projects through post-adoption activities, to complement existing State and federal permitting processes. The Board is authorized to review flood management improvement projects for compliance with policies on hydraulic impacts (CWC Sections 8710–8723; CCR Title 23, Chapter 1, Article 3(16)(o)). In addition, DWR and the Board review proposed State-federal flood management projects before they are authorized and determine whether the projects' individual and cumulative hydraulic impacts are mitigated (CWC Section 12585.9). The Board, in collaboration with USACE and DWR, is continuing to develop guidelines related to project-specific hydraulic impacts.

The State is sensitive to the potential effects of repairs or improvements (including habitat components) to SPFC facilities that may result in redirected hydraulic impacts upstream or downstream from these facilities, and is developing more detailed policies to minimize and mitigate potential impacts. Based on current evaluations (see Section 3.13; Attachment 8C, "Riverine Channel Evaluations"; and Attachment 8D, "Estuary Channel Evaluations," in Appendix A, "Central Valley Flood Protection Plan"), implementing the SSIA as a whole would not result in adverse systemwide hydraulic effects, including any in the Delta. Peak floodflows may increase slightly (over current conditions) in certain reaches, but the expansion of conveyance capacity proposed in the SSIA would attenuate flood peaks and result generally in reduced peak flood stages throughout the system.

Future feasibility studies are needed to refine the proposed elements of the SSIA, and the ultimate configuration of facilities may vary from those presented in the 2012 CVFPP. Only at that time will the State have project-specific modeling results that indicate the specific magnitude and extent of hydraulic impacts, if any, from planned improvements within the system. Cost estimates for the SSIA in the 2012 CVFPP include an allowance for features to mitigate potential significant hydraulic impacts caused by project implementation.

The issue of potentially redirecting hydraulic impacts is also addressed in Section 3.13, "Hydrology," in the DPEIR under Impact HYD-2 (NTMA), Impact HYD-4 (NTMA), Impact HYD-2 (LTMA), and Impact HYD-4 (LTMA). As indicated in these impact discussions, any project proponent implementing a project consistent with the SSIA that would affect flood stage elevations would need to obtain various applicable permits before project implementation (such as Section 408 and 208.10 authorization from USACE and encroachment permits from the Board). The project proponent would need to analyze the potential for the project to locally impede flow or transfer flood risk by causing changes in river velocity, stage, or cross section. Projects would not be authorized if changes in water surface

elevation, and thus flooding potential, would increase above the maximum allowable rise set by these agencies. If the design of a project would result in an unacceptable increase in flooding potential, a project redesign or other mitigation would be required to meet agency standards before the project could be authorized and implemented. For additional details, see Master Response 12.

T_KLEVER1-01 MR. KLEVER: My name is Dale Klever, and I work for the City of Colusa, Public Works Director. Thank you for your consideration, Board Members, and your concerns.

I would like to share a little bit of policy and technical. Most of what I'll say probably has been said, I just would like to reiterate it for the City of Colusa.

I know we have a dilemma of holding water for agricultural and drinking water, keeping it clean and safe, as well as the flood concern of getting rid of water. And so the whole flood control system, like Assemblymember Nielsen reiterated, is for protection of life and property. And so the biggest concern I think I have is the two-tier system with the 100-year versus the 200-year flood protection.

Until the recent Assembly Bill, Senate Bill and the flood protection plan, everything was a hundred year flood protection and everyone was looked at equally. And within the last year or so, now we have a 200-year elevation of certain urban areas, because the City of Colusa, although a small urban area, albeit very small maybe in some people's eyes, it was incorporated over a hundred years ago near the time of the Gold Rush and the incorporation of California. And so it has a wastewater

treatment plant, $15 million dollar new wastewater treatment plant for the community, a drinking water system that's approaching a hundred years old, and police and fire. It is an urban area, and it is looked at as maybe getting a hundred year protection.

And so that said, the Cherokee Creek issue looks like a increased bypass from the Feather River, like the gentleman said that lives in the Butte Sink area, that you're looking to shift water from the east side of the Buttes over to the west side into the Colusa Basin. And so the whole system was designed for -- the Butte Sink was mainly a relief for the Sacramento. And if we're going to increase the risk -- increase the flow from the Feather River, now those people are looking at having more floods in the Butte Sink pointed right at the City of Colusa, that's not even considered an urban area that's going to look at a 200-year flood protection.

And so I would suggest -- while being in the public works sector in mostly water and wastewater for the last 30 years, I know that the whole flood system is basically a storm drain system. It's a gravity sewer, a storm sewer. And so you don't bring mains together into a main line. When you bring mains together, it turns into a trunk line into an interceptor it gets bigger and bigger.

And as they've said before, you fly over with a

helicopter, you get an aerial view of the flood system. And you can see where the levees are plenty wide for a certain amount of time, and then for whatever reason when they were built by farmers or whatever, they'll meander and get eddies. They'll pinch together where somebody's house was. You'll have pinch points and backup points. And so it's as bad, if not worse, than doing poor maintenance and letting trees and debris fill up.

You actually -- even if it's clean, you've got this pinch point where the flow will back up. And so to use Cherokee Creek way up above Live Oak to try to relieve the pressure where historically we've had a lot of problems in the Yuba City, Marysville area, because the Feather River has the increased flow of the Yuba River, and then the increased flow of the Bear River, and the levee system doesn't, in effect, turn from a main line into a trunk line. It doesn't increase proportionately with the increase of flow, so you have all this pressure. And to try to relieve it with Cherokee Creek and send it over to Colusa County seems ill-advised at best, bad policy.

And so I would agree with the River Partners that improving the bypasses and setting back the levees at appropriate places to appropriate levels would be a much better system to control floods in the future and protect

the people that live in this prone area.

Thank you.

PRESIDENT EDGAR: Thank you.

Dale Klever, Public Works Director, City of Colusa (Public Hearing, April 6, 2012)

Response

T_KLEVER1-01

As stated in Master Response 1, the CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

Furthermore, as stated in Master Response 12, the 2012 CVFPP does not include new State policy or guidance for considering hydraulic effects of CVFPP actions such as repairing or reconstructing existing SPFC facilities; the Central Valley Flood Protection Act of 2008 (SB 5) did not require preparation of such a policy. However, the State will continue to develop policies and guidance to support SPFC repair and improvement projects through post-adoption activities, to complement existing State and federal permitting processes. The Board is authorized to review flood management improvement projects for compliance with policies on hydraulic impacts (CWC Sections 8710–8723; CCR Title 23, Chapter 1, Article 3(16)(o)). In addition, DWR and the Board review proposed State-federal flood management projects before they are authorized and determine whether the projects' individual and cumulative hydraulic impacts are mitigated (CWC Section 12585.9). The Board, in collaboration with USACE and DWR, is continuing to develop guidelines related to project-specific hydraulic impacts.

The State is sensitive to the potential effects of repairs or improvements (including habitat components) to SPFC facilities that may result in redirected hydraulic impacts upstream or downstream from these facilities, and is developing more detailed policies to minimize and mitigate potential impacts. Based on current evaluations (see Section 3.13; Attachment 8C, "Riverine Channel Evaluations"; and Attachment 8D, "Estuary Channel Evaluations," in Appendix A, "Central Valley Flood Protection Plan"), implementing the SSIA as a whole would not result in adverse systemwide hydraulic effects, including any in the Delta. Peak floodflows may increase slightly (over current conditions) in certain reaches, but the expansion of conveyance capacity proposed in the SSIA would attenuate flood peaks and result generally in reduced peak flood stages throughout the system.

Future feasibility studies are needed to refine the proposed elements of the SSIA, and the ultimate configuration of facilities may vary from those presented in the 2012 CVFPP. Only at that time will the State have project-

specific modeling results that indicate the specific magnitude and extent of hydraulic impacts, if any, from planned improvements within the system. Cost estimates for the SSIA in the 2012 CVFPP include an allowance for features to mitigate potential significant hydraulic impacts caused by project implementation.

The issue of potentially redirecting hydraulic impacts is also addressed in Section 3.13, "Hydrology," in the DPEIR under Impact HYD-2 (NTMA), Impact HYD-4 (NTMA), Impact HYD-2 (LTMA), and Impact HYD-4 (LTMA). As indicated in these impact discussions, any project proponent implementing a project consistent with the SSIA that would affect flood stage elevations would need to obtain various applicable permits before project implementation (such as Section 408 and 208.10 authorization from USACE and encroachment permits from the Board). The project proponent would need to analyze the potential for the project to locally impede flow or transfer flood risk by causing changes in river velocity, stage, or cross section. Projects would not be authorized if changes in water surface elevation, and thus flooding potential, would increase above the maximum allowable rise set by these agencies. If the design of a project would result in an unacceptable increase in flooding potential, a project redesign or other mitigation would be required to meet agency standards before the project could be authorized and implemented. For additional details, see Master Response 12.

T_LAMALFA1

T_LAMALFA1-01

MS. RYAN: Thank you, President Carter and Board members. My name is Tiffany Ryan, and I'm here on behalf of Senator Doug LaMalfa.

According to the current plans, the Draft Flood Plan proposes to expand and create new habitat in

floodways on prime agricultural land. Not only are these lands in the -- the best in the nation for farming, the plan also does not include a proper maintenance plan.

T_LAMALFA1-02

If approved, this plan would jeopardize thousands of acres of existing agricultural lands. Furthermore, the likely eminent domain seizure of productive private agricultural land for conversion to habitat is highly objectionable and takes them out of the property tax base.

T_LAMALFA1-03

The Draft Flood Plan would also displace family homes, farming operations, processing facilities and businesses that have been in place for generations. These private landowners would either willingly sell or be forced out through other circumstances, such as eminent domain. How on earth in this budget crisis is the State going to pay each of these private landowners for their property?

T_LAMALFA1-04

The Department of Water Resources and/or the Central Valley Flood Protection Board has done an inadequate job of making residents aware of the Draft Flood Plan, thus most owners aren't even aware that property may be jeopardized.

T_LAMALFA1-05

The Draft Flood Plan purports to achieve 200 years of flood protection for urban areas, as well as habitat restoration Where is the evidence that this plan will actually achieve a flood protection goal and how has

T_LAMALFA1-06

T_LAMALFA1-07

that been demonstrated to those whose private property would be affected? Where is the benefit for the farmers and residents of the north Sacramento valley.

It is one thing to build flood control. It is quite another to create special habitat areas in lands designated for flood control conveyance.

In conclusion, I encourage this Board to take the comments of the private landowners very seriously and revise the plan to something that will continue to encourage agricultural while maintaining a viable flood plan for the Sacramento and San Joaquin Valleys with clear, easy-to-understand detail, so the farmers know which of their parcels will be affected. Anything less is a disservice to the hard working individuals that place food on our tables and pay taxes.

Thank you.

PRESIDENT CARTER: Thank you, Ms. Ryan.

Tiffany Ryan, on Behalf of Senator Doug LaMalfa (Public Hearing, February 24, 2012)

Response

T_LAMALFA1-01

As stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated. For additional details, see Master Response 2.

As stated in Master Response 6, improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures). For additional details, see Master Response 6.

T_LAMALFA1-02

See the summary of Master Response 2 in response to comment T_LAMALFA1-01, above.

T_LAMALFA1-03

The commenter states a concern about possible eminent domain seizure but does not further clarify this concern or comment on the environmental analysis provided in the DPEIR. In the event that future steps necessitate the use of eminent domain, such actions would be undertaken by agencies with the legal authority to exercise such powers and in compliance with federal and State law. California state law limits public agencies' use of eminent domain, and agencies seeking to implement management actions under the CVFPP would be subject to all the restrictions and limitations that exist for other agencies in California.

As stated in Master Response 2, a portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of levees in rural areas. For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements.

The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed

land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable.

In addition to expansion of the bypass system, levee reconstruction, and other elements, the SSIA includes State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans. These easements would be used to preserve agriculture and prevent urban development in current agricultural areas, discouraging conversion to land uses that would increase flood risks within floodplains protected by SPFC facilities. Agricultural conservation easements could be purchased through various DWR programs; an example is DWR's Flood Corridor Program, which focuses on nonstructural flood risk reduction integrated with protection of natural resources and agricultural lands. For additional details, see Master Response 2.

The issue of funding is addressed in Master Response 15. As stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin Basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA "alternatives" for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas

protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning. For additional details, see Master Response 15.

T_LAMALFA1-04

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

Anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and

maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_LAMALFA1-05

As stated in Master Response 4, the SSIA identifies minimum flood protection targets when State investments are made to protect public safety in urban areas and small communities (protection from 200- and 100-year flood events, respectively). However, the plan acknowledges that State investments alone cannot achieve these targets in all communities without leveraging federal and local funds, and encourages higher levels of flood protection whenever feasible. The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas, and that are aimed at promoting sustainable rural-

agricultural economies without inducing imprudent urban development in floodplains. The SSIA does not target a minimum level of flood protection for State investments in rural-agricultural areas outside of the small communities because conditions and local interests differ from one area to another, and additional regional planning efforts are needed to formulate solutions that meet community needs and State investment priorities. However, the SSIA includes various options for addressing flood risks in rural-agricultural areas, including the following:

- Projects to maintain levee crown elevations for existing rural SPFC levees and provide all-weather access roads for inspection and floodfighting

- Economically feasible projects to resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs

- System elements (such as new and expanded bypasses) that would lower water surface elevations within some rural and urban channels

All areas would benefit from State investments in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery. For additional details, see Master Response 4.

As stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

T_LAMALFA1-06

As stated in Master Response 3, the SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas outside small communities. These actions are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development or increasing flood risks within lands protected by the SPFC. No target minimum level of flood protection has been established for prioritizing State investments in rural-agricultural areas (see CWC Section 9603). However, the SSIA proposes (1) projects

that maintain levee crown elevations for rural SPFC levees and provide all-weather access roads for inspection and floodfighting; (2) economically feasible projects that resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs; (3) system elements (e.g., bypass expansion) that lower peak flood stages within some rural channels; and (4) actions to manage residual flood risks. For additional details, see Master Response 3.

As stated in Master Response 4, in recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments would vary from region to region depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, all areas protected by the SPFC would receive flood risk management benefits from fully implementing the SSIA. Further, the State places a priority on flood management improvement projects that provide multiple benefits to support broad State interests and expand cost-sharing opportunities. For additional details, see Master Response 4.

T_LAMALFA1-07

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)). Several of these multiple objectives related to natural resources and ecosystems.

The SSIA, consistent with the Legislature's direction, includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important shaded riverine aquatic habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities.

Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions.

Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework. For additional details, see Master Response 7.

As stated in Master Response 14, the SSIA is a conceptual plan for flood system improvements, and additional post-adoption work is needed to refine its individual elements. Anticipated post-adoption activities include regional flood management planning, development of basin-wide feasibility studies and the CVFPP Financing Plan, completion of project-level proposals and environmental compliance, development of the Conservation Strategy, and State and USACE permitting.

Regional flood management planning, to be conducted in each of nine regions identified in the 2012 CVFPP, is an important next step in identifying specific improvements to rural-agricultural areas, small communities, and urban areas consistent with the SSIA. Upon CVFPP adoption, DWR will work closely with local entities to collect on-the-ground information regarding flood risks and needs, identify potential local and regional improvement projects, assess the performance and feasibility of these projects, and develop proposals that reflect the priorities of local entities in reducing flood risks. Each regional plan will present an assessment of proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. DWR intends to provide guidance as well as technical and financial assistance to local agencies to prepare the regional flood management plans, subject to availability of funds.

Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts. Information and outcomes from the regional planning process will inform the State-led basin-wide feasibility studies, preparation of a financing plan for the CVFPP, and the first update of the CVFPP (scheduled for completion by 2017). This regional effort is scheduled to be launched publicly in June 2012 and is anticipated to continue through 2013. For additional details, see Master Response 14.

As stated in Master Response 2, initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated. For additional details, see Master Response 2.

T_LAMALFA2

T_LAMALFA2-01 MS. RYAN: Mr. Chair and members. My name is Tiffany Ryan, Legislative Aide for Senator Doug LaMalfa. And I am here today on behalf of the Senator to comment on the draft flood plan.

The plan jeopardizes thousands of acres of farm land that is some of the best in the world. In fact, on DWR's website, they indicate that the affected counties in this plan account for almost 40 percent of the agricultural economy in California.

If that is the case, why weren't agriculture and its interests included in the drafting of this plan?

T_LAMALFA2-02 The amount of time from the very loose draft to an adoption date is very short and shortchanges the public's input and ability to come to grips with the plan's effects on their lands, and the ability to farm the crops of their choice not what the State allows them to grow.

T_LAMALFA2-03 This is in addition to the establishment of habitat on all levees and bypasses, which risks the breach

of another levee similar to the breach in Yuba County in 1997.

T_LAMALFA2-04 The State has little ability to borrow $17 billion with the crisis of the State budget, down economy, silly costly pursuits, like the high-speed rail, and an impending vote on a water bond this November to not have a well thought-out plan that truly addresses the handling and flow of flood water, and not a bait and switch that is just more environmental and habitat spending masquerading as flood control.

This while also taking productive agricultural land out of production, and even being seized from landowners. What was the purpose of this project?

T_LAMALFA2-05 In conclusion, Senator LaMalfa expects farmers and agricultural to have a firm place at the table and not be an afterthought and asks that this Board convey that message to DWR that a hasty, arbitrary timeline is neither productive nor fair, and will not be tolerated by our constituents or my office whose lives are directly affected by this proposal.

Thank you.

PRESIDENT EDGAR: Thank you very much.

Tiffany Ryan, on Behalf of Senator Doug LaMalfa (Public Hearing, April 6, 2012)

Response

T_LAMALFA2-01

As stated in Master Response 2, the 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated. For additional details, see Master Response 2.

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP. For additional details, see Master Response 13. For the Joint Subcommittee on Agricultural Stewardship Scope Definition Subcommittee's membership list and charter, see http://www.water.ca.gov/cvfmp/documents.cfm.

T_LAMALFA2-02

As stated in Master Response 22, the State Legislature required DWR to prepare the first public draft CVFPP by January 1, 2012, for adoption by the Board by July 1, 2012, or as such other date as may be provided by the Legislature. The schedule for CVFPP preparation has been driven by the Legislature's requirements. For additional details, see Master Response 22.

Response to comment T_LAMALFA2-01 provides information from Master Response 13 regarding past public involvement efforts. There will be ample opportunities for further public engagement before activities are implemented that affect particular lands or ability to farm those lands. As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges,

and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_LAMALFA1-03

The CVFPP does not include a proposal to place habitat on all levees. Various conditions exist, such as locations where rip-rap is needed to protect a levee from severe erosion risks, where creating habitat on a levee would not be appropriate. As stated in Master Response 7, the SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important shaded riverine aquatic habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. For additional details, see Master Response 7.

Master Response 16 addresses levee vegetation and flood risk. As stated in Master Response 16, USACE ETL 1110-2-571, *Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams and Appurtenant Structures* (2009), treats vegetation as introducing unacceptable uncertainties into levee performance. USACE direction in ETL 1110-2-571 states that these uncertainties must be addressed through vegetation removal and/or engineering works. A preliminary assessment of USACE's approach by DWR concluded that the complete removal of existing woody vegetation along the 1,600-mile legacy Central Valley

levee system would be enormously expensive, would divert investments away from more critical threats to levee integrity, and would be environmentally devastating. State and federal resource agencies find that the ETL itself, and the potential impacts of widespread vegetation removal with strict enforcement of that regulation, pose a major threat to protected species and their recovery. Similarly, local agencies are concerned about negative impacts on public safety from rigid ETL compliance if limited financial resources were redirected to lower priority risks. The CVFPP proposes the State's comprehensive, integrated VMS for levees to meet both public safety and environmental goals in the Central Valley.

The State will implement a comprehensive, integrated VMS in the Central Valley that both meets public safety goals and protects and enhances sensitive habitats in the Sacramento and San Joaquin valleys. The CVFPP's VMS represents the State's current approach to addressing levee vegetation in the context of USACE ETL 1110-2-571 governing vegetation on federal flood management facilities. However, DWR continues to advocate having USACE participate as a true partner in addressing legacy levee vegetation issues, jointly considering the environmental and risk-reduction implications of vegetation remediation within the context of prudent expenditure of limited public funds. DWR will continue a dialogue with USACE regarding plan formulation concepts that recognize the agencies' shared responsibility for addressing vegetation issues (along with traditional levee risk factors), within a systemwide risk-informed context intended to enable continued progress on critical cost-shared flood system improvements.

The VMS in the CVFPP includes a long-term adaptive vegetation LCM strategy. As explained in the CVFPP and DPEIR, the LCM strategy generally will not apply to waterside vegetation up to a line 20 feet below the levee crown, and that waterside vegetation will be retained. Although it is true that implementing the LCM strategy will result in the gradual loss of important terrestrial and upper waterside riparian habitat throughout the SPFC levee system, the CVFPP's VMS includes the early establishment of riparian forest corridors that are expected to result in a net gain of this habitat over time. These riparian forest corridors will be established adjacent to existing and new levees such that riparian corridor functions and wildlife habitat will be maintained or improved for the system as a whole. This approach will allow replacement habitat to develop and mature over time, while existing trees within the vegetation management zone are allowed to live out their normal life cycles on the levee slopes.

The CVFPP's VMS is an adaptive approach, and ongoing and future research will include evaluating effects on riparian ecosystem functions from eliminating natural recruitment under LCM. This research may

include a monitoring program to determine whether LCM affects species composition and recruitment, and the survival of lower waterside vegetation. For additional details, see Master Response 16.

Local HCPs can be countywide initiatives or can be implemented in response to proposed development. The main objectives of these plans are to protect natural resources, including species and habitat, and to enhance coordination and collaboration of development stakeholders.

Should a place-based project be defined and pursued as part of the proposed program, and should the CEQA lead agency be subject to the authority of local jurisdictions, the applicable county and city policies and ordinances would be addressed in a project-level CEQA document as necessary. Planting of vegetation in the floodway may not be authorized by the Board, USACE, or other agencies if the vegetation would impede flood flows sufficiently that a rise in water surface elevation would cause a significant increase in risk to public safety.

T_LAMALFA1-04

As stated in Master Response 9, the SPFC must contend with a lack of stable funding and with concerns like deferred maintenance, changes to regulations and societal priorities, dated construction techniques, and imprudent development in deep floodplains, leaving almost a million people at risk. To address these challenges, and to meet legislative direction for a systemwide approach that focuses on public safety and promotes multi-benefit projects, DWR formulated the SSIA, with a preliminary cost estimated between $14 billion and $17 billion. The high cost of the SSIA reflects the costly nature of providing flood protection in the Central Valley's deep floodplains and the current conditions of the SPFC facilities, as described in the *Draft Flood Control System Status Report* (DWR 2011). For additional details, see Master Response 9.

As stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies,

land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA "alternatives" for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning. For additional details, see Master Response 15.

The project goals and objectives are stated in Master Response 19. The five CVFPP goals were carried forward and became the program objectives of the PEIR. The primary objective is to improve flood risk management. More information on the primary objective and the four supporting objectives are described in Master Response 22.

T_LAMALFA1-05

As stated in Master Response 2, the conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy,

and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable. For additional details, see Master Response 2.

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction. For additional details, see Master Response 13.

T_LAMALFA3-01

SENATOR LaMALFA: Thank you.

PRESIDENT EDGAR: We just received your speaker's slip or I would have called you earlier.

SENATOR LaMALFA: It wouldn't have been possible, because I haven't been here that long. I just filled out the slip, but I appreciate that.

Thank you.

(Laughter.)

SECRETARY DOLAN: Hard to hide.

SENATOR LaMALFA: Thanks for the opportunity to speak here. And my staff member, Tiffany, had a chance to address you this morning here. So I'm sure she did a good job. And thank you again for holding the hearings up here in the affected area and giving the chance for the local, because my conversations with people is a lot of folks have been caught by surprise. And other than what Farm Bureau has been able to inform them, they're playing

catch-up here.

So, and I understand also because of Senate Bill 5, which I voted against, but nonetheless here we are, this task has been put upon you to carry out for the DWR to come up with a plan and adopt a plan.

And I think I'll say right out of the chute that it's my view it's okay to not adopt a plan. So I hope you continue that as one of your options, and especially given the timeline here of having to jump from no plan to a plan sometime this summer. And given some of the controversy about it -- around it that's going to be facing the landowners, the farmers, those most directly affected by what's going to happen with that land.

T_LAMALFA3-02 A question I would have and hope to receive answers on are the goals of the plan. How were they established, what criteria, such as the 32,000 cfs? Who

T_LAMALFA3-03 came up with that number? Why is it the number for the shifting of possible flood water from the Feather to the west through the proposed bypass? When will we know what

T_LAMALFA3-04 the actual maps would look like, other than the preliminary ones, which aren't very defined from everything we can tell, who it's going to affect and what its goals are?

T_LAMALFA3-05 The area of land use that would be in a proposed bypass. You know, we're talking about the acres that are

going to be setback. Now, there seems to be an inconsistency with the use for farmers of that land. It would be very, very limited as to what crop type they could use, if at all, in some cases, such as areas that might be appropriate for orchard, for trees, would be limited to not having that use anymore.

On the other hand, some of these same lands will be planted up with habitat type trees, shrubs, and other things that would be a direct impediment on the flow of water? How is that consistent is a question that keeps coming up?

T_LAMALFA3-06

Also, with the stalling of the delisting of the elderberry beetle, but one that is on the horizon, how has that been taken into account? With possible mitigations that are being looked at is the elderberry bush, as the habitat for the elderberry beetle, considered an integral part of this proposal or is it one that is being set aside as the elderberry beetle process of delisting right now, which is in court, because of foot dragging, but one that is likely to happen. Is this an area that is going to be looked at and take into account? And would that require then under the fullest extent of the habitat and mitigation, et cetera, would that cause a lesser amount of habitat to be needed if that delisting is accomplished?

And then the one that keeps coming back, and the

one that I've shared too being near some of these facilities, is why would not a greater effort to maintain the systems we do have and make them flow, as opposed to having to go through the pain of condemning property, making wider zones, why aren't we doing more to clean up the waterways that we have, and have the water flow to its maximum as designed when these systems were first made?

In deed, some efforts have been made in Cherokee in the past. And we had discussions for awhile there, they were looking to purchase property in order to put the spoils on looking for neighbors that would maybe sell some property to put the spoils of cleaning Cherokee. Now, we've shifted from that to more setback.

T_LAMALFA3-07

Interestingly, I note that rice lands that would be in this area here, would that continue to be seen as a habitat zone or is it something that has to be replaced with a more direct habitat, as seen fit by those that would create the trees, the shrub type?

And interestingly, this habitat on the one hand in rice is seen as a very good thing, a very good source of habitat. I bring up to mind the proposal to remove the stop lights and put in overcrossings on Highway 99 south of here going towards Sacramento, Ramirez Road -- or no, Riego Road, excuse me, and the other one in that neighborhood.

One of the things being discussed was that in order to put these overcrosses in to replace the lights, you would have to mitigate the rice land in that area.

So is the rice land in that area seen as habitat that needs to be mitigated? And on the other hand, it doesn't count as habitat in this zone here, because it's not up to the task? So that's an interesting, to me, counter way of looking at things.

T_LAMALFA3-08

Last, we come back to the cost, once again, of this system. You know, when you hear a high number of 15 to 17 billion for everything, what this portion is. You know, I think we're still trying to find out and get through in this plan, which I think is why we need more time partially. But the vagueness of what we have so far and the short amount of time to do it, kind of reminds me of high-speed rail. This being the high-speed rail of flood plans in the way this is being put upon us, I think, by DWR or others are the requirements perhaps of SB 5.

And so do we really want to have that as a template hurrying through a plan with unbelievably high costs in a State that is fiscally strapped and facing many other funding goals, such as the water bond that may or may not still be on this November ballot, and the high-speed rail that may be competing for that same money, as well as just the things that are in the budget we're

T_LAMALFA3-09

having difficulty with now, with the cuts to the UC system, the CSU system, Medi-Cal, and, for awhile there, elimination of school bus service during this current year. How is this going to compete with all those other things?

So lastly, I guess, for me, I do appreciate that there's a process here, and that we're going to hear from the affected community here that it hasn't been bypassed. But as a plan idea would go along, should there be something that's more defined, available, I would ask that this Board please hold more of these hearings when you get to that next phase before there would be an adoption at the June or July or whatever it might end up being on that timeline. Because it is indeed very important to come back to the district here and have folks be able to see something a little more concrete, a little more defined that they would have a comment on when they know exactly how it will affect them, instead of the kind of moving target they're worried about right now. So that would be a good service of the process, and I would again greatly appreciate that opportunity.

So, again, I know you're carrying out an SB 5 requirement on behalf of DWR. So our office wants to continue to work with you on this issue as we move forward, because it's very important to our constituents.

And this is a relationship we need to have in doing that. So thank you for allowing me to speak with you her today.

PRESIDENT EDGAR: Thank you, Senator, very much.

Fourth Senate District, Senator Doug LaMalfa (Public Hearing, April 6, 2012)

Response

T_LAMALFA3-01

Master Response 13 addresses public outreach and public involvement. As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP. For additional details, see Master Response 13.

Master Response 22 addresses the timing for plan review. As stated in Master Response 22, the State Legislature required DWR to prepare the first public draft CVFPP by January 1, 2012, for adoption by the Board by July 1, 2012, or as such other date as may be provided by the Legislature..

T_LAMALFA3-02

As stated in Master Response 19, the California Central Valley Flood Protection Act of 2008 (SB 5) defined multiple objectives for the CVFPP, codified in CWC Section 9616, to be achieved wherever feasible. Goals for the CVFPP were collaboratively drafted by DWR, its partners (the Board and USACE), and interested parties through an extensive communications and engagement process, capturing the guidance and objectives provided by CWC Section 9616. As a result of this process, one primary goal and four supporting CVFPP goals were established and provided guidance in forming specific CVFPP policies and physical elements.

The process used to develop CVFPP goals is described in Section 1.6 of the plan, titled "Formulation of the 2012 Central Valley Flood Protection Plan." Much of this information is repeated and/or summarized in Section 2.1.2, "Purpose and Objectives of the Proposed Program," and Section 2.2,

"Development of the Proposed Program," of the DPEIR. For additional details, see Master Response 19.

Furthermore, as stated in Master Response 9, three preliminary approaches were used to explore a range of potential physical changes to the existing flood management system and help highlight needed policies or other management actions: Achieve SPFC Design Flow Capacity, Protect High-Risk Communities, and Enhance Flood System Capacity. Evaluating these preliminary approaches provided information on their costs, benefits, and overall effectiveness. None of the three preliminary approaches were found to fully satisfy the legislative requirements and CVFPP goals in a cost-effective manner. However, the most promising elements of each were combined to formulate the State's preferred approach—the SSIA. The CVFPP and accompanying attachments provide additional details about the formulation and screening of elements included in the SSIA. For additional details, see Master Response 9.

Regarding bypass flows, as stated in Master Response 1, the Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC, Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

T_LAMALFA3-03

See response to comment T_LAMALFA3-02, above.

T_LAMALFA3-04

See response to comment T_LAMALFA3-02, above.

Furthermore, as stated in Master Response 14, the SSIA is a conceptual plan for flood system improvements, and additional post-adoption work is

needed to refine its individual elements. Anticipated post-adoption activities include regional flood management planning, development of basin-wide feasibility studies and the CVFPP Financing Plan, completion of project-level proposals and environmental compliance, development of the Conservation Strategy, and State and USACE permitting.

Some elements of the SSIA have already been implemented (through the Early Implementation Projects Program since 2007, for example). Others may be accomplished before the first update of the CVFPP in 2017, and many will require additional time to fully develop and implement. Ongoing and new planning studies, engineering, feasibility studies, environmental review, designs, funding, and partnering are required to better define, and incrementally fund and implement, elements of the SSIA during the next 20–25 years.

Regional flood management planning, to be conducted in each of nine regions identified in the 2012 CVFPP, is an important next step in identifying specific improvements to rural-agricultural areas, small communities, and urban areas consistent with the SSIA. Upon CVFPP adoption, DWR will work closely with local entities to collect on-the-ground information regarding flood risks and needs, identify potential local and regional improvement projects, assess the performance and feasibility of these projects, and develop proposals that reflect the priorities of local entities in reducing flood risks. Each regional plan will present an assessment of proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. DWR intends to provide guidance as well as technical and financial assistance to local agencies to prepare the regional flood management plans, subject to availability of funds.

Regional flood management plans are anticipated to:

- Assess regional flood risks and management actions (projects) to reduce these risks
- Discuss regional priorities, including criteria used to prioritize individual projects
- Describe specific projects, including their potential costs, regional and systemwide benefits, and beneficiaries
- Provide a financial plan describing how the proposed projects would be funded, including cost sharing and financing for local shares
- Describe regional governance of flood management

Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts. Information and outcomes from the regional planning process will inform the State-led basin-wide feasibility studies, preparation of a financing plan for the CVFPP, and the first update of the CVFPP (scheduled for completion by 2017). This regional effort is scheduled to be launched publicly in June 2012 and is anticipated to continue through 2013.

DWR will engage regional flood planning partners to develop and implement communication strategies with broad interest groups to brief them on flood management planning in their regions. Regional implementing and operating agencies, land use agencies, and interest groups will be invited to participate in the planning process. Each regional planning process will seek input, as appropriate, from agricultural interests, environmental interests, permitting agencies/resource agencies, local emergency responders, tribes, and other stakeholders. DWR anticipates that a regional flood working group will be formed in each region.

Post-adoption activities will include development of two State-led basin-wide feasibility studies—one in the Sacramento River Basin and one in the San Joaquin River Basin—that will refine the broad description of the SSIA contained in the 2012 CVFPP. The basin-wide feasibility studies will (1) identify State interest in and articulate refinements to system elements and regional elements, (2) inform development of the CVFPP Financing Plan and the 2017 CVFPP update, and (3) help define the State's locally preferred plan for consideration in ongoing and planned USACE federal feasibility studies. The basin-wide feasibility studies will focus on system elements, which may take longer to study and implement than other regional plan elements because of their scale and complexity.

The basin-wide feasibility studies will be conducted in two primary phases. The first phase will be conducted concurrently with regional planning, and will focus on developing specific objectives and analyzing physical options for system elements (such as bypass expansion and new bypasses). The second phase will combine the most promising options for system elements with the prioritized list of regional elements identified in the regional flood management plans. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale, representing refined alternatives for implementing the SSIA.

Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. The studies will be conducted in

coordination with USACE (and ongoing cost-share feasibility studies) and local implementing agencies. It is anticipated that working groups will form to help evaluate and refine bypass expansion options, identify implementation challenges, and provide input in the planning process.

The State intends to complete both studies by mid-2015 to provide time to incorporate information and findings into the 2017 CVFPP Update. Interactions with other key planning efforts, such as regional flood management planning, the CVFPP Financing Plan, and Central Valley Floodplain Evaluation and Delineation, are important to meeting the anticipated schedule. For additional details, see Master Response 14.

T_LAMALFA3-05

As stated in Master Response 2, the 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

A portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of levees in rural areas. For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements.

The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable.

In addition to expansion of the bypass system, levee reconstruction, and other elements, the SSIA includes State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans. These easements would be used to preserve agriculture and prevent urban development in current agricultural areas, discouraging conversion to land uses that would increase flood risks within floodplains protected by SPFC facilities. Agricultural conservation easements could be purchased through various DWR programs; an example is DWR's Flood Corridor Program, which focuses on nonstructural flood risk reduction integrated with protection of natural resources and agricultural lands.

The DPEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

Note that various agricultural practices can occur in bypasses and floodways, depending on the frequency and duration of inundation. Currently, agricultural lands are in SPFC floodways that support orchards as well as areas where a variety of crops are cultivated. Local HCPs can be countywide initiatives or can be implemented in response to proposed development. The main objectives of these plans are to protect natural resources, including species and habitat, and to enhance coordination and collaboration of development stakeholders.

Should a place-based project be defined and pursued as part of the proposed program, and should the CEQA lead agency be subject to the authority of local jurisdictions, the applicable county and city policies and ordinances would be addressed in a project-level CEQA document as necessary.

Planting of vegetation in the floodway may not be authorized by the Board, USACE, or other agencies if the vegetation would impede flood flows sufficiently that a rise in water surface elevation would cause a significant increase in risk to public safety.

T_LAMALFA3-06

Mitigation for impacts on valley elderberry longhorn beetle is provided in DPEIR Section 3.6, “Biological Resources—Terrestrial.” The determination of a significant impact on the species, and the requirement for mitigation, is based on the listing of the species as threatened under the federal ESA. Mitigation is based on established USFWS protocols for the species. If the valley elderberry longhorn beetle was to be delisted and not provided any other legal protections to qualify it as a special-status species, it is unlikely that impacts to this species would continue to be considered significant under CEQA, and mitigation for impacts would no longer be required. Such a potential change in listing status and removal of mitigation requirements can be accommodated within CVFPP implementation.

As stated in Master Response 6, DWR recognizes the importance of proper maintenance to protect State, local, and federal investments in the flood management system. However, maintenance activities alone do not meet current needs or legislative requirements for the CVFPP (e.g., urban level of protection, systemwide approach, and providing multiple benefits). This is highlighted in the evaluation conducted for the preliminary approach called “Achieve SPFC Design Flow Capacity.”

The Achieve SPFC Design Flow Capacity preliminary approach focuses on reconstructing SPFC facilities to meet current engineering criteria without making major changes to facility footprints or operations. To achieve the design flow capacity, reconstruction is required because the original specifications focused primarily on levee prism geometry, and current

evaluations have shown them to be insufficient in passing design flows if geotechnical and other engineering conditions (e.g., underseepage) are not improved. This approach was formulated to address legislation that required DWR to consider structural actions necessary to reconstruct SPFC facilities to their design standard (CWC Section 9614(g)). It also addresses requests from stakeholders to consider reconstructing the existing flood management system in place, or without major modification to facility locations.

Based on an initial assessment, this preliminary approach is estimated to cost approximately $19 billion to $23 billion and take 30–35 years to implement. This approach would improve the reliability of SPFC facilities compared to existing conditions. However, in many locations, upstream levee reconstruction would increase peak flows and stages downstream because upstream levee failures would be reduced compared to existing conditions. Further, the level of protection would be highly variable throughout the system and would not be linked to the current public safety needs and legislated requirements, and to assets at risk within the floodplain. Consequently, this approach would only partially address the primary CVFPP goal of improving flood risk management.

Investments in SPFC reconstruction would initially reduce SPFC O&M costs, but long-term costs to maintain the system would remain high. Thus, this approach would only partially contribute to the goal of improving O&M. Opportunities to integrate ecosystem restoration and enhancement would be limited and would not contribute to improved ecosystem functions on a systemwide scale. There would also be few opportunities to promote multipurpose benefits including incorporating new groundwater recharge or other water-related benefits, and promoting ecosystem functions, recreation, or agricultural sustainability. Consequently, an approach focusing on maintenance, repair, and reconstruction of existing facilities would contribute in only a minor way to the supporting goals of multi-benefit projects. For additional details, see Master Response 6.

T_LAMALFA3-07

See response to comment T_LAMALFA3-02 above. The details regarding specific projects, land uses within project areas, and mitigation requirements will be determined during various CVFPP post-adoption implementation processes.

T_LAMALFA3-08

As stated in Master Response 9, construction of the Central Valley's flood management facilities was originally driven by the need to defend the developing valley floor against periodic floods while maintaining navigable

channels for commerce. Over time, some facilities have become obsolete or have nearly exceeded their expected service lives, and they are in need of major modification or repair. Further, facilities originally constructed primarily for navigation, sediment transport, and flood management are now also recognized as important for water supply conveyance, ecosystem functions, recreation, and other beneficial uses.

Today, the SPFC must contend with a lack of stable funding and with concerns like deferred maintenance, changes to regulations and societal priorities, dated construction techniques, and imprudent development in deep floodplains, leaving almost a million people at risk. To address these challenges, and to meet legislative direction for a systemwide approach that focuses on public safety and promotes multi-benefit projects, DWR formulated the SSIA, with a preliminary cost estimated between $14 billion and $17 billion. The high cost of the SSIA reflects the costly nature of providing flood protection in the Central Valley's deep floodplains and the current conditions of the SPFC facilities, as described in the *Draft Flood Control System Status Report* (DWR 2011).

Specific project features ultimately implemented for the SSIA will depend on a host of factors. These factors include the results of detailed project feasibility studies; designs and cost estimates; environmental benefits and impacts; interaction with other local projects and system improvements; participation by local, State, and federal agencies in project implementation; and changing physical, institutional, and economic conditions. Costs presented in the 2012 CVFPP are preliminary planning-level estimates. The actual costs of these elements will depend on the specific projects that are justified by feasibility studies, project scopes, implementation times, future economic and contractor-bidding conditions, and many other factors. Funding sources for SSIA projects will vary according to factors such as the type of project or program, beneficiaries, availability of funds, and project or program urgency. Cost-sharing among State, federal, and local agencies may also change depending on project objectives and agency interests. Post-adoption activities (regional flood management planning, development of basin-wide feasibility studies, and development of a financing plan for the CVFPP) will further develop and refine additional project-specific details on cost, feasibility, funding, cost sharing, and local capacity to pay.

Currently available bond funding is insufficient to fully implement the recommended SSIA as a whole. After adoption of the CVFPP in 2012, DWR will prepare a framework for financing projects at a regional level. DWR will use the information gathered during preparation of the framework to prepare the financing plan for the CVFPP that will guide investment in flood-risk management in the Central Valley during the next

20 years (CWC Section 9616(a)(13)). The financing plan will be available in 2013, after adoption of the 2012 CVFPP. The financing plan is critical to implementation, given the uncertainty regarding State, federal, and local agencies' budgets and cost-sharing capabilities. The financing plan may include legislative actions to establish reliable funding for continued implementation of the SSIA in its totality to benefit the entire Central Valley and state of California. For additional details, see Master Response 9.

Master Response 22 addresses the timing for plan review. As stated in Master Response 22, the State Legislature required DWR to prepare the first public draft CVFPP by January 1, 2012, for adoption by the Board by July 1, 2012, or as such other date as may be provided by the Legislature. DWR believes that the CVFPP and DPEIR speak for themselves regarding the magnitude of the required effort in light of these statutory deadlines, and appreciates the compliments from a number of commenters in that regard.

The Public Draft CVFPP was released, on time, on December 30, 2011. Several of the attached supporting documents, specifically the *State Plan of Flood Control Descriptive Document* (November 2010) and *the Draft Flood Control System Status Report* (December 2011), were published before the Public Draft CVFPP and informed its development. Most CVFPP attachments were released with the public draft or in early February 2012; exceptions include the "Flood Damage Analysis," "Riverine Channel Evaluations," "Cost Estimates," and "Reservoir Analysis" attachments, which were released between mid-February and the publication of the DPEIR.

CEQA Guidelines Section 15105(a) states that when a draft EIR is submitted to the State Clearinghouse for review by state agencies, the public review period shall not be less than 45 days. The DPEIR was made available for public comment on March 6, 2012; however, as described above, most attachments (the CFVPP and attachments) were publicly available several months before.

Four comments that were received on the last day of the noticed DPEIR comment period requested an extension of the time to comment. No requests for extension were made before then. DWR decided not to extend the 45-day public comment period after considering several factors: (1) Many of the key documents had been available for more than 45 days; (2) the vast majority of commenters did not see a need to request an extension; (3) a number of commenters had already responded in a timely manner, many with very detailed comments; (4) the commenters requesting extensions were simultaneously filing comments reflecting a thoughtful

review; (5) a highly publicized outreach and engagement program was initiated with stakeholders; and (6) it was necessary to ensure compliance with the rapidly approaching July 1 statutory deadline. DWR appreciates the diligent efforts made by all of those who have participated in the development of the CVFPP, including those who submitted timely comments on the DPEIR. For additional details, see Master Response 22.

T_LAMALFA3-09

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form “alternatives” for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be

conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13. DWR and the Board hope to continue working with Senator LaMalfa and the citizens in his District as the CVFPP is implemented.

T_LANG1-01

MR. LANG: Hello. My name is Kyle Lang. And I'm a third generation walnut farmer. My grandfather -- the orchard I live on, the trees are 75 years old, were planted in 1938 and we still farm them. That is -- and part of the map that was put out in the Sacramento Bee in the middle of the purple part it just says floodway. And the very next day we got a phone call from our Farm Credit, who we use to help us expand and continue our operation, asking us what does this mean?

Because if -- we farm a permanent crop. There's no way you can make that a flood area and continue to farm. We also farm in Reclamation District 537 just south of that, 500 acres of walnuts. And we also have our processing plant that's been there for 45 years that's a million and a half dollar processing plant. These are things you can't pick up and move.

There's talk of, well, we'll pay for, you know, oh, if you take out the orchard, we'll compensate you for that. But to farm walnuts, when you plant a tree it's about 10 years till you get into a producing orchard. So that's not an option for someone who grows orchard of walnuts.

T_LANG1-02

And also -- I'm also -- I manage Reclamation District 537, which is just north of West Sacramento, and also Reclamation District 1600, which is Fremont Weir section just north of Road 22, up to Fremont Weir. And there are solutions to lowering some of the high flood level head that can be met without blanketing out basically 20,000 acres.

I don't know if you've looked at the elevation maps of the bypass itself, but the fall from north to south from the Fremont Weir to the Vic Fazio or 80 is only about six feet. So you're not talking a tremendous fall. It's pretty level. But the fall from the -- it would be east -- or the west levee to the east levee coming to the east is significantly more to where the whole -- I don't know if you looked at the elevation, but it actually slopes this way toward the Sacramento River.

So if you take levees out to have it come this way, all you're going to have is water heading straight into a river taking out the river and going back into the river. That's not really a solution.

In the seventies, the Corps of Engineers did a study of 1600. And my grandfather has been fighting the floods out there in 1600. He was involved in the fifties flood fight, and every major flood fight they've had out there.

And in that study the Corps did, if you flooded RD 1600, because they looked at that to relieve pressure off of the Natomas side, all that allows is eight hours, because it's basically a bathtub, and the water would flow down, fill up, and there would be no actual flow of bypass water. It would just allow eight hours of water to go in and fill that up and then it would basically be a bathtub.

T_LANG1-03

There are many options, and it's unfortunate that you've developed this plan, but you have not included the reclamation districts, the county, the landowners to help you find these solutions. For instance, widening -- I think you have three actual details in the plan. One is the Fremont Weir to widen a mile. And the other one is Sacramento Weir to widen 1,000 feet.

Widening the Sacramento Weir 1,000 feet makes sense. And I believe in the studies they have you drop the downtown water level from the American River three feet, and that makes perfect sense.

But to purple out a whole area where you have homes and you have, besides our walnuts, there's another 4,000 acres of walnuts in that whole area, and most of them are along the river. And you have a lot of field crops that are grown that -- if you looked at it.

You can, you know, gain a little here and there to help increase the bypass. But the one thing that it

comes back to, I farm walnuts, and in processing the walnuts, we always find that we run into our next bottleneck. And you can only go as fast as your bottleneck.

And in that bypass, I-5, where it comes in -- where it comes over and comes down, that's your bottleneck. And if you look at the bypass, it all comes to that short area. So no matter if you widen the Elkhorn area to the north or to the south, you still have a bottleneck there that your efforts aren't gaining much because you just -- you've run into your bottleneck.

T_LANG1-04 The solution for that is to -- which I imagine is extremely infeasible, but the soil that was used to make that -- the landing for I-5 was taken out of soil just north of there in RD 1600 from fields. And that soil there is blowsand, and sand -- and soil from the 1850s, from the Gold Rush era. So in order to do that, you're going to have to do a lot of concrete and metal work to get that to secure itself.

T_LANG1-05 And then the other issue I see with the plan is the talk of the fish channel. If you look at where the Fremont Weir is, it's a wall that goes across the whole bypass, and it goes down. And then it goes down another 20 feet before you get to the top of the river. So you're talking a channel that's going to be 35, 40 feet to have

any real influence for fish habitat.

And you're going to have to put it through the center of the -- being that large, you're going to have to put it through the center of the bypass, which takes out, I don't know how many acres of farm ground. But then the other issue is, is the second you have flood water comes in, which occurs about every 10 years, '86, '97, and '06, is the soils that come down through the Sutter and the Feather River are the blow sand and the sands, and they fill in very quickly. So it's not like you create a fish channel and you've got a fish channel there. It's pretty much the next flood you have is going to fill in or ruin most of it.

T_LANG1-06 And then -- that's all I have, but it really seems you have a plan without any details, and that, to me isn't a plan. So it would be good if you could extend your date, include the rec districts, the County, the landowners. And instead of just posting something in the Sacramento Bee that shows that our families, our land, our survival is, "Oh, well, you're going to be flooded now". That's really -- I don't know who thought of that concept, but that is not a very wise concept.

Thank you very much.

PRESIDENT EDGAR: Thank you.

Kyle Lang (Public Hearing, April 11, 2012)

Response

T_LANG1-01

As stated in Master Response 2, the 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

A portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of levees in rural areas. For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements.

The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide

opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable.

In addition to expansion of the bypass system, levee reconstruction, and other elements, the SSIA includes State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans. These easements would be used to preserve agriculture and prevent urban development in current agricultural areas, discouraging conversion to land uses that would increase flood risks within floodplains protected by SPFC facilities. Agricultural conservation easements could be purchased through various DWR programs; an example is DWR's Flood Corridor Program, which focuses on nonstructural flood risk reduction integrated with protection of natural resources and agricultural lands.

The PEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

T_LANG1-02

As stated in Master Response 1, the existing bypass system in the Sacramento River Basin (including the Sutter and Yolo bypasses and associated inflow weirs) forms the central backbone of the Sacramento River Flood Control Project and redirects damaging floodflows away from the main channels of the Sacramento and Feather rivers. The considerable capacity of the bypass system (up to 490,000 cfs) also slows the movement of floods, effectively attenuating flood peaks and flows into the Delta. The

existing bypass system also supports a vibrant seasonal agricultural economy and provides important habitat for multiple terrestrial and aquatic species. In the San Joaquin River Basin, the bypass system includes the Chowchilla, Eastside, and Mariposa bypasses.

The Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it

preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

T_LANG1-03

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, “Engagement Record,” in Appendix A, “Central Valley Flood Protection Plan.” The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

Phase 1 of the public engagement planning process focused on identifying problems and needs and crafting specific goals for the CVFPP. A variety of regional and topic-based work groups formed during this phase. Phase 2

focused on identifying individual actions that could be taken to achieve the CVFPP goals, and engaged stakeholders through continued regional and topic-based work groups and public workshops.

After Phase 2, stakeholders indicated that they preferred to review more developed materials and information before continuing with intense working meetings. With that understanding, DWR focused its efforts on content development (considering previously provided input and ongoing analyses) and developed a cohesive working draft document for stakeholder review in fall 2011. Outreach efforts included e-mail communications and updates, workshops, webinar briefings, and meetings with individuals and agencies. Work group members were also given an opportunity to review and comment on a working draft of the CVFPP. However, with a commitment to complete a public draft CVFPP within the legislated time frame, the degree of engagement provided in Phases 1 and 2 was not feasible for Phases 3 and 4.

The Board provided various opportunities for members of the public and agencies to comment on the public draft CVFPP, released in December 2011. Hearings were held in 2012 on April 5 (Sacramento), April 6 (Marysville), April 9 (Stockton), and April 11 (Woodland), and public comments were heard and discussed at both regular and special Board meetings. DWR also accepted comments on the DPEIR, which was released in early March 2012. More information on the Board's process for public review and plan adoption can be found on its Web site, http://www.cvfpb.ca.gov/. For additional details, see Master Response 13.

In addition, see responses to comments T_LANG1-01 and T_LANG1-02, above.

T_LANG1-04

See responses to comments T_LANG1-01 and T_LANG1-02, above, regarding the high-level nature of the CVFPP and the process for evaluation, planning, and design of future projects. The comment is a suggestion regarding implementation of a particular flood control improvement. The suggestion will be considered by DWR and the Board during future program implementation efforts.

As stated in Master Response 14, elements of the CVFPP are expected to be refined and modified based on regional flood management planning efforts and the two basin-wide feasibility studies. This is especially true for larger system elements that require more studies and feasibility evaluations to better understand their costs and benefits and to reduce the level of uncertainty. All applicable project-specific environmental review will be

conducted before implementation of projects stemming from the CVFPP. For additional details, see Master Response 14.

The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_LANG1-05

See responses to comments T_LANG1-01, T_LANG1-02, and T_LANG1-04, above, regarding the high-level nature of the CVFPP and the process for evaluation, planning, and design of future projects. The comment is a suggestion regarding implementation of a particular flood control improvement. The suggestion will be considered by DWR and the Board during future program implementation efforts.

It is also suggested that the commenter remain involved in future public involvement aspects of CVFPP implementation. As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local

projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_LANG1-06

See responses to comments T_LANG1-01, T_LANG1-02, T_LANG1-03, and T_LANG1-05, above.

In regard to extending the comment period, as stated in Master Response 22, the Public Draft CVFPP was released, on time, on December 30, 2011. Several of the attached supporting documents, specifically the *State Plan of Flood Control Descriptive Document* (November 2010) and the *Draft Flood Control System Status Report* (December 2011), were published before the Public Draft CVFPP and informed its development. Most CVFPP attachments were released with the public draft or in early February 2012; exceptions include the "Flood Damage Analysis," "Riverine Channel Evaluations," "Cost Estimates," and "Reservoir Analysis" attachments, which were released between mid-February and the publication of the DPEIR.

CEQA Guidelines Section 15105(a) states that when a draft EIR is submitted to the State Clearinghouse for review by State agencies, the public review period shall not be less than 45 days. The DPEIR was made available for public comment on March 6, 2012; however, as described above, most attachments (the CFVPP and attachments) were publicly available several months before.

Four comments that were received on the last day of the noticed comment period requested an extension of the time to comment. No requests for extension were made before then. DWR decided not to extend the 45-day public comment period after considering several factors: (1) Many of the

key documents had been available for more than 45 days; (2) the vast majority of commenters did not see a need to request an extension; (3) a number of commenters had already responded in a timely manner, many with very detailed comments; (4) the commenters requesting extensions were simultaneously filing comments reflecting a thoughtful review; (5) a highly publicized outreach and engagement program was initiated with stakeholders; and (6) it was necessary to ensure compliance with the rapidly approaching July 1 statutory deadline. DWR appreciates the diligent efforts made by all of those who have participated in the development of the CVFPP, including those who submitted timely comments on the DPEIR. For additional details, see Master Response 22.

In addition, the overall CVFPP schedule is based on the State Legislature's requirement that DWR prepare the first public draft CVFPP by January 1, 2012, for adoption by the Board by July 1, 2012, or as such other date as may be provided by the Legislature. DWR and the Board are taking action in a manner to comply with this legislatively mandated schedule.

T_LOCKETT1-01

MR. LOCKETT: Thank you for your time. I'll read my statement regarding:

Dear, Sirs. We own our 97-year old home along the east side of the Sacramento River one mile above Knights Landing in Sutter County. We own the adjacent farm land to the low water line of the east bank of the

Sacramento River.

We would fight very hard not to be included in the CVFPP. Widening or setting back of the levee would destroy our home, farm shop, and equipment yard, as well as our river pumps. The capacity of the river could be increased if all the debris could be pulled from the river, like it used to be before the hard core environmentalists wouldn't let the Corps of Engineers do it anymore.

T_LOCKETT1-02

Dredging the high spots would increase the capacity also. Levee setbacks would push any winter seepage father out into the basin. Bypass expansions would not be necessary, if the existing bypasses were cleared of all vegetation and excess dirt and kept that way. There is no need for an additional 40,000 acre footprint of bypass expansion, especially 10,000 acres of permanent habitat included in this plan.

T_LOCKETT1-03

This is not a flood control plan, it is a plan to satisfy the environmentalists to keep the area natural. Why is it that the agricultural and rural areas share greater burdens, pressures, risks, and liabilities when compared to urban and urbanizing areas?

We hope that the CVFPP, as proposed now, will not be authorized. The plan would be extremely expensive and would have a lot of farmers, landholders, and rural areas

with harm.

Thank you.

PRESIDENT EDGAR: Thank you very much.

William Lockett , Sutter County Farmer, (Public Hearing, April 11, 2012)

Response

T_LOCKETT1-01

As stated in Master Response 1, specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available.

The PEIR recognizes that converting current land uses (particularly agricultural uses) to bypass and related uses (such as habitat and recreation) would result in potentially significant and unavoidable impacts, particularly on agriculture, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 1. Also see response to comment T_LOCKETT1-02, below, regarding facility maintenance.

T_LOCKETT1-02

As stated in Master Response 6, DWR recognizes the importance of proper maintenance to protect State, local, and federal investments in the flood management system. However, maintenance activities alone do not meet current needs or legislative requirements for the CVFPP (e.g., urban level of protection, systemwide approach, and providing multiple benefits). This is highlighted in the evaluation conducted for the preliminary approach called "Achieve SPFC Design Flow Capacity."

The Achieve SPFC Design Flow Capacity preliminary approach focuses on reconstructing SPFC facilities to meet current engineering criteria without making major changes to facility footprints or operations. To achieve the design flow capacity, reconstruction is required because the original specifications focused primarily on levee prism geometry, and current evaluations have shown them to be insufficient in passing design flows if geotechnical and other engineering conditions (e.g., underseepage) are not improved. This approach was formulated to address legislation that required DWR to consider structural actions necessary to reconstruct SPFC facilities to their design standard (CWC Section 9614(g)). It also addresses requests from stakeholders to consider reconstructing the existing flood management system in place, or without major modification to facility locations.

Based on an initial assessment, this preliminary approach is estimated to cost approximately $19 billion to $23 billion and take 30–35 years to implement. This approach would improve the reliability of SPFC facilities compared to existing conditions. However, in many locations, upstream levee reconstruction would increase peak flows and stages downstream because upstream levee failures would be reduced compared to existing conditions. Further, the level of protection would be highly variable throughout the system and would not be linked to the current public safety needs and legislated requirements, and to assets at risk within the floodplain. Consequently, this approach would only partially address the primary CVFPP goal of improving flood risk management.

Investments in SPFC reconstruction would initially reduce SPFC O&M costs, but long-term costs to maintain the system would remain high. Thus, this approach would only partially contribute to the goal of improving O&M. Opportunities to integrate ecosystem restoration and enhancement would be limited and would not contribute to improved ecosystem functions on a systemwide scale. There would also be few opportunities to promote multipurpose benefits including incorporating new groundwater recharge or other water-related benefits, and promoting ecosystem functions, recreation, or agricultural sustainability. Consequently, an approach focusing on maintenance, repair, and reconstruction of existing

facilities would contribute in only a minor way to the supporting goals of multi-benefit projects. For additional details, see Master Response 6.

T_LOCKETT1-03

As stated in Master Response 1, the Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it

preclude any future actions that could contribute to flood management goals.

As described above in response to comment T_LOCKETT1-01, specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available.

The PEIR recognizes that converting current land uses (particularly agricultural uses) to bypass and related uses (such as habitat and recreation) would result in potentially significant and unavoidable impacts, particularly on agriculture, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments.

Several commenters expressed concern regarding the potential for particular properties to be included in a bypass proposal. Concerns were also expressed that preliminary identification of conceptual bypass designs might create a “cloud” over the properties, making it difficult to manage,

obtain loans for, or sell those properties. DWR and the Board wish to make clear that the conceptual designs reflected in the CVFPP do not reflect a determination regarding any specific properties, and that the potential involvement of particular properties in any future bypass project is entirely speculative at this time. For additional details, see Master Response 1.

In addition, as stated in Master Response 2, the 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

A portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of levees in rural areas. For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements.

The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities (mentioned above in the summary of Master Response 1). As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid- to late-2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined

analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable.

In addition to expansion of the bypass system, levee reconstruction, and other elements, the SSIA includes State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans. These easements would be used to preserve agriculture and prevent urban development in current agricultural areas, discouraging conversion to land uses that would increase flood risks within floodplains protected by SPFC facilities. Agricultural conservation easements could be purchased through various DWR programs; an example is DWR's Flood Corridor Program, which focuses on nonstructural flood risk reduction integrated with protection of natural resources and agricultural lands. For additional details, see Master Response 2.

T_LOGUE1-01

ASSEMBLYMAN LOGUE: Thank you for coming today. I appreciate your efforts. I just want to reemphasize the fact that you're sitting in a county that has flooded twice in 10 years. And I know what it means to see a community destroyed by it. If you have a fire in a community, you can recover within a year or two. When you have a flood, it takes five years that it destroys the economy and the base. So I've seen firsthand cars up in trees. I know what it does.

T_LOGUE1-02

My concern here today is that we work hand-in-hand with the local communities and the elected officials on the ground. They understand the dynamics better than anybody from Sacramento.

T_LOGUE1-03

Number two, I believe that it's absolutely necessary that the solution for our problem will be offstream storage flood control dams. I mean that more than any other area we can solve this problem. We can have water for the north State, and we could even provide water for the south State. I believe that that is going to be the main solution. We cannot afford to continue to take good ag land out of production. We're already doing that right now.

In the last 20 years, the farmers and the

businesses in the north State have lost over two-thirds of the water supply in the north State. So I would hope that you will strongly consider that.

T_LOGUE1-04

As a member of the Yuba County Water Board and chairman of Three Rivers, one of the proposals that were among the best that we had was in order to control flood waters, we were considering building mini dams throughout the north State, where they would hold the water back for 90 days and release it gently throughout the year. That would restore the aquifer in the ground. It would keep our communities safe. And I believe there's money and resources available to do that. That would also allow us to keep the farm land in production.

So the hope and dreams of the north State is to protect agricultural. There's a lot of businesses leaving California today. The last five years -- the last year alone, we've had five times more businesses leaving California than ever before. The ag industry is probably the last business standing in this State. We have to make sure that we provide the water and the resources for them to produce, to feed the world, and to make sure that their land is not taken out of production.

T_LOGUE1-05

I'm not sure what the definition of urban is. I wish somebody would tell me what that is. But I want to make sure that the definition of urban is not to protect

Sacramento at the cost of the north State.

Thank you very much.

(Applause.)

PRESIDENT EDGAR: Thank you, Dan.

Assemblyman Dan Logue (Public Hearing, April 6, 2012)

Response

T_LOGUE1-01

The comment conveys experience with past flood events. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_LOGUE1-02

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

Anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect

the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_LOGUE1-03

As stated in Master Response 10, in developing the CVFPP and formulating the SSIA, DWR considered various forms of storage for flood management, including operational changes to existing reservoirs with flood storage, new or expanded flood storage in reservoirs, and storage in floodplains. Specifically, one of the preliminary approaches— Enhance Flood System Capacity—included enlarging the flood storage allocation of several multipurpose reservoirs to improve management of flood risks on lands protected by the SPFC. This evaluation found potential benefits from and opportunities for reservoir flood storage and operational changes, such as improving flexibility in managing hydrologic changes (such as climate change) and potentially offsetting the hydraulic effects of certain system improvements on downstream reaches. At the same time, these analyses addressed both the physical limitations of these opportunities and the

potential negative effects of increasing flood-storage allocations on water supply and other beneficial uses. The analyses of reservoir storage and flood operations that were conducted in support of the 2012 CVFPP are described in Attachment 8B in Appendix A, "Central Valley Flood Protection Plan."

Storage elements ultimately retained in the SSIA are based on preliminary systemwide analyses conducted for the 2012 CVFPP, legislative direction for the CVFPP, and the findings of prior and ongoing studies. Among those studies are ongoing surface storage investigations and prior local, State, and federal studies such as the Shasta Lake Water Resources Investigation, North-of-the-Delta Offstream Storage (Sites Reservoir), In-Delta Storage Program, Los Vaqueros Reservoir Expansion, and Upper San Joaquin River Basin Storage Investigation (Temperance Flat Reservoir). However, no new site-specific investigations of surface storage were included in the systemwide analyses conducted to support the 2012 CVFPP.

In the 2012 CVFPP, the SSIA includes coordinated reservoir operations aimed at making the most efficient and effective use of current flood storage allocations in existing reservoirs, and implementation of the authorized Folsom Dam Raise (see Section 3.5.4 of the CVFPP). These SSIA storage elements appropriately reflect the conceptual level of detail and systemwide focus of the 2012 CVFPP, without precluding future consideration of new or expanded storage by the State or local agencies. At this time, the SSIA does not include new reservoirs or expansion of storage (other than at Folsom Dam) solely for the purpose of flood management; however, DWR will continue to consider flood management in the context of, and as an objective of, its ongoing multi-benefit surface storage investigations and systemwide reoperation studies. Should these State investigations or other related efforts by local or federal agencies identify flood management as a component of a feasible reservoir storage project, this may be reflected in future updates to the CVFPP.

Ongoing investigations are being conducted to determine the feasibility of surface storage and consider potential environmental effects. The analyses included in these surface-storage studies are more detailed than those conducted at a systemwide scale for the 2012 CVFPP. Consequently, these studies are developing more comprehensive information about the potential costs and benefits of site-specific increases in flood storage. Some specific examples of ongoing multipurpose surface-storage investigations and related investigations that are examining the feasibility of adding new flood storage are the Upper San Joaquin River Basin Storage Investigation, the North-of-Delta Offstream Storage Investigation, and the Shasta Lake Water Resources Investigation.

Over past decades, most of the major rivers and tributaries draining into the Central Valley were dammed, providing both intentional and incidental flood management benefits. The aggregate benefit of these reservoirs to flood management has been substantial, and has contributed to the success of the existing flood system in reducing or avoiding damage from major flood events during the past century. However, California's topography and geology limit opportunities for reservoir construction, and most of the feasible locations have already been developed with the existing major dams (e.g., Shasta, Oroville, Folsom). The remaining opportunities are much more limited.

Specifically, unlike the situation that existed at the beginning of the 20th century, only a few remaining dam sites, spread throughout the Central Valley watersheds, offer the potential to provide large volumes of flood storage capacity. Other than for a few specifics, such as raising Shasta Dam or constructing Sites Reservoir, commenters on this topic did not provide a more detailed proposal or recommendation for implementing upstream storage projects. In particular, commenters provided no specific information regarding the feasibility of using an upstream-reservoir approach to meet the requirements of SB 5.

DWR recognizes the importance of developing additional water storage capacity in California to support an increasing population, to help compensate for the anticipated loss of snowpack storage as a result of climate change, and to maintain the important role of Central Valley agriculture for the nation and the world. For these reasons, multipurpose reservoir projects will likely continue to be proposed and, if successful, may help to meet needs for flood storage capacity.

However, these proposals face daunting challenges. Despite their benefits, new or expanded reservoirs generally face considerable opposition given their environmental effects, costs, perceived risks, and other factors. Also, environmental laws established mostly in the 1970s now apply to these proposals. Among these laws is the requirement under Section 404 of the CWA that any project affecting waters of the United States can be approved only if it is demonstrated to be the least environmentally damaging practicable alternative. Many other laws also present permitting challenges.

It is significant that no new major onstream reservoir has been constructed in the Central Valley watershed since New Melones Dam was completed in 1978. The Auburn Dam project, which commenced construction in 1968, was never completed because of several factors, including its cost, geologic problems with the site, and potential harm to recreational and ecological values. Recently, successful projects have consisted largely of projects to

provide offstream storage (such as Los Vaqueros Reservoir), which can provide only limited flood control benefits outside their watersheds given the need for pumping, and projects to increase the capacity of existing reservoirs (which by their nature are only incremental).

Moreover, to serve as a substitute for floodway conveyance and storage, upstream reservoir capacity would have to be developed throughout the Central Valley watershed. The extreme weather events (i.e., atmospheric rivers) that create the greatest risk of a severe flood are often localized. Floodplain storage protects against floodwaters originating from all upstream areas, but by definition, upstream reservoirs can store only the floodwaters that originate from a particular area or tributary watershed. For example, an increase in the capacity of Shasta Lake would provide little or no benefit in the event of a major atmospheric rivers event focused on the central or southern Sierra Nevada. There is simply no reasonable scenario under which an array of new reservoir projects spread throughout the Central Valley watershed would be feasible and could serve as an effective substitute for floodplain storage. Suitable and feasible remaining sites do not exist, the costs would likely be prohibitive and the opposition substantial, and environmental permits would be difficult if not impossible to obtain. It would be both speculative and imprudent for the CVFPP to rely on such an approach. None of the comments on the topic have addressed, much less rebutted, the substantial evidence that such an alternative could not feasibly meet the objectives of the CVFPP as directed by SB 5.

Failing to reserve adequate floodway conveyance and storage capacity now would leave future generations with limited options for addressing their flood protection needs. The current generation has benefited from the existing bypass system, and expanding that system would benefit both current and future residents.

It is recognized that in certain cases and to some degree, upstream floodway conveyance and storage could reduce the need for (or scale of) some types of downstream flood management actions associated with the SPFC. However, opportunities to reduce flood risks on lands protected by the SPFC by increasing floodway conveyance and storage are limited, and depend on a variety of factors:

- The location of a reservoir (or multiple reservoirs) with respect to the downstream actions or target area is important. Multipurpose reservoirs are present along many major tributaries to the Sacramento and San Joaquin rivers, but the hydrology (magnitude of rainfall and timing of peak flows from a watershed) and the operations of these reservoirs are very complex. Floodflows in downstream reaches of mainstem rivers

are often influenced by the operation of multiple reservoirs, and peak flood stages may result from a combination of hydrologic events on different tributaries. Consequently, increasing flood storage in one reservoir may not reduce peak flood stage along a mainstem river reach because of the operations of other reservoirs, contributions from unregulated streams, or hydrology of the various tributary watersheds.

- The volume of floodway conveyance and storage that could be achieved is related to the size of the watershed and floodflows it generates, which can limit the effectiveness of expanding reservoirs or constructing new reservoirs. Expanding a reservoir is typically most effective when the existing reservoir has a small flood storage allocation compared with its tributary watershed. Similarly, it may not be effective to construct or expand a reservoir that controls a relatively small watershed.

- Opportunities to expand a reservoir are typically limited by the existing dam's location, size, and type of construction (concrete versus earthen, for example). A reservoir expansion sufficient to achieve the desired flood risk reduction benefits downstream may not be physically possible at all locations.

- The cost and potential impacts of enlarging a reservoir or constructing a new reservoir vary substantially from location to location. The CVFPP is a conceptual plan, and the PEIR is a program-level document; the site-specific analyses that would be needed to assess feasibility were not conducted as part of the CVFPP or PEIR, and will occur at the project level. See Master Response 24.

- Reservoir ownership varies, and studies of specific opportunities to expand reservoirs must be conducted in partnership with owners and operators.

The above factors indicate that a feasible and cost-effective surface-storage project could be developed only under specific circumstances, and that even if it is feasible, additional surface storage may not provide meaningful flood management benefits. These factors, combined with the conceptual systemwide focus of the 2012 CVFPP, precluded DWR from identifying specific reservoir storage elements to include in the SSIA at this time. These factors limited the ability to formulate an approach/alternative to include in the PEIR that focused primarily on increasing flood storage. Further, increasing storage alone would not achieve many CVFPP goals or fulfill legislative intent, such as improving ecosystem functions within the flood management system or achieving an urban level of flood protection for all urban areas.

Studies showed that combining bypass expansion, regional levee improvements, and coordinated operations in the SSIA did not result in systemwide hydraulic impacts that would be substantial enough to require including additional surface storage as a hydraulic mitigation measure. However, the plan does not preclude future consideration of new or additional flood storage by State, federal, or local agencies in the regional flood management planning or two basin feasibility studies, or as independent projects. (See Section 3.5.4 in Appendix A, "Central Valley Flood Protection Plan."). For additional details, see Master Response 10.

T_LOGUE1-04

Detention basins and dry dams could be considered during the regional planning process. Although DWR cannot guarantee State participation in local projects, DWR encourages local entities to participate in the regional planning process.

See response to comment T_LOGUE1-03, above, regarding reservoirs and the CVFPP. Regarding the concept of "mini-dams" that appear to function as temporary detention basins, the suggestion is noted. Interim storage via detention basin–like facilities could be consistent with elements of the CVFPP. Such suggestions may be presented during various elements of future implementation of the CVFPP; however, no change to the current version of the CVFPP was made.

Regarding effects on agriculture, as stated in Master Response 14, regional flood management planning, to be conducted in each of nine regions identified in the 2012 CVFPP, is an important next step in identifying specific improvements to rural-agricultural areas, small communities, and urban areas consistent with the SSIA. Upon CVFPP adoption, DWR will work closely with local entities to collect on-the-ground information regarding flood risks and needs, identify potential local and regional improvement projects, assess the performance and feasibility of these projects, and develop proposals that reflect the priorities of local entities in reducing flood risks. Each regional plan will present an assessment of proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. DWR intends to provide guidance as well as technical and financial assistance to local agencies to prepare the regional flood management plans, subject to availability of funds. For additional information, see Master Response 14.

T_LOGUE1-05

Under CGC Section 65007 (j), an urban area is a developed area in which there are 10,000 residents or more.

T_MAGUIRE1-01

MR. MAGUIRE: Good afternoon, President Edgar and members of the Board.

First I'd like to take this opportunity to welcome you to San Joaquin County and to thank you for conducting your public outreach meeting on the Central Valley Flood Protection Plan in our county.

I would also like to take this opportunity to recognize DWR staff for completion of the Plan. It was a tremendous undertaking. And we would like to express our appreciation to them for conducting the numerous workshops and webinars to actively seek input from local agencies in the Plan and supporting documents.

We recognize that this initial version of the Plan provides a foundation upon which the development of

further more detailed plans will be completed over the course of the next several years.

The Plan anticipates that cities and counties will develop regional flood protection plans in cooperation with DWR staff, and that these plans will be incorporated into two basin-wide feasibility studies. This will then lead to the actual implementation of flood control projects.

In the event you were not aware, here in San Joaquin County we are well along in the planning efforts to identify 200-year flood protection improvements. In 2009, led by the San Joaquin Area Flood Control Agency, SJAFCA, many local agencies in San Joaquin County, along with the State of California and the Corps of Engineers, teamed up to prepare the Lower San Joaquin River Feasibility Study.

We believe the study will provide the basis for the area's regional flood plan. We are committed to the completion of this feasibility study and subsequently moving forward with the other necessary actions to achieve 200-year level of protection.

T_MAGUIRE1-02 The Central Valley Flood Protection Plan also anticipates that DWR staff will assist local agencies in amending their general plans and zoning ordinances to comply with the law, and we look forward to receiving this

assistance.

T_MAGUIRE1-03 And lastly, we suggest that the Board consider deferring your adoption of the Urban Level of Protection Criteria document pending the adoption of cleanup legislation that was recently introduced by Senator Wolk. We have been engaged in the preparation of this document and, through that process, recognize the need for legislative changes.

Thank you.

San Joaquin County, John Maguire (Public Hearing, April 9, 2012)

Response

T_MAGUIRE1-01

DWR and the Board appreciate the acknowledgement of the effort put into preparing the CVFPP. The comment describes several CVFPP post-adoption implementation steps, and San Joaquin County is to be commended for steps it has taken and continues to take toward flood protection planning and study. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_MAGUIRE1-02

Consistent with the comment, and as stated in Master Response 5, State law (SB 5) requires each city and county in the Sacramento–San Joaquin Valley to amend its general plan within 24 months of the Board's adoption of the CVFPP (see CGC Sections 65302.9 and 65860.1) to include consistent information. These cities and counties must also amend their zoning ordinances accordingly within 36 months of the Board's adoption of the CVFPP.

DWR has made the following efforts to provide technical assistance to local jurisdictions related to implementation of the CVFPP:

- DWR completed its legislative responsibility by developing urban level of flood protection criteria consistent with current legislation, and in collaboration with cities and counties.
- DWR completed the draft CVFPP for the Board's adoption:
  - The CVFPP describes the State's investment approach and interests in SPFC facilities and the associated protected areas.
  - The *Draft Urban Level of Flood Protection Criteria* is incorporated by reference.
  - The *Urban Levee Design Criteria*, which describes the engineering criteria for levees and floodwalls, is incorporated by reference in the *Draft Urban Level of Flood Protection Criteria* and the CVFPP.

- DWR has shared and will continue to share available data, tools, and other relevant information with cities and counties, including the following details:
  - CVFED Program (anticipated 2013)
    - Mapping of the 200-year floodplain for the mainstem Sacramento and San Joaquin rivers and major tributaries
    - Fine-scale topographic (LiDAR) data
    - System hydraulic models and data
  - Central Valley Hydrology Study (anticipated 2013)
    - System hydrology (including climate change considerations)
    - System hydrologic models and data
  - Levee Evaluation Program (ongoing, with currently available preliminary data)
    - Inspection and geotechnical data
    - Levee integrity assessments and data
  - Existing data and tools used to develop the 2012 CVFPP
- With potential legislative support and collaboration with other federal and State agencies (e.g., FEMA), DWR may consider providing additional assistance to cities and counties as they develop or acquire additional floodplain information to support their local planning and decision making.

DWR has completed a guide titled *Implementing California Flood Legislation into Local Land Use Planning: A Handbook for Local Communities* (2010) (http://www.water.ca.gov/floodmgmt/lrafmo/fmb/docs/Oct2010_DWR_Handbook_web.pdf). This handbook covers more than the requirements of an urban level of flood protection. It describes how the 2007 flood risk management legislation affects cities' and counties' responsibilities to meet local planning requirements such as those for general plans, development agreements, zoning ordinances, and tentative maps. For additional details, see Master Response 5.

T_MAGUIRE1-03

DWR and the Board are aware of the legislation referenced in the comment. Both DWR and the Board are currently implementing SB 5 and

other applicable State legislation following the schedule and process provided by the Legislature. If the Legislature modifies the schedule or the process, then DWR and the Board will respond accordingly. The comment is noted.

T_MATTOS1-01 MR. MATTOS: Thank you for the opportunity to address the Board. And to make a correction, recent past president. My term -- I finally relinquished that position as of November 2011, but I was on the Board for 24 years.

And a couple things I'd like to address. I was a little bit surprised to come in here today thinking that

there might be a little more. And I know the plan is vague. And it's a systemwide EIR, but I thought there might be a little more defined plans as to what the Central Valley Flood Protection Plan consists of.

I read part of it, not all of it. They discuss possible 42 miles of levee, expansion of the bypass by, and I've heard, up to a mile in the Sacramento Bypass.

I would think that if these items have been discussed, and even in a vague plan, that we could have seen some -- a little more detail at least to what the plan might entail. Now, obviously, it's in a conceptual stage and it could be changed.

T_MATTOS1-02 But to address some comments that were made earlier, emotions when you just see something out of the Sacramento Bee or other items that were presented to us, where you got a little shading that depicts that you might -- your properties might be engulfed as a flood zone, tends to raise the emotional level pretty high.

I'm a landowner, a third generation farmer, and my son farms with me. It's my vision to have him continue on with that. We are in the process of raising walnuts. We have three-year old trees. So it kind of bothers me to see a plan along this line without any definition possibly include my livelihood, my future, my son's future livelihood.

And these trees, like Mr. Lang spoke of earlier -- I mean, he's got an orchard that the trees are 45 years old. I'm three years into an orchard, if this plan comes within the next 10 or 15 years, I kind of wonder about the compensation if I had forced -- if I'm forced to deal with this, because it's not just the cost of the land and the investment that I've put into it, but I think to mitigate the potential of what this plan might do to farmers like myself and others that have spoke, a lot of consideration needs to be addressed and not only just maybe the current cost of the land, but the future revenue to these walnuts, that in my case, have not even started producing yet, but might produce for another 35, 40 years. So I'm concerned about mitigation along those lines.

T_MATTOS1-03 And when you've asked for possible alternatives to what we've seen, now again, what we've seen either depicted in the newspaper and some of the other drawings are not reality, because we have no posters or no maps or anything that define this yet.

Based on the concept that we've seen, I can offer some alternatives, at least in the Elkhorn area. Again, we get back to that bottleneck at I-5 and the crossing there. In our area where they talk about expanding the potential -- expanding of the bypass to the east up

against County Road 22, which is the Sacramento River, flowing south to the Sacramento Bypass. Now, if that gets expanded, that would allow for the lowering of the Sacramento -- the headwater of the Sacramento River, and I think that's probably a good idea.

But to take in the Elkhorn area between I-5 at least south to the Sacramento Bypass, it seems to me, since it's -- once it gets to the Sacramento Bypass, it's got to be diverted westward to make its way around West Sacramento, that that just becomes an initial, like Mr. Lang said, pooling, but that really doesn't create any flow. Because once it probably fills up to its initial height, then the water, once it hits the Sacramento Bypass levee, whether it gets expanded or not still has to move to the west to go through the channel.

So that area in itself, I think, should be excluded from the plan, because it doesn't create flow. It creates some dead water space to initially probably displace some water. But in the long term of displacing the water through flow, I don't think it really adds much to the design.

T_MATTOS1-04 And I believe, like some of the other folks that have spoke, we're getting rid of this water. And I think with the ongoing increased need for water, not just south, but to sustain agriculture in the Central Valley, as well

as our own area, we need to look, I think, more towards a channel to get rid of it, but basins or reservoirs or someway to retain the water for use throughout the year and not just trying to -- the flood control thing, I think there's a need for it, and I think we need to be responsible in the design of that, so that it works for everybody, but I think the retention of water, I think, also needs to be included in this somewhere along the line.

T_MATTOS1-05 As a Board member, and the President of the Board who has been trying to comply with the State mandates and the Corps' mandates and especially since Katrina, a couple of comments. I think what -- my opinion on some of these flood control issues are we have the interim rules that we got placed under for maintaining district levees, because of mitigation.

And I think what we need to do is separate what we are trying to do in terms of the mitigation for wildlife or habitat and flood control, and decide are we doing flood control or are we doing habitat mitigation.

Every one of these channels that have these trees and brush in the bypass -- a gentlemen had a picture of it earlier today at the mouth of the Yolo Causeway, is it restricts water flow, backs it up, creates headwaters, where maybe they shouldn't be there. They might allow

them to flow out sooner.

So I think as much as I love the habitat, and I don't think there's a better steward of the land than somebody that has to live off of it, and to derive his livelihood, and I've lived on it for 61 years, born and raised on the ranch, and still farming today.

And I look outside my window, we have turkeys. We have coyotes. We have the wildlife. And I do everything I can to try and keep that, because I want my future generations to see it. So I understand the need for maintaining wildlife and creating habitat, but I don't think you should be doing them one within the other. I think you need to find another place to do this mitigation of wildlife and habitat and deal with the concept of providing flood control, and not trying to make the two mix when one complicates the other. And I thank the Board for allowing me to address you.

PRESIDENT EDGAR: Thank you, sir.

William Mattos (Public Hearing, April 11, 2012)

Response

T_MATTOS1-01

As stated in Master Response 8, the State Legislature enacted comprehensive flood risk management legislation in 2007, including the Central Valley Flood Protection Act of 2008. This law set a clear directive for an integrated systemwide approach to Central Valley flood management, and provided detailed guidance for DWR to follow in formulating the CVFPP. The Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in CWC Sections 9600–9625.

In accordance with legislative direction and reflecting stakeholder input, DWR prepared the 2012 CVFPP to describe the State's vision for flood management in the Central Valley. This vision for flood management in the Central Valley is for a sustainable flood management system that provides a high degree of public safety, promotes long-term economic stability, and supports restoration of compatible riverine and floodplain ecosystems.

In the CVFPP, DWR describes the SSIA, which is a proposal for achieving the State's vision for flood management. The SSIA helps achieve the State's vision for flood management in a balanced manner by promoting responsible investment of public funds, commensurate with flood risks, in projects that integrate multiple benefits, in proactive maintenance of SFPC facilities and residual risk management, and in wise management of floodplains protected by the SPFC. For additional details, see Master Response 8.

As stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions

identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time.

The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable. For additional details, see Master Response 2.

T_MATTOS1-02

As stated in Master Response 2, because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

A portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of levees in rural areas. For preliminary planning purposes, it has been

estimated that about 75 percent of lands that could be used for bypass expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable.

The PEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

As stated in Master Response 3, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and 3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed. For additional details, see Master Response 3.

T_MATTOS1-03

As stated in Master Response 9, three preliminary approaches were used during development of the CVFPP to explore a range of potential physical

changes to the existing flood management system and help highlight needed policies or other management actions: Achieve SPFC Design Flow Capacity, Protect High-Risk Communities, and Enhance Flood System Capacity. Evaluating these preliminary approaches provided information on their costs, benefits, and overall effectiveness. None of the three preliminary approaches were found to fully satisfy the legislative requirements and CVFPP goals in a cost-effective manner. However, the most promising elements of each were combined to formulate the State's preferred approach—the SSIA. The CVFPP and accompanying attachments provide additional details about the formulation and screening of elements included in the SSIA. For additional details, see Master Response 9.

See response to comment T_MATTOS1-01 regarding the high-level nature and conceptual elements of the CVFPP. Master Response 14 addresses the issue of planning and implementing specific future projects. As stated in Master Response 10, regional flood management planning, to be conducted in each of nine regions identified in the 2012 CVFPP, is an important next step in identifying specific improvements to rural-agricultural areas, small communities, and urban areas consistent with the SSIA. Upon CVFPP adoption, DWR will work closely with local entities to collect on-the-ground information regarding flood risks and needs, identify potential local and regional improvement projects, assess the performance and feasibility of these projects, and develop proposals that reflect the priorities of local entities in reducing flood risks. Each regional plan will present an assessment of proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. DWR intends to provide guidance as well as technical and financial assistance to local agencies to prepare the regional flood management plans, subject to availability of funds.

Regional flood management plans are anticipated to:

- Assess regional flood risks and management actions (projects) to reduce these risks
- Discuss regional priorities, including criteria used to prioritize individual projects
- Describe specific projects, including their potential costs, regional and systemwide benefits, and beneficiaries
- Provide a financial plan describing how the proposed projects would be funded, including cost sharing and financing for local shares

- Describe regional governance of flood management

Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts. Information and outcomes from the regional planning process will inform the State-led basin-wide feasibility studies, preparation of a financing plan for the CVFPP, and the first update of the CVFPP (scheduled for completion by 2017). This regional effort is scheduled to be launched publicly in June 2012 and is anticipated to continue through 2013.

DWR will engage regional flood planning partners to develop and implement communication strategies with broad interest groups to brief them on flood management planning in their regions. Regional implementing and operating agencies, land use agencies, and interest groups will be invited to participate in the planning process. Each regional planning process will seek input, as appropriate, from agricultural interests, environmental interests, permitting agencies/resource agencies, local emergency responders, tribes, and other stakeholders. DWR anticipates that a regional flood working group will be formed in each region.

Post-adoption activities will also include development of two State-led basin-wide feasibility studies—one in the Sacramento River Basin and one in the San Joaquin River Basin—that will refine the broad description of the SSIA contained in the 2012 CVFPP. The basin-wide feasibility studies will (1) identify State interest in and articulate refinements to system elements and regional elements, (2) inform development of the CVFPP Financing Plan and the 2017 CVFPP update, and (3) help define the State's locally preferred plan for consideration in ongoing and planned USACE federal feasibility studies. The basin-wide feasibility studies will focus on system elements, which may take longer to study and implement than other regional plan elements because of their scale and complexity.

State-led feasibility studies are intended to support State decision making, regardless of the corresponding level of federal participation. They do not necessarily cover the scope of a federal feasibility study; however, these State-led studies will be conducted to minimize, to the extent possible, additional federal study needed to determine federal participation and facilitate subsequent authorization by Congress, if appropriate.

The basin-wide feasibility studies will be conducted in two primary phases. The first phase will be conducted concurrently with regional planning, and will focus on developing specific objectives and analyzing physical options for system elements (such as bypass expansion and new bypasses). The

second phase will combine the most promising options for system elements with the prioritized list of regional elements identified in the regional flood management plans. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale, representing refined alternatives for implementing the SSIA.

Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. The studies will be conducted in coordination with USACE (and ongoing cost-share feasibility studies) and local implementing agencies. It is anticipated that working groups will form to help evaluate and refine bypass expansion options, identify implementation challenges, and provide input in the planning process.

The State intends to complete both studies by mid-2015 to provide time to incorporate information and findings into the 2017 CVFPP Update. Interactions with other key planning efforts, such as regional flood management planning, the CVFPP Financing Plan, and Central Valley Floodplain Evaluation and Delineation, are important to meeting the anticipated schedule. For additional details, see Master Response 14.

T_MATTOS1-04

As stated in Master Response 7, capturing and using floodflows for groundwater recharge is a component of integrated flood and water management in the CVFPP. The State supports programs that use floodflows for groundwater recharge to improve water management throughout California. However, the State also recognizes the limitations of direct groundwater recharge in lowering flood stage and reducing flood risks, especially in the Sacramento River Basin. Considering these limitations, the SSIA identifies opportunities for groundwater recharge within the flood management system (in-channel recharge and in expanded bypass areas). Although no specific recharge projects are recommended in the SSIA at this time, the State encourages further exploration of feasible recharge opportunities in the San Joaquin River Basin, in particular, to capture a portion of high flows from snowmelt.

DWR also recognizes that although expanding a floodway can assist in recharging groundwater by expanding the surface area of inundated ground during high-water events, a meaningful benefit cannot be assured. The inundated soils must be appropriate to allow groundwater infiltration. Depending on hydrologic conditions, an expanded floodway may be inundated only rarely, allowing only limited opportunities for increased groundwater infiltration. The local aquifer may be recharged from lands away from the river, with groundwater flowing toward and draining into the river. In this circumstance, increasing floodway inundation would have

little benefit to local groundwater recharge. Therefore, potential groundwater recharge benefits from increasing floodplains, flood bypasses, and setback levees are very dependent on site-specific conditions. For additional details, see Master Response 7.

As stated in Master Response 10, in developing the CVFPP and formulating the SSIA, DWR considered various forms of storage for flood management, including operational changes to existing reservoirs with flood storage, new or expanded flood storage in reservoirs, and storage in floodplains. Specifically, one of the preliminary approaches—Enhance Flood System Capacity—included enlarging the flood storage allocation of several multipurpose reservoirs to improve management of flood risks on lands protected by the SPFC. This evaluation found potential benefits from and opportunities for reservoir flood storage and operational changes, such as improving flexibility in managing hydrologic changes (such as climate change) and potentially offsetting the hydraulic effects of certain system improvements on downstream reaches. At the same time, these analyses addressed both the physical limitations of these opportunities and the potential negative effects of increasing flood-storage allocations on water supply and other beneficial uses. The analyses of reservoir storage and flood operations that were conducted in support of the 2012 CVFPP are described in Attachment 8B in Appendix A, "Central Valley Flood Protection Plan."

Storage elements ultimately retained in the SSIA are based on preliminary systemwide analyses conducted for the 2012 CVFPP, legislative direction for the CVFPP, and the findings of prior and ongoing studies. For additional details, see Master Response 10.

T_MATTOS1-05

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. For additional details, see Master Response 7.

As stated in Master Response 6, improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures). For additional details, see Master Response 6.

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework.

Appendix E, “2012 Central Valley Flood Protection Plan Conservation Framework,” provides a preview of a long-term Conservation Strategy that DWR is developing to support the 2017 CVFPP Update. The Conservation Framework focuses on promoting ecosystem functions and multi-benefit projects in the context of integrated flood management for near-term

implementation actions and projects. The Conservation Framework provides an overview of the floodway ecosystem conditions and trends and key conservation goals that further clarify the CVFPP's ecosystem goal. For additional details, see Master Response 7.

T_MIRAM1

T_MIRAM1-01

MR. MIRAMONTES: Thank you. I'm Tim Miramontes Yolo county farmers. And I do farm inside the bypass

already, and it is a tough operation to be able to do that by you expanding -- trying to expand the bypasses, where I farm in the bypass, it's going to make it almost impossible. The flood waters are going to stay on longer. We're not going to be able to get crops in.

T_MIRAM1-02

Also, by putting more farm ground into the bypass -- a new bypass expansion, you're going to lower the land values for the counties, which are already hurting for money. I know our county is kind of upset that they weren't brought in on this -- supposedly brought in on this expansion of all the bypasses and the floodways.

T_MIRAM1-03

As California grows, we do need to be able to control these waters and whatnot. But I'm not sure if the expansion is the right way to do it with looking at how these bypasses are maintained. There is a lot of vegetation that is going that is putting pressure back up in the rivers, and not letting the waters flow through like they're supposed to.

T_MIRAM1-04

I farm just south of the Fremont Weir, where you want to widen it a mile, and those trees are 20, 30 feet tall, and all the way across the weir. How is water supposed to flow into this weir -- into this bypass system, if it cannot get in because of trees and sediment buildup.

T_MIRAM1-05

With further expansion, where is the money going to come to keep these bypass systems maintained. Farming is the best way to do it. But as we're seeing, Sutter Bypass, Tisdale Bypass, Yolo Bypass is starting to turn in the same way. The vegetation is overgrown. It's a big concern for anyone that is around the areas further up northward. The water is backing up and putting more pressure on the levees.

T_MIRAM1-06

As Chris said, there's approximately 10,000 acres of habitat that is proposed in this concept, and 30,000 acres going inside the bypass. But you have to consider the 17 -- the 20,000 acres that the BDCP is trying to add in for their fisheries projects, which you guys are aware of and communicating back and forth with.

So that's bringing the total up to nearly 60,000 acres of farm ground that could be lost. That is a huge chunk for the north State. And Yolo county has taken a big brunt of that.

T_MIRAM1-07

I started off going to the forums that were put on for the past couple years. And it was a tough thing to deal with. It was during our busy time. Most farmers that try to go to those are -- the heart's into it, but we're not like everybody that's there and getting paid to be there at these meetings. We're supposed to be out on the farm doing our job, and it makes it very tough,

T_MIRAM1-08

T_MIRAM1-09

T_MIRAM1-10

especially for someone young like me, who doesn't have very many employees, and I have to be out there every day.

There was four working groups that were established for this -- these forum, the climate change group, levee performance, operation management and environmental stewardship. There was nothing to do with ag until the farmers actually had to complain about it and got one program going for them, but it wasn't till late in the game as the other four stewardship -- other groups had already put in their comments. And that just didn't seem fair for agriculture to be taking the brunt of it again.

We appreciate you trying to do more outreach to the rural areas, but like Chris said and others have said, the ag community is not well aware of this. You have put fliers out and whatnot, and local farm dealers have tried to make it even more available, but it's still -- a lot of people do not even know -- have not seen these maps, and do not know anything about it.

So getting farmers into the next few months is critical, but it's going to be very difficult with how dry the weather is and us getting out back into the fields. I do appreciate you giving me the opportunity to speak.

And I have brought along with me 18 letters from people that were not able to make it to this meeting. I don't know who. I'd give that to --

PRESIDENT CARTER: Give that to Ms. Moricz behind you.

MR. MIRAMONTES: And there's a copy of my letter in there also for the Board.

PRESIDENT CARTER: Okay. And those will be posted on the website with all the other comments, so they can be reviewed by everyone and shared.

MR. MIRAMONTES: Thank you.

PRESIDENT CARTER: Thank you, Mr. Miramontes.

Tim Miramontes (Public Hearing, February 24, 2012)

Response

T_MIRAM1-01

As stated in Master Response 1, the existing bypass system in the Sacramento River Basin (including the Sutter and Yolo bypasses and associated inflow weirs) forms the central backbone of the Sacramento River Flood Control Project and redirects damaging floodflows away from the main channels of the Sacramento and Feather rivers. The considerable capacity of the bypass system (up to 490,000 cfs) also slows the movement of floods, effectively attenuating flood peaks and flows into the Delta. In the San Joaquin River Basin, the bypass system includes the Chowchilla, Eastside, and Mariposa bypasses.

The Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it

preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

Among the details that would be evaluated in the future would be any potential changes in bypass operational criteria, including the timing, duration, and depth of inundation. However, these factors typically are based on river flows and the need to alleviate flood risk for the areas receiving benefits from the bypass system.

T_MIRAM1-02

Changes in tax revenue as a result of flood control projects may be addressed in project-level evaluation and planning analysis during post-plan implementation activities. As stated in Master Response 3, CEQA does not require the addressing of issues that generally are social and economic in nature except to the extent that they relate to potentially significant adverse effects on the physical environment. For additional details, see Master Response 3.

As stated in Master Response 1, the PEIR recognizes that converting current land uses (particularly agricultural uses) to bypass and related uses (such as habitat and recreation) would result in potentially significant and unavoidable impacts, particularly on agriculture, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed

the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topic or information was raised in the comments. For additional details, see Master Response 1.

As stated in Master Response 3, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and 3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed. For additional details, see Master Response 3.

In regard to public and agency outreach and engagement, as stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, “Engagement Record,” in Appendix A, “Central Valley Flood Protection Plan.” The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP. For additional details, see Master Response 13.

T_MIRAM1-03

As stated in Master Response 6, improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures).

The SSIA promotes efficient and sustainable long-term O&M practices through the following:

- Reforming and consolidating State and local agencies' roles and responsibilities for O&M
- Standardizing criteria by which maintenance practices, procedures, and inspections are performed and reported
- Implementing strategies to adequately and reliably fund routine activities and streamline permitting

Some of the proposed activities may involve legislative action, new institutional arrangements involving local maintaining agencies, modifications to existing State programs, and additional or redirected funding.

DWR recognizes the importance of proper maintenance to protect State, local, and federal investments in the flood management system. However, maintenance activities alone do not meet current needs or legislative requirements for the CVFPP (e.g., urban level of protection, systemwide approach, and providing multiple benefits). This is highlighted in the evaluation conducted for the preliminary approach called "Achieve SPFC Design Flow Capacity."

The Achieve SPFC Design Flow Capacity preliminary approach focuses on reconstructing SPFC facilities to meet current engineering criteria without making major changes to facility footprints or operations. To achieve the design flow capacity, reconstruction is required because the original specifications focused primarily on levee prism geometry, and current evaluations have shown them to be insufficient in passing design flows if geotechnical and other engineering conditions (e.g., underseepage) are not improved. This approach was formulated to address legislation that required DWR to consider structural actions necessary to reconstruct SPFC facilities to their design standard (CWC Section 9614(g)). It also addresses

requests from stakeholders to consider reconstructing the existing flood management system in place, or without major modification to facility locations.

Based on an initial assessment, this preliminary approach is estimated to cost approximately $19 billion to $23 billion and take 30–35 years to implement. This approach would improve the reliability of SPFC facilities compared to existing conditions. However, in many locations, upstream levee reconstruction would increase peak flows and stages downstream because upstream levee failures would be reduced compared to existing conditions. Further, the level of protection would be highly variable throughout the system and would not be linked to the current public safety needs and legislated requirements, and to assets at risk within the floodplain. Consequently, this approach would only partially address the primary CVFPP goal of improving flood risk management.

Investments in SPFC reconstruction would initially reduce SPFC O&M costs, but long-term costs to maintain the system would remain high. Thus, this approach would only partially contribute to the goal of improving O&M. Opportunities to integrate ecosystem restoration and enhancement would be limited and would not contribute to improved ecosystem functions on a systemwide scale. There would also be few opportunities to promote multipurpose benefits including incorporating new groundwater recharge or other water-related benefits, and promoting ecosystem functions, recreation, or agricultural sustainability. Consequently, an approach focusing on maintenance, repair, and reconstruction of existing facilities would contribute in only a minor way to the supporting goals of multi-benefit projects. For additional details, see Master Response 6.

T_MIRAM1-04

See response to comment T_Miram1-03.

T_MIRAM1-05

See response to comment T_Miram1-03.

In regard to funding, as stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However,

most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA "alternatives" for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning. For additional details, see Master Response 15.

As stated in Master Response 12, the State is sensitive to the potential effects of repairs or improvements to SPFC facilities that may result in redirected hydraulic impacts upstream or downstream from these facilities, and is developing more detailed policies to minimize and mitigate potential impacts. Based on current evaluations (see Section 3.13; Attachment 8C, "Riverine Channel Evaluations"; and Attachment 8D, "Estuary Channel Evaluations," in Appendix A, "Central Valley Flood Protection Plan"),

implementing the SSIA as a whole would not result in adverse systemwide hydraulic effects, including any in the Delta. Peak floodflows may increase slightly (over current conditions) in certain reaches, but the expansion of conveyance capacity proposed in the SSIA would attenuate flood peaks and result generally in reduced peak flood stages throughout the system.

Future feasibility studies are needed to refine the proposed elements of the SSIA, and the ultimate configuration of facilities may vary from those presented in the 2012 CVFPP. Only at that time will the State have project-specific modeling results that indicate the specific magnitude and extent of hydraulic impacts, if any, from planned improvements within the system. Cost estimates for the SSIA in the 2012 CVFPP include an allowance for features to mitigate potential significant hydraulic impacts caused by project implementation.

The issue of potentially redirecting hydraulic impacts is also addressed in Section 3.13, "Hydrology," in the DPEIR under Impact HYD-2 (NTMA), Impact HYD-4 (NTMA), Impact HYD-2 (LTMA), and Impact HYD-4 (LTMA). As indicated in these impact discussions, any project proponent implementing a project consistent with the SSIA that would affect flood stage elevations would need to obtain various applicable permits before project implementation (such as Section 408 and 208.10 authorization from USACE and encroachment permits from the Board). The project proponent would need to analyze the potential for the project to locally impede flow or transfer flood risk by causing changes in river velocity, stage, or cross section. Projects would not be authorized if changes in water surface elevation, and thus flooding potential, would increase above the maximum allowable rise set by these agencies. If the design of a project would result in an unacceptable increase in flooding potential, a project redesign or other mitigation would be required to meet agency standards before the project could be authorized and implemented. For additional details, see Master Response 12.

T_MIRAM1-06

As stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions

identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable.

The PEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during

any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

As stated in Master Response 3, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and 3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed. For additional details, see Master Response 3.

As stated in Master Response 18, the CVFPP will be implemented in coordination with other FloodSAFE programs and projects that also address flood risk in the Delta, especially for tidal estuaries and for non-SPFC facilities. Among these programs and projects are the Delta Levee Maintenance Subventions Program, the Delta Levees Special Flood Control Projects, and the Delta Emergency Operations Plan. The CVFPP will be integrated with other large plans within the context of its primary goal to improve flood management in the SPFC planning area by considering an urban level of flood protection against a 200-year (0.5 percent annual chance) flood for urban and urbanizing areas; structural and nonstructural options for protecting small communities from a 100-year (1 percent annual chance) flood; and flood protection options for rural-agricultural areas, with a focus on integrated projects that achieve multiple benefits and help preserve rural-agricultural lands from urban development. Additional project-level study and coordination with local, State, and federal governments and agencies, and with local major programs and projects, is necessary to implement many of the elements proposed in the CVFPP. For example, the Yolo Bypass expansion would need to be implemented in coordination with the CVP and SWP Long-term Operations Criteria and Plan Biological Opinion and BDCP, in consultation with Yolo County's Natural Heritage Program and other programs that focus on the region. For additional details, see Master Response 18.

DPEIR Chapter 4.0 addresses the cumulative impacts of multiple projects that could interact with the CVFPP, including the BDCP. As stated in

Master Response 18, the CVFPP will be integrated with other large plans within the context of its primary goal to improve flood management in the SPFC planning area by considering an urban level of flood protection against a 200-year (0.5 percent annual chance) flood for urban and urbanizing areas; structural and nonstructural options for protecting small communities from a 100-year (1 percent annual chance) flood; and flood protection options for rural-agricultural areas, with a focus on integrated projects that achieve multiple benefits and help preserve rural-agricultural lands from urban development. Additional project-level study and coordination with local, State, and federal governments and agencies, and with local major programs and projects, is necessary to implement many of the elements proposed in the CVFPP. For example, the Yolo Bypass expansion would need to be implemented in coordination with the CVP and SWP Long-term Operations Criteria and Plan Biological Opinion and BDCP, in consultation with Yolo County's Natural Heritage Program and other programs that focus on the region.

T_MIRAM1-07

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars.

Anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction. For additional details, see Master Response 13. The availability of stakeholders is taken into account during the development of all DWR and Board public engagement processes, although it is often impossible to provide convenient opportunities for involvement for all involved.

T_MIRAM1-08

See response to comment T_Miram1-07. The comment provides a critique of a particular element of the early public involvement process during CVFPP development. The comment does not raise specific questions or

information regarding the content of the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_MIRAM1-09

See response to comment T_Miram1-07.

T_MIRAM1-10

The comment is a conversation between the Board and the commenter regarding the transfer of printed information. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_MIRAM2-01 MR. MIRAMONTES: Yeah. My name is Tim Miramontes. I'm a farmer and resident of Yolo County. I farm in Colusa County also. I farm in the bypass, the Yolo Bypass, where you're talking about expanding it all the way up to the Grimes area, which is in your maps of being in the floodplain.

So a few comments is widening the bypass is not the answer to California's flood problems. We need to get storage, which would help out with the flood problems and water shortages.

T_MIRAM2-02 There also needs to be some support for the FEMA NFIP reform for rural areas that you need to look at.

With these new flood maps and everything coming out, it's just almost impossible for a farming operation to expand or improve their operations on buildingwise with flood insurance.

T_MIRAM2-03 I'd also like to see more local -- involvement with local interests, county governments, cities, and rural residents. The outreach on this has -- like stated by Matt Rexroad, has been not well taken. There hasn't been -- I went to a meeting two years ago when this all started up, in a room about as big as this and there was two farmers allowed into the room with about 30 to 40 environmental and federal, State agency people. That doesn't seem like fair representation when the rural part is taking the brunt of this operation.

T_MIRAM2-04 There's also problems with this project, as far as the federal government is in debt, State governments are in debt, county governments are just the same boat. How is this project going to be funded? We don't see how it can spend $17 billion in a project.

T_MIRAM2-05 I do understand the nee for flood protection. I farm right next to the river. I farm inside the bypass. I understand that we need to have something, but just looking at expanding the bypasses to push water out of the State is not a good answer, I believe.

I also have a couple pictures of the mouth of the

Yolo Bypass that shows it all clogged up with trees. This shows how the maintenance from these -- in the -- DWR's maintenance in these bypasses is handled. With things like this happening, how are we supposed to put faith in you to keep our bypasses clean if you want to make them wider, and there's less money to keep these clean.

They can keep those.

I also have put a little signature pack with people of the same concerns of over 200 people from Grimes down to Woodland that are concerned about this too, that have not been able to come or too busy working and whatnot. But I'd like to turn this in, so that you can see that there is a big concern with how the project is going forward.

Thank you.

PRESIDENT EDGAR: Thanks you very much. If you'd just give that to Lorraine, we'll take a look at it. Thank you very much.

Tim Miramontes (Public Hearing, April 11, 2012)

Response

T_MIRAM2-01

As stated in Master Response 1, the Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass. For additional details, see Master Response 1.

As stated in Master Response 10, in developing the CVFPP and formulating the SSIA, DWR considered various forms of storage for flood management, including operational changes to existing reservoirs with flood storage, new or expanded flood storage in reservoirs, and storage in floodplains. Specifically, one of the preliminary approaches—Enhance Flood System Capacity—included enlarging the flood storage allocation of several multipurpose reservoirs to improve management of flood risks on lands protected by the SPFC. This evaluation found potential benefits from and opportunities for reservoir flood storage and operational changes, such as improving flexibility in managing hydrologic changes (such as climate change) and potentially offsetting the hydraulic effects of certain system improvements on downstream reaches. At the same time, these analyses addressed both the physical limitations of these opportunities and the potential negative effects of increasing flood-storage allocations on water supply and other beneficial uses. The analyses of reservoir storage and flood operations that were conducted in support of the 2012 CVFPP are

described in Attachment 8B in Appendix A, "Central Valley Flood Protection Plan."

Storage elements ultimately retained in the SSIA are based on preliminary systemwide analyses conducted for the 2012 CVFPP, legislative direction for the CVFPP, and the findings of prior and ongoing studies. Among those studies are ongoing surface storage investigations and prior local, State, and federal studies such as the Shasta Lake Water Resources Investigation, North-of-the-Delta Offstream Storage (Sites Reservoir), In-Delta Storage Program, Los Vaqueros Reservoir Expansion, and Upper San Joaquin River Basin Storage Investigation (Temperance Flat Reservoir). However, no new site-specific investigations of surface storage were included in the systemwide analyses conducted to support the 2012 CVFPP.

In the 2012 CVFPP, the SSIA includes coordinated reservoir operations aimed at making the most efficient and effective use of current flood storage allocations in existing reservoirs, and implementation of the authorized Folsom Dam Raise (see Section 3.5.4 of the CVFPP). These SSIA storage elements appropriately reflect the conceptual level of detail and systemwide focus of the 2012 CVFPP, without precluding future consideration of new or expanded storage by the State or local agencies. At this time, the SSIA does not include new reservoirs or expansion of storage (other than at Folsom Dam) solely for the purpose of flood management; however, DWR will continue to consider flood management in the context of, and as an objective of, its ongoing multi-benefit surface storage investigations and systemwide reoperation studies. Should these State investigations or other related efforts by local or federal agencies identify flood management as a component of a feasible reservoir storage project, this may be reflected in future updates to the CVFPP. For additional details, see Master Response 10.

T_MIRAM2-02

As stated in Master Response 3, the State supports efforts to reform FEMA's NFIP to more equitably reflect corresponding flood risks, including establishing a flood zone for agriculturally based communities to allow replacement of existing structures or reinvestment development in the floodplain. The State also supports identifying a special, lower-premium rate structure that reflects actual flood risks for agricultural buildings in rural-agricultural areas located in Special Flood Hazard Areas. The State will work with local flood management interests to pursue reform of the NFIP. For additional details, see Master Response 3.

T_MIRAM-03

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

The Board provided various opportunities for members of the public and agencies to comment on the public draft CVFPP, released in December 2011. Hearings were held in 2012 on April 5 (Sacramento), April 6 (Marysville), April 9 (Stockton), and April 11 (Woodland), and public comments were heard and discussed at both regular and special Board meetings. DWR also accepted comments on the DPEIR, which was released in early March 2012. More information on the Board's process for public review and plan adoption can be found on its Web site, http://www.cvfpb.ca.gov.

Anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction. For additional details, see Master Response 13.

A portion of the comment provides a critique of a particular element of the early public involvement process during CVFPP development. The comment does not raise specific questions or information regarding the content of the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_MIRAM2-04

As stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA "alternatives" for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management

activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

T_MIRAM2-05

As stated in Master Response 1, the existing bypass system in the Sacramento River Basin (including the Sutter and Yolo bypasses and associated inflow weirs) forms the central backbone of the Sacramento River Flood Control Project and redirects damaging floodflows away from the main channels of the Sacramento and Feather rivers. The considerable capacity of the bypass system (up to 490,000 cfs) also slows the movement of floods, effectively attenuating flood peaks and flows into the Delta. The existing bypass system also supports a vibrant seasonal agricultural economy and provides important habitat for multiple terrestrial and aquatic species. In the San Joaquin River Basin, the bypass system includes the Chowchilla, Eastside, and Mariposa bypasses.

The Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions. For additional details, see Master Response 1.

Additionally, as stated in Master Response 6, improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures).

The SSIA promotes efficient and sustainable long-term O&M practices through the following:

- Reforming and consolidating State and local agencies' roles and responsibilities for O&M
- Standardizing criteria by which maintenance practices, procedures, and inspections are performed and reported
- Implementing strategies to adequately and reliably fund routine activities and streamline permitting

Some of the proposed activities may involve legislative action, new institutional arrangements involving local maintaining agencies, modifications to existing State programs, and additional or redirected funding. For additional details, see Master Response 6.

T_MUNGER1-01

SUTTER COUNTY SUPERVISOR MUNGER: That's fine. I know it's very busy. So thank you, Mr. Edgar, Chairman, and Board for having us here and having this forum today. I think it's very informational. Everything brought before us is very informational. I don't care from one side to another, we need all the aspects brought out here and we can weigh it.

Having been on the Board when Dick Akin spoke earlier, I was there in the flood in 1997 in Meridian, and the hydraulics above the refuge was three feet like he said. And we're going to have the same scenario at Mossen Bridge if we come in with Cherokee Creek coming into the north and filling into that Butte Sink.

We've got an area at Mossen Bridge where it chokes down and you have habitat just below the bridge there, which is probably about 200 acres of habitat right there now. So we're going to have another area choked that will actually bring the flow higher up into the basin that we're going to have.

At that time, we also talked with the Corps about dredging. And anybody -- and like most of your farmers out here, if they have a problem with a ditch, they dredge. But we had a colonel come in to talk to us about it. He didn't really understand this farmer's aspect if you've got a plugged ditch that to clean it is only common

sense. You don't let it -- you choke it up and come back and flood your agriculture.

And a lot of this is, what we're working for, if we can go back in and dredge, and open our capacity instead of spending billions, you know, on what we want to do now by widening. Go in and spend millions and clean it up. Like our Sacramento River, you can't hardly bring a boat up the Sacramento river. You used to bring barges clear up to Colusa. And they're used to be, at one time - I tried to explain to this Colonel - that you could bring a paddle boat to Yuba City. And you cannot bring a paddle boat to Yuba City. You can't hardly bring a boat to Yuba City. And that cleans the channel ways, then you've got the clean flows.

T_MUNGER1-02 And a lot of it goes along with habitat and we know what the mitigation is now. What's the mitigation going to be in 20 or 30 years with our children? Every time we do something we have to have habitat mitigation.

T_MUNGER1-03 And it's so costly. And that's -- two-thirds of our projects are mitigation, and that's a sad thing about it. And we need to work towards doing the job and replacing it. If we're going to replace the levee in place, let's do it, but why do we have to mitigate for something that's already there.

Thank you.

Larry Munger, Sutter County Supervisor (Public Hearing, April 6, 2012)

Response

T_MUNGER1-01

As stated in Master Response 6, DWR recognizes the importance of proper maintenance to protect State, local, and federal investments in the flood management system. However, maintenance activities alone do not meet current needs or legislative requirements for the CVFPP (e.g., urban level of protection, systemwide approach, and providing multiple benefits). This is highlighted in the evaluation conducted for the preliminary approach called "Achieve SPFC Design Flow Capacity."

The Achieve SPFC Design Flow Capacity preliminary approach focuses on reconstructing SPFC facilities to meet current engineering criteria without making major changes to facility footprints or operations. To achieve the design flow capacity, reconstruction is required because the original specifications focused primarily on levee prism geometry, and current evaluations have shown them to be insufficient in passing design flows if geotechnical and other engineering conditions (e.g., underseepage) are not improved. This approach was formulated to address legislation that required DWR to consider structural actions necessary to reconstruct SPFC facilities to their design standard (CWC Section 9614(g)). It also addresses requests from stakeholders to consider reconstructing the existing flood management system in place, or without major modification to facility locations.

Improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures).

The SSIA promotes efficient and sustainable long-term O&M practices through the following:

- Reforming and consolidating State and local agencies' roles and responsibilities for O&M
- Standardizing criteria by which maintenance practices, procedures, and inspections are performed and reported

- Implementing strategies to adequately and reliably fund routine activities and streamline permitting

Some of the proposed activities may involve legislative action, new institutional arrangements involving local maintaining agencies, modifications to existing State programs, and additional or redirected funding. For additional details, see Master Response 6.

As stated in Master Response 12, the State is sensitive to the potential effects of repairs or improvements to SPFC facilities that may result in redirected hydraulic impacts upstream or downstream from these facilities, and is developing more detailed policies to minimize and mitigate potential impacts. Based on current evaluations (see Section 3.13; Attachment 8C, "Riverine Channel Evaluations"; and Attachment 8D, "Estuary Channel Evaluations," in Appendix A, "Central Valley Flood Protection Plan"), implementing the SSIA as a whole would not result in adverse systemwide hydraulic effects, including any in the Delta. Peak floodflows may increase slightly (over current conditions) in certain reaches, but the expansion of conveyance capacity proposed in the SSIA would attenuate flood peaks and result generally in reduced peak flood stages throughout the system.

Future feasibility studies are needed to refine the proposed elements of the SSIA, and the ultimate configuration of facilities may vary from those presented in the 2012 CVFPP. Only at that time will the State have project-specific modeling results that indicate the specific magnitude and extent of hydraulic impacts, if any, from planned improvements within the system. Cost estimates for the SSIA in the 2012 CVFPP include an allowance for features to mitigate potential significant hydraulic impacts caused by project implementation.

The issue of potentially redirecting hydraulic impacts is also addressed in Section 3.13, "Hydrology," in the DPEIR under Impact HYD-2 (NTMA), Impact HYD-4 (NTMA), Impact HYD-2 (LTMA), and Impact HYD-4 (LTMA). As indicated in these impact discussions, any project proponent implementing a project consistent with the SSIA that would affect flood stage elevations would need to obtain various applicable permits before project implementation (such as Section 408 and 208.10 authorization from USACE and encroachment permits from the Board). The project proponent would need to analyze the potential for the project to locally impede flow or transfer flood risk by causing changes in river velocity, stage, or cross section. Projects would not be authorized if changes in water surface elevation, and thus flooding potential, would increase above the maximum allowable rise set by these agencies. If the design of a project would result in an unacceptable increase in flooding potential, a project redesign or other mitigation would be required to meet agency standards before the

project could be authorized and implemented. For additional details, see Master Response 12.

T_MUNGER1-02

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important shaded riverine aquatic habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework. For additional details, see Master Response 7.

Mitigation for biological resources are most typically driven by the need for compliance with existing State and federal laws, including the federal ESA, CESA, CWA, and CEQA.

T_MUNGER1-03

As stated in response to comment T_MUNGER1-02, mitigation for impacts on biological resources are most typically driven by the need for compliance with existing State and federal laws, including the federal ESA,

CESA, CWA, and CEQA. Additional laws and regulations may also generate the need for mitigation, such as the National Historic Preservation Act and the California Fish and Game Code. The comment is noted.

T_NEUH1-01

MR. NEUHARTH: First of all, my name's Tim Neuharth. I'm a farmer on Sutter Island up near Courtland, California. Been there since 1848. Have watched a lot of water go past the levees over there.

BOARD MEMBER COUNTRYMAN: Wait a second.

MR. NEUHARTH: I haven't personally been there since 1848.

(Laughter.)

MR. NEUHARTH: I have to set that record straight for the stenographer. But our family has. Sorry.

I ran across this little handout you have here today. And if this is the appropriate time to bring this up, then sobeit.

It says, "The staff provided comments on potential adverse impacts. The planting of vegetation may not be possible if there would be a significant rise in water surface elevation that would cause any significant increase in risk to public safety."

I'm here to tell you that in watching the river go by for many a year and watching many a flood water go by for many a year, vegetation on these levees is of the utmost importance. The vegetation on these levees, be it small or large, from oak trees and sycamore trees all the way down to Bermuda grass, snake grass and what have you, all provide a root system that essentially provide the same level of integrity as putting rebar in concrete. If any of you are familiar with construction processes, rebar in concrete is absolutely essential to keep it from cracking and moving beyond where it was intended to be.

The root systems on this vegetation does exactly that. They provide the integrity, the holding power to keep levee material in place any time you, one, have water moving across it, two, you have human traffic going across it. It is direly important. When we remove that vegetation, there is no longer any rebar in the dirt, in the levee system to hold that soil in place. And when the high water comes up or any water comes up, it simply just scours it off, and away it goes. And then the levee

continues to slough off and slough off and slough off. We've watched this happen many a time due to vegetation removal projects that are done by different agencies.

It is not a happy sight to see your levee go sloughing off down into the water because there's nothing there to hold it.

T_NEUH1-02 The other thing that that vegetation provides is habitat; a lot of habitat for a lot of creatures, both terrestrial and aquatic. It provides that level of home, if you will, habitat for creatures as -- Swainson's Hawks, red-tailed hawks, owls -- every kind of creature you can imagine, and the skunks and the raccoons and everything else out there.

It provides shade for the fish, overhanging branches and so forth.

T_NEUH1-03 What we do need on the levees in addition to that is rock. We have to have rock on these levees, mainly because you have boat traffic that is incredibly insensitive to the fragile levees we have. They produce wakes anywhere from a foot to four feet high that come off of a boat, come off of a Bayliner, go washing out to the bank, hit the bank and actually ricochet off the bank and go right back out and go to the opposite side of the waterway.

It is a process that goes on 24-7 out there with

the boat traffic. And unless you have a rock shield on those levees to shield the embankment, it just continues to undermine, to undermine, to undermine and undermine. And the vegetation cannot handle that. It won't do it. I can show you any number of sites where the vegetation has been virtually devoid of any soil to hold it in place. That's why a lot of trees fall over into the river. It's not that they're old and decrepit. They've lost their support. And their support is lost because of wave action from boats. So put the rock on there. It's a essential.

But after you've done that, leave the thing alone and let Mother Nature establish -- the vegetation that was there in the first place, to reestablish that and provide again the reinforcement of the levees, the habitat for the species and so on.

I urge you to take that into consideration. And I thank you for your time. Thank you.

PRESIDENT EDGAR: Thank you.

Tim Neuharth (Public Hearing, April 9, 2012)

Response

T_NEUH1-01

As stated in Master Response 16, USACE ETL 1110-2-571, *Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams and Appurtenant Structures* (2009), treats vegetation as introducing unacceptable uncertainties into levee performance. USACE direction in ETL 1110-2-571 states that these uncertainties must be addressed through vegetation removal and/or engineering works. A preliminary assessment of USACE's approach by DWR concluded that the complete removal of existing woody vegetation along the 1,600-mile legacy Central Valley levee system would be enormously expensive, would divert investments away from more critical threats to levee integrity, and would be environmentally devastating. State and federal resource agencies find that the ETL itself, and the potential impacts of widespread vegetation removal with strict enforcement of that regulation, pose a major threat to protected species and their recovery. Similarly, local agencies are concerned about negative impacts on public safety from rigid ETL compliance if limited financial resources were redirected to lower priority risks. The CVFPP proposes the State's comprehensive, integrated VMS for levees to meet both public safety and environmental goals in the Central Valley.

USACE has proposed a policy for issuing variances from the strict vegetation removal requirements of the ETL. The State intends for the VMS, including LCM, to serve as the basis for a regional variance application that would generally allow vegetation to remain on the waterside of Central Valley levees up to a line 20 feet below the waterside levee crown. The State considers this vegetation to be particularly important for providing habitat while also promoting levee integrity. Although the most recent version of USACE's draft variance policy casts considerable doubt on the viability of such a regional variance that would achieve the State's objective of retaining most waterside vegetation, the VMS has been retained in the CVFPP to support a continued dialogue with USACE, including a likely variance application.

The State will implement a comprehensive, integrated VMS in the Central Valley that both meets public safety goals and protects and enhances sensitive habitats in the Sacramento and San Joaquin valleys. The CVFPP's VMS represents the State's current approach to addressing levee vegetation in the context of USACE ETL 1110-2-571 governing vegetation on federal flood management facilities. However, DWR continues to advocate having USACE participate as a true partner in addressing legacy levee vegetation

issues, jointly considering the environmental and risk-reduction implications of vegetation remediation within the context of prudent expenditure of limited public funds. DWR will continue a dialogue with USACE regarding plan formulation concepts that recognize the agencies' shared responsibility for addressing vegetation issues (along with traditional levee risk factors), within a systemwide risk-informed context intended to enable continued progress on critical cost-shared flood system improvements. For additional details, see Master Response 16.

In addition, DPEIR Section 3.5, "Biological Resources—Aquatic," and Section 3.6, "Biological Resources—Terrestrial," address the potential losses of levee vegetation that could result from CVFPP implementation and provide mitigation to reduce these impacts. In most cases, impacts from the removal of levee vegetation can be reduced to a less-than-significant level; however, the DPEIR acknowledges that in some instances the establishment of compensatory habitat may not be possible in the vicinity of the removed vegetation, and there could be localized degradation of habitat quality.

T_NEUH1-02

This comment is similar to comment T_NEUH1-01. See response to comment T_NEUH1-01, above. Additionally, as stated in Master Response 16, the VMS in the CVFPP includes a long-term adaptive vegetation LCM strategy. As explained in the CVFPP and DPEIR, the LCM strategy generally will not apply to waterside vegetation up to a line 20 feet below the levee crown, and that waterside vegetation will be retained. Although it is true that implementing the LCM strategy will result in the gradual loss of important terrestrial and upper waterside riparian habitat throughout the SPFC levee system, the CVFPP's VMS includes the early establishment of riparian forest corridors that are expected to result in a net gain of this habitat over time. These riparian forest corridors will be established adjacent to existing and new levees such that riparian corridor functions and wildlife habitat will be maintained or improved for the system as a whole. This approach will allow replacement habitat to develop and mature over time, while existing trees within the vegetation management zone are allowed to live out their normal life cycles on the levee slopes.

Levee vegetation subject to removal through LCM will be quantified using the best available information. Specific rates and species types for replanting and other details of implementation of LCM will be determined through collaboration with the appropriate agencies as part of the long-term Conservation Strategy. Appropriate compensation and/or mitigation for the loss of habitat will also be addressed, in consultation with the resource agencies, as the Conservation Strategy is developed.

The CVFPP's VMS is an adaptive approach, and ongoing and future research will include evaluating effects on riparian ecosystem functions from eliminating natural recruitment under LCM. This research may include a monitoring program to determine whether LCM affects species composition and recruitment, and the survival of lower waterside vegetation.

Also, the vegetation loss under the LCM strategy generally will occur passively, over a period of decades. The State is assuming that LCM will be a necessary, and generally sufficient, condition for USACE to issue a regional vegetation variance that will allow most waterside vegetation to be retained. If this assumption proves incorrect and an adequate vegetation variance is not forthcoming from USACE, the appropriateness of the LCM strategy could be reevaluated. Generally, the effects of applying the LCM strategy in the near term, while a vegetation variance is being pursued, should be fully reversible if the strategy is modified or eliminated at a later date. For additional details, see Master Response 16.

T_NEUH1-03

The SSIA includes the use of rock, riprap, and other erosion control measures where needed and appropriate to preserve levee integrity. Preventing and repairing erosion is a critical element of flood facility O&M. As stated in Master Response 6, improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures).

The SSIA promotes efficient and sustainable long-term O&M practices through the following:

- Reforming and consolidating State and local agencies' roles and responsibilities for O&M
- Standardizing criteria by which maintenance practices, procedures, and inspections are performed and reported
- Implementing strategies to adequately and reliably fund routine activities and streamline permitting

Some of the proposed activities may involve legislative action, new institutional arrangements involving local maintaining agencies,

modifications to existing State programs, and additional or redirected funding. For additional details, see Master Response 6.

T_NICOLETTI1

T_NICOLETTI1-01

YUBA COUNTY SUPERVISOR NICOLETTI: Good morning. I'm John Nicoletti. I'm on the Board of Supervisor for the County of Yuba. I'm also a director for Three Rivers Levee Improvement Authority. I'm also a director for Yuba

County Water Agency.

PRESIDENT EDGAR: Thank you for hosting the facilities today, John. Appreciate it.

T_NICOLETTI1-02

YUBA COUNTY SUPERVISOR NICOLETTI: We understand very well that we get two-thirds of the annual rainfall in California here, and that two-thirds of the population lives at the other end. There's a lot of pressure in those water systems, mainly man caused, to get the conveyance and to get environmental considerations involved.

T_NICOLETTI1-03

I think the draft plan that you're putting forward includes elements that will benefit Yuba County, including the rural levee program, and especially for us, the modifications to the outlets at New Bullards Bar, goes a long way to helping the mission that we've been working on.

I also think we have an excellent opportunity to work together and improve public safety in the Yuba and Sutter region. Having come though the Lower Yuba Accord process, we feel that there is a way forward. I do share the concerns about the Cherokee Bypass and the widening of the Sutter Bypass as well.

T_NICOLETTI1-04

T_NICOLETTI1-05

We really just want to make sure that we can work closely with, you know, your Board, with DWR to confirm that these projects do continue to make sense for all of

us involved.

We've had great successes. We absolutely appreciate our partnerships. We've had good projects here in Yuba County, both with your Board and with DWR. We want to use that strength and share that strength. And we hope that we can work closely together to help implement this plan.

Thanks.

Yuba County Supervisor, John Nicoletti (Public Hearing, April 6, 2012)

Response

T_NICOLETTI1-01

The comment is introductory and identifies the commenter's professional affiliations. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_NICOLETTI1-02

The comment summarizes water management conditions in California. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_NICOLETTI1-03

DWR and the Board appreciate Supervisor Nicoletti's acknowledgement of the benefits the CVFPP would provide to Yuba County and look forward to continued coordination with him during CVFPP implementation. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_NICOLETTI1-04

As stated in Master Response 1, the existing bypass system in the Sacramento River Basin (including the Sutter and Yolo bypasses and associated inflow weirs) forms the central backbone of the Sacramento River Flood Control Project and redirects damaging floodflows away from the main channels of the Sacramento and Feather rivers. The considerable capacity of the bypass system (up to 490,000 cfs) also slows the movement of floods, effectively attenuating flood peaks and flows into the Delta. The existing bypass system also supports a vibrant seasonal agricultural economy and provides important habitat for multiple terrestrial and aquatic species. In the San Joaquin River Basin, the bypass system includes the Chowchilla, Eastside, and Mariposa bypasses.

The Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the

Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities

include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

T_NICOLETTI1-05

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form “alternatives” for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be

conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_NIELSEN1-01

ASSEMBLYMAN NIELSEN: Chairman Edgar and esteemed members, I do thank you for the opportunity to come and comment before you today.

PRESIDENT EDGAR: Good to see you, Jim.

T_NIELSEN1-02

ASSEMBLYMAN NIELSEN: I'm again Jim Nielsen and I represent the Second Assembly District.

I come from one perspective as a farmer from the Sacramento and San Joaquin valleys who has farmed up and

down those valleys and been an agricultural consultant therein, who has represented in the State Legislature north and central Delta and all of the Sacramento River and its watersheds, and is author of major legislation affecting this area, including Senate Bill 1086, the management plan for the Sacramento River, the Sacramento valley studies legislation, and the Colusa Basin Drainage District.

And I want to thank Board Member Dolan in her new duties for redirecting the focus at the forum back on the intent of the author. Oftentimes, whatever the author intended gets drifted off over the years in implementation. And that's a clear and present danger even with what we are discussing right here.

T_NIELSEN1-03

Senate Bill 1086, the Sacramento Forum, was a management plan for the Sacramento River, but one that was promulgated to be particularly sensitive to local communities, to local elected officials, local landowners, and agricultural, and particularly focused on a forum and means to get the competing and contradictory often agencies of State and federal government together with those local parties with the intent of fostering communication and cooperation. And I think that largely has happened over the years with that construct, because it's been applied elsewhere. That's one of my

perspectives.

T_NIELSEN1-04

I also come before you again as a legislator in that regard, but also as the founding president of the California Alliance to Protect Private Property Rights. We were founded, first, to stop the County of Yolo from, by eminent domain taking over a 17,000-acre ranch, most of when was in the bypass. And all of the designs that were purported to be applied to that bypass in the future were contradictory and would compromise the flood control purposes, and put many people at risk, and also destroy agricultural. We must not let that happen.

T_NIELSEN1-05

I would speak of process too briefly. And I compliment you. This is off to a very good start. What I've heard hear so far, Mr. Chairman, I much appreciate. But government now has done so much more behind closed doors, particularly the California State Legislature. And the limiting of input in public, even at forum like this, is disturbing to me. The issues that are before you, us, other bodies, affect their lives in enormous and drastic ways, and they deserve full latitude, the public does, to know. And again, the Legislature now is the first and worst cooperator.

I would actually ask you to do -- aggressively be engaged in the front end, bringing people to the bear. I'm aware of Yolo County's concern about the Fremont Weir

T_NIELSEN1-06

and not being involved early enough in the development of those ideas. To the degree that you can with your limited resources, I would encourage you to do as much of that as you possibly could.

One of the landmark treatises on this, it's one of my favorite books, the battle for the inland sea. I study it all the time and I keep going back to it, almost like the Bible for water. And I'm delighted to have had my small part in it as a successor in some of that vision.

But we must learn the lessons of history. And I will argue that the levees and the bypasses have a more specific purpose of protecting life and property. They ought not have, other than as a de minimis purpose, other things, such as habitat, recreating, et cetera.

The accumulation of debris in our bypasses has long been a problem, and the removal of those is critically important to preserve the integrity of them, as well as the levees. Sometimes we've been successful in accomplishing that over years and sometimes we haven't.

But it disturbed me the great glee that so many of embraced taking over the Conway Ranch and putting all these parks and all these pathways and all this habitat at the south end of the Yolo Bypass, the bottle stopper of all bottle stoppers.

Those purposes must be de minimis. And it

somewhat concerns me taking some 40,000 acres out of agricultural land, increasing habitat by some 10,000 acres in these areas. I argue that should be a very de minimis reason and purpose and action item in the future, because those are not compatible with the flood control purposes and the integrity of those levees and those bypasses that are so important.

And if you want to have a classic picture of it, drive between Davis and Sacramento on I-80. You have the Yolo Causeway, quite an impediment, a necessary impediment, to flows. But embracing that bypass on either side is a marvelous wildlife habitat. As I drive by it frequently, I see the accumulation of material in this wonderful wildlife habitat area.

I argue that's not sound flood control management or use of that bypass. And even the County of Yolo is very concerned of the designs that the Delta Stewardship Council and the Bay Delta Conservation Plan has for mitigation of environmental concerns in the Delta applied to the southern end of the Yolo Bypass. That does not make good sense.

T_NIELSEN1-07

I'm encouraged by what I've seen here today in terms of your sensitivity to that local input, the local control, but not only to have that input, but that that input be heeded.

T_NIELSEN1-08

One of the greatest problems we have in government is the lack of trust in government. Now, I'll argue that the Public Trust Doctrine applied in water has been overextended considerably over the years. That's not the one I'm talking about. I'm talking about people being able to trust the Government that represents them, and they have good cause not to, particularly with the development of a massive impediment of bureaucracy.

T_NIELSEN1-09

I mentioned one of the purposes of 1086 was the cooperation between State, federal, local, individuals and authorities. That's always a problem. I would hope at all levels we can achieve better in the future, with the federal government not arrogantly saying to the State you must do it our way; the State telling local government you must do it our way; but to see a much more cooperative attitude ahead.

I think that we do have some great opportunity here, ladies and gentlemen. We certainly have a crisis. It's not the crisis to end all crises. And by the way, the Delta has always been in a crisis, ever since I've been around.

I have to give you something that gives me a smile about science. And I appreciate the fastidiousness of Mr. Villines and Ms. Suarez heeding and mindful of some of the economic impacts and the interpretations and such

and good science.

In the water debate a couple years ago, the issue was that one of the scientists came and said the problem with the Delta is we needed more salt water coming up the river, and that would solve the problem with the Delta if more salt -- and I was stunned. I said Dr. -- I want name him -- all my years as being involved in the Delta, I have never heard that theory espoused. In fact, to the contrary. What magic has occurred to change this dynamic and paradigm? I must, sir, question your science.

But be careful and be fastidious about it, ladies and gentlemen. These are legitimate concerns, and I will indicate to you that a lot of folks around California are very concerned about their government. And therefore, everything that goes on, they're concerned and distrustful about.

You've shown them here today an openmindedness and a respect for that. I ask you to continue to be so sensitive, so concerned, and inculcate and incorporate some of their suggestions and ideas in what you ultimately recommend.

T_NIELSEN1-10

And I thank you very much for your dedication. You are stewards of the future for our grandchildren. This is not about now. It's about 25 and 50 years from now.

Thank you for the opportunity.

PRESIDENT EDGAR: Thank you very much, Jim. Thank you.

Second Assembly District, Jim Nielsen (Public Hearing, April 6, 2012)

Response

T_NIELSEN1-01

The comment is introductory. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_NIELSEN1-02

The comment summarizes past events unrelated to the CVFPP. The comment does not raise specific questions or information regarding the CVFPP or adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_NIELSEN1-03

The comment summarizes past events unrelated to the CVFPP. The comment does not raise specific questions or information regarding the CVFPP or adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_NIELSEN1-04

As stated in Master Response 1, the existing bypass system in the Sacramento River Basin (including the Sutter and Yolo bypasses and associated inflow weirs) forms the central backbone of the Sacramento River Flood Control Project and redirects damaging floodflows away from the main channels of the Sacramento and Feather rivers. The considerable capacity of the bypass system (up to 490,000 cfs) also slows the movement of floods, effectively attenuating flood peaks and flows into the Delta. The existing bypass system also supports a vibrant seasonal agricultural economy and provides important habitat for multiple terrestrial and aquatic species. In the San Joaquin River Basin, the bypass system includes the Chowchilla, Eastside, and Mariposa bypasses.

The Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC, Section 9616(a)(2)). Bypasses

have served an essential role in providing these functions. For more details, see Master Response 1.

As stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

The DPEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For more details, see Master Response 2.

T_NIELSEN1-05

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

Anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These

combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For more details, see Master Response 13.

T_NIELSEN1-06

As stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

A portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of levees in rural areas. For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements.

The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable. For more details, see Master Response 2.

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-

agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important shaded riverine aquatic habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework. For more details, see Master Response 7.

As stated in Master Response 6, improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures).

The SSIA promotes efficient and sustainable long-term O&M practices through the following:

- Reforming and consolidating State and local agencies' roles and responsibilities for O&M
- Standardizing criteria by which maintenance practices, procedures, and inspections are performed and reported
- Implementing strategies to adequately and reliably fund routine activities and streamline permitting

Some of the proposed activities may involve legislative action, new institutional arrangements involving local maintaining agencies, modifications to existing State programs, and additional or redirected funding. For additional details, see Master Response 6.

As stated in Master Response 12, the State is sensitive to the potential effects of repairs or improvements to SPFC facilities that may result in redirected hydraulic impacts upstream or downstream from these facilities, and is developing more detailed policies to minimize and mitigate potential impacts. Based on current evaluations (see Section 3.13; Attachment 8C, "Riverine Channel Evaluations"; and Attachment 8D, "Estuary Channel Evaluations," in Appendix A, "Central Valley Flood Protection Plan"), implementing the SSIA as a whole would not result in adverse systemwide hydraulic effects, including any in the Delta. Peak floodflows may increase slightly (over current conditions) in certain reaches, but the expansion of conveyance capacity proposed in the SSIA would attenuate flood peaks and result generally in reduced peak flood stages throughout the system.

Future feasibility studies are needed to refine the proposed elements of the SSIA, and the ultimate configuration of facilities may vary from those presented in the 2012 CVFPP. Only at that time will the State have project-specific modeling results that indicate the specific magnitude and extent of hydraulic impacts, if any, from planned improvements within the system. Cost estimates for the SSIA in the 2012 CVFPP include an allowance for features to mitigate potential significant hydraulic impacts caused by project implementation.

The issue of potentially redirecting hydraulic impacts is also addressed in Section 3.13, "Hydrology," in the DPEIR under Impact HYD-2 (NTMA), Impact HYD-4 (NTMA), Impact HYD-2 (LTMA), and Impact HYD-4 (LTMA). As indicated in these impact discussions, any project proponent implementing a project consistent with the SSIA that would affect flood stage elevations would need to obtain various applicable permits before project implementation (such as Section 408 and 208.10 authorization from USACE and encroachment permits from the Board). The project proponent would need to analyze the potential for the project to locally impede flow or transfer flood risk by causing changes in river velocity, stage, or cross section. Projects would not be authorized if changes in water surface elevation, and thus flooding potential, would increase above the maximum allowable rise set by these agencies. If the design of a project would result in an unacceptable increase in flooding potential, a project redesign or other mitigation would be required to meet agency standards before the project could be authorized and implemented. For additional details, see Master Response 12.

Local HCPs can be countywide initiatives or can be implemented in response to proposed development. The main objectives of these plans are to protect natural resources, including species and habitat, and to enhance coordination and collaboration of development stakeholders.

Should a place-based project be defined and pursued as part of the proposed program, and should the CEQA lead agency be subject to the authority of local jurisdictions, the applicable county and city policies and ordinances would be addressed in a project-level CEQA document as necessary. Planting vegetation in the floodway may not be authorized by the Board, USACE, or other agencies if the vegetation would impede floodflows sufficiently that a rise in water surface elevation would cause a significant increase in risk to public safety.

See response to comment T_NIELSEN1-05, above, regarding past and future public outreach efforts related to the CVFPP.

T_NIELSEN1-07

See response to comment T_NIELSEN1-05, above, regarding past and future public outreach and coordination efforts related to the CVFPP.

T_NIELSEN1-08

The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_NIELSEN1-09

The comment does not raise specific questions or information regarding the DVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_NIELSEN1-10

DWR and the Board appreciate Assemblyman Nielsen’s participation in the hearing. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_NOMELL1-01 MR. NOMELLINI: Good morning. How are you? I'm I'm the secretary and attorney for a number of reclamation districts and therefore interface with these flood control plans, both on the urban level as well as the agricultural level for the ag districts.

I must apologize for not having read the entirety of the documents involved. I've skimmed them in general. I see positive aspects. But I'd like to make a couple of comments of what I think are important. And I hope they're incorporated in here, but they may not be.

First of all, the viability of local agencies to participate with you, the State, and the Federal Government depends on the economic well-being of the community.

Where we raise our money is from assessments, benefit assessments. And under the California Constitution, any benefit assessment that we have where we raise above our present level has to be approved through what they call an assessment ballot proceeding. And that means that those who have to pay the bill get to in effect

vote on that. And if there's a majority against it, it does not pass.

Now, in the urban agency that I'm particularly involved in, we had two benefit assessment ballot proceedings, both of which were successful. But we found that there's a limited ability to pay based on the viability of the community. And I was particularly surprised that a hundred dollar assessment on residential units per year brought forward some very -- I think very honest and forthright protests by people who said they just couldn't afford to pay that.

And I think we have the mortgage crisis and things like that are involved. But the fair market value of the property that we have in our communities is the basis upon which the local agencies are going to draw. Now, we don't levee an assessment based on value. But if property values go down, the people can't afford to make the payments, and commercial and industrial as well.

So I worry about the effect of the implementation of picking a 200-year level of protection and then making the land-use agency -- and I don't represent land-use agencies. We maintain the levees. But the land-use agencies are the ones that control what goes on. And our communities are very dependent upon development. Economically, whether we like it or not, they're dependent

on the progress of development.

So if you bring development to a halt and there's this tension, should we improve levees that protect urban areas -- and in particular the area I represent has 50,000 residents and $4 billion of property value. I think it's a no-brainer that we have no choice but to protect those areas. But there's this tension that maybe we shouldn't protect these areas, because more development might move in behind this levee system in the yet-undeveloped portion of the community. And in my opinion, if you restrict that, you will cause the local ability to pay to go away. And I just want to tell you that's my feeling based on experience.

T_NOMELL1-02

The second thing that I wanted to mention is very difficult for us, is this tension between the Corps of Engineers and the State of California; not only over the engineering technical letter on vegetation, but the inspection criteria is different. And I know in the report it says we should strive to get a uniform inspection. And then that is absolutely essential because we have the Corps disqualifying districts based on a different criteria than the State.

The disqualification by the Corps, in my view, is very unfortunate, it is not justified, and probably surprises the State as well. But that means that the

community is disqualified from federal assistance to come back from a flood, a rehabilitation, because FEMA will not apply its emergency relief if the Corps jurisdiction applies. And the Corps is using its inspection criteria as a basis for disqualification. Very serious problem that we all face, State and locals. And we need to address that.

T_NOMELL1-03 Another point I'd like to make is this idea that habitat restoration -- and our people are not against leaving the vegetation on the levees, and maybe even improving some of it. But we have to -- you know, where do you want to leave it? And we think we've been responsible over the years with State inspection and this and that. But, you know, Corps wants us to bring it down. But we agree -- or I agree with the report that says the lower vegetation -- you know, why can't you leave that?

T_NOMELL1-04 The idea that the fisheries that are in great crisis in the Delta watershed are somehow tied to habitat restoration in the Delta, I've looked very hard at that and looked at the declines of the fisheries, and they don't correlate. That doesn't mean we shouldn't have habitat. But it doesn't correlate to flooded areas in the Delta. And, in fact, we have had in recent years during the, you know, most direct collapses greater flooded areas in the Delta, for example, in the bottom of the Yolo

Bypass.

So I have diligently tried to understand that and I've gone to some of these meetings and asked questions, "Well, is it better" -- and we're focusing in on salmon -- "is it better for salmon to go out into a shallow floodplain or not?" And there's this slide that's put up, I call it the fat salmon, skinny salmon slide.

And so I had one of my employees gather up the studies so I could look at them. Well, the fat salmon, skinny salmon slide is based on a study where they put some smolts -- salmon smolts in cages, some of them in the channel and some of them off to the side. The fish in the channel had to keep swimming against the current, whereas the fish in the shallows didn't have to swim against the current. So further study is needed.

Also the cages protected these fish against predation.

So the studies, if you look at them -- you've got to be careful you jump to the conclusion that that slide would indicate. But predation and stranding are recognized clearly as something that hasn't been studied. So the automatic assumption that we're doing something very good for salmon by inundating these areas is not supported in my opinion by the studies to date.

The other thing is, there was a study done by a

T_NOMELL1-05

Mr. Vogel that's on the David Guy's website for the -- what is it, the Northern something or other --

BOARD MEMBER COUNTRYMAN: NCWA.

MR. NOMELLINI: -- water agency -- NCWA.

And it was interesting to me after my investigation as a non-biologist of this biology that the increased tidal prism created by flooding lower Liberty created a greater intrusion of salinity on the flood tide and a greater flow on the ebb tide. And the salmon that were migrating down the Sacramento River were taken out of their migration route and brought back up into the lower end of the bypass. And that study would indicate, and it does say, you've got to study this further as to whether or not there's a true benefit.

Now, once you get out of the tidal zone and up above the Delta, it may be different. I don't know. But I looked at those studies that have been pointed to down in the lower end.

T_NOMELL1-06 Last point I want to make is sea level rise - 55 inches. Go to the NOAA site and look at the sea level gauge information. Last 150 years at the Golden Gate, about 8 inches.

More importantly, last hundred years, a comparison at Golden Gate to Alameda, Alameda is less than 4 inches. Why?

Short-term rises in sea level due to surges and even tsunamis affect the gauge at the Golden Gate differently than they do the gauge at Alameda, because what comes through the Golden Gate spreads out. And if it's short duration, the gauge at Alameda doesn't reflect that height.

There's a study on a tsunami of 43 feet at the Golden Gate. When it hits Berkeley and Emeryville, it's like 21 feet, at Alviso and San Pablo Bay it's like 4 feet.

When we translate those elevations up into the Delta, the Delta pool -- and I understand the -- I think the statute says 55 inches. But there is no study that looks to me like it's scientifically done of trying to translate those events all the way into the Delta. It needs to be done if it's going to guide our investment, and it should be done.

The other thing is, if you look at the gauges at the NOAA site, Alaska -- the gauges in Alaska went down like 4 feet. Now, they're not using the same data point. You know, it's obviously they can't be using one point on earth that they say is fixed and then comparing all these gauge readings.

So science that we have to guide us needs to be at least recognized for its inadequacy. And I would say

when we talk about spending billions and billions of dollars, it would be helpful to all of us to go in and try and be more scientific rather than just take these figures. And the Legislature can do what it wants. And it came up with 55 inches or whatever. But I think it's pretty reckless to be planning based on 55 inches. It ought to be a bookmark at one end. And then we ought to try and use some other judgment in between.

T_NOMELL1-07 Anyway, I appreciate it. I apologize for not being more diligent. I will try to be more diligent. But the time does not permit most of us to read through this volume of material and do a responsible job. I know there's deadlines. But before you adopt your urban levee -- or urban level of protection plan. And for whatever that is, if you do have some flexibility, give us more time to get into the detail. If you don't have flexibility, we'll live with it and probably just struggle through it.

Thank you. I'd be happy to answer questions.

PRESIDENT EDGAR: Any questions?

Okay. Thank you, Dante.

Dante Nomellini (Public Hearing, April 9, 2012—#1)

Response

T_NOMELL1-01

The comment expresses an opinion about the importance of future development to fund CVFPP improvements. It does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

As stated in Master Response 3, the SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas outside small communities. These actions are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development or increasing flood risks within lands protected by the SPFC. No target minimum level of flood protection has been established for prioritizing State investments in rural-agricultural areas (see CWC Section 9603). However, the SSIA proposes (1) projects that maintain levee crown elevations for rural SPFC levees and provide all-weather access roads for inspection and floodfighting; (2) economically feasible projects that resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs; (3) system elements (e.g., bypass expansion) that lower peak flood stages within some rural channels; and (4) actions to manage residual flood risks. For additional details, see Master Response 3.

In addition, as stated in Master Response 5, the requirement for an urban (200-year) level of flood protection is included in SB 5, and through that law is triggered by adoption of the CVFPP. State law (SB 5) requires an urban level of flood protection for urban and urbanizing areas within the Sacramento–San Joaquin Valley (as defined in CGC Section 65007(g)) within a flood hazard zone. CGC Sections 65865.5, 65962, and 66474.5 require all cities and counties within the Sacramento–San Joaquin Valley to make findings related to an urban level of flood protection before they may take any of the following actions:

- Enter into a development agreement for a property
- Approve a discretionary permit or entitlement for any property development or use, or approve a ministerial permit that would result in construction of a new residence
- Approve a tentative map/parcel map for a subdivision

Existing developments or remodels are not affected by these requirements unless they require one or more of the covered land use decisions listed above.

DWR developed the *Draft Urban Level of Flood Protection Criteria* (April 2012) to assist cities and counties in making findings related to the urban level of flood protection. DWR also developed the *Urban Levee Design Criteria* (May 2012), which contains the engineering criteria that apply when cities and counties use levees and floodwalls to provide an urban level of flood protection. Those criteria are incorporated by reference into the *Draft Urban Level of Flood Protection Criteria*. For additional details, see Master Response 5.

T_NOMELL1-02

As stated in Master Response 16, USACE ETL 1110-2-571, *Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams and Appurtenant Structures* (2009), treats vegetation as introducing unacceptable uncertainties into levee performance. USACE direction in ETL 1110-2-571 states that these uncertainties must be addressed through vegetation removal and/or engineering works. A preliminary assessment of USACE's approach by DWR concluded that the complete removal of existing woody vegetation along the 1,600-mile legacy Central Valley levee system would be enormously expensive, would divert investments away from more critical threats to levee integrity, and would be environmentally devastating. State and federal resource agencies find that the ETL itself, and the potential impacts of widespread vegetation removal with strict enforcement of that regulation, pose a major threat to protected species and their recovery. Similarly, local agencies are concerned about negative impacts on public safety from rigid ETL compliance if limited financial resources were redirected to lower priority risks. The CVFPP proposes the State's comprehensive, integrated VMS for levees to meet both public safety and environmental goals in the Central Valley.

USACE has proposed a policy for issuing variances from the strict vegetation removal requirements of the ETL. The State intends for the VMS, including LCM, to serve as the basis for a regional variance application that would generally allow vegetation to remain on the waterside of Central Valley levees up to a line 20 feet below the waterside levee crown. The State considers this vegetation to be particularly important for providing habitat while also promoting levee integrity. Although the most recent version of USACE's draft variance policy casts considerable doubt on the viability of such a regional variance that would achieve the State's objective of retaining most waterside vegetation, the

VMS has been retained in the CVFPP to support a continued dialogue with USACE, including a likely variance application.

The State will implement a comprehensive, integrated VMS in the Central Valley that both meets public safety goals and protects and enhances sensitive habitats in the Sacramento and San Joaquin valleys. The CVFPP's VMS represents the State's current approach to addressing levee vegetation in the context of USACE ETL 1110-2-571 governing vegetation on federal flood management facilities. However, DWR continues to advocate having USACE participate as a true partner in addressing legacy levee vegetation issues, jointly considering the environmental and risk-reduction implications of vegetation remediation within the context of prudent expenditure of limited public funds. DWR will continue a dialogue with USACE regarding plan formulation concepts that recognize the agencies' shared responsibility for addressing vegetation issues (along with traditional levee risk factors), within a systemwide risk-informed context intended to enable continued progress on critical cost-shared flood system improvements.

The VMS in the CVFPP includes a long-term adaptive vegetation LCM strategy. As explained in the CVFPP and DPEIR, the LCM strategy generally will not apply to waterside vegetation up to a line 20 feet below the levee crown, and that waterside vegetation will be retained. Although it is true that implementing the LCM strategy will result in the gradual loss of important terrestrial and upper waterside riparian habitat throughout the SPFC levee system, the CVFPP's VMS includes the early establishment of riparian forest corridors that are expected to result in a net gain of this habitat over time. These riparian forest corridors will be established adjacent to existing and new levees such that riparian corridor functions and wildlife habitat will be maintained or improved for the system as a whole. This approach will allow replacement habitat to develop and mature over time, while existing trees within the vegetation management zone are allowed to live out their normal life cycles on the levee slopes.

Levee vegetation subject to removal through LCM will be quantified using the best available information. Specific rates and species types for replanting and other details of implementation of LCM will be determined through collaboration with the appropriate agencies as part of the long-term Conservation Strategy. Appropriate compensation and/or mitigation for the loss of habitat will also be addressed, in consultation with the resource agencies, as the Conservation Strategy is developed.

The CVFPP's VMS is an adaptive approach, and ongoing and future research will include evaluating effects on riparian ecosystem functions from eliminating natural recruitment under LCM. This research may

include a monitoring program to determine whether LCM affects species composition and recruitment, and the survival of lower waterside vegetation.

Also, the vegetation loss under the LCM strategy generally will occur passively, over a period of decades. The State is assuming that LCM will be a necessary, and generally sufficient, condition for USACE to issue a regional vegetation variance that will allow most waterside vegetation to be retained. If this assumption proves incorrect and an adequate vegetation variance is not forthcoming from USACE, the appropriateness of the LCM strategy could be reevaluated. Generally, the effects of applying the LCM strategy in the near term, while a vegetation variance is being pursued, should be fully reversible if the strategy is modified or eliminated at a later date. For additional details, see Master Response 16.

In addition, as stated in Master Response 3, the State supports efforts to reform FEMA's NFIP to more equitably reflect corresponding flood risks, including establishing a flood zone for agriculturally based communities to allow replacement of existing structures or reinvestment development in the floodplain. The State also supports identifying a special, lower-premium rate structure that reflects actual flood risks for agricultural buildings in rural-agricultural areas located in Special Flood Hazard Areas. The State will work with local flood management interests to pursue reform of the FEMA NFIP. For additional details, see Master Response 3.

T_NOMELL1-03

This comment is similar to comment T_NOMELL1-02. See response to comment T_NOMELL1-02, above.

T_NOMELL1-04

The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_NOMELL1-05

The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_NOMELL1-06

As stated in Master Response 17, recent CEQA case law suggests that an EIR is not required to evaluate the effects of climate change on proposed

projects. However, CWC Section 9614(f) requires the CVFPP to include a "description of the probable impacts of projected climate change . . . on the ability of the system to provide adequate levels of flood protection." To address this requirement and promote the informational and public participation purposes of CEQA, an analysis of the effects of climate change was included in Attachment 8K, "Climate Change Analysis," in Appendix A, "Central Valley Flood Protection Plan."

The current science and best available information do not properly support a complete, quantitative analysis for climate change impacts on flood management. Climate change impacts and considerations have been incorporated into many recent and ongoing California resources planning studies, using varying analytical approaches. The CVFPP is the first major policy-level study with broad applications that addresses climate change for flood management in California. Typical analyses of climate change impacts—that is, assessments for long-term water supply needs—consider likely changes in average temperature and precipitation. However, climate change impacts on extreme events, such as floods, will not result from changes in averages, but from changes in local extremes.

To that end, DWR also has invested resources in developing a unique approach for assessing the impacts of climate change on Central Valley flood management. DWR has worked with leading experts and practitioners in the field to develop a new methodology based on the intensity of "atmospheric rivers," which are fast-moving, concentrated streams of water vapor that can release heavy rains. The commonly known "Pineapple Express" is a form of atmospheric river.

However, insufficient data are available to be able to predict the magnitude or frequency of climate change impacts on extreme storm events, and climate projections from global climate models have difficulty representing regional- and local-scale precipitation patterns and processes that drive extreme events. DWR is working instead on the concept of prudent decision making that focuses on investments that could accommodate a broader range of climate change scenarios, rather than optimizing investments within a few selected extreme scenarios. DWR recently applied the resulting Threshold Analysis Approach to the Yuba-Feather system in a proof-of-concept pilot study. The results of the pilot study suggest that under F-CO, the Yuba River system is more vulnerable to changing climate conditions because of the limited regulating capacity (outlet release capacity) of New Bullards Bar Dam. This information provides guidance for the overall investment strategy for modifications such as enlarging outlets at New Bullards Bar Dam. DWR intends to fully develop the Threshold Analysis Approach for the 2017 CVFPP Update with new Central Valley hydrology and improved atmospheric river

indices. This pilot study and the overview of potential climate change effects on the Central Valley flood management system are further detailed in Attachment 8K, "Climate Change Analysis," in Appendix A, "Central Valley Flood Protection Plan."

Although the 2012 CVFPP does not include a complete, quantitative analysis for climate change impacts on flood management, the CVFPP does includes various system elements in its climate change adaptation strategy. The system elements provide additional benefits to the regional elements, and improve the overall function and performance of the SPFC in managing large floods. They also provide greater flexibility in accommodating future hydrologic changes, including climate change, and provide greater system resiliency in the face of changing downstream conditions. An evaluation of climate change in Section 6.6 of the DPEIR, titled "Effects of Global Climate Change on Program Facilities and Operations," comes to similar conclusions.

The SSIA includes these system elements that provide flexibility to accommodate higher flows resulting from climate change:

1. Wider bypasses to lower floodwater surface elevations would increase flow-carrying capacity and flexibility to deal with higher floodflows that may occur because of climate change.

2. Changes in reservoir operations from Forecast-Based Operations and F-CO can provide additional flexibility and adaptability to changes in extreme flood events.

3. The SSIA does not preclude State participation with others in reservoir expansion projects, and includes obtaining rights for floodplain transitory storage from willing landowners.

Sea-level rise will affect peak water surface elevations within the Delta and some distance upstream along its tributaries. The estimated average sea-level rise is currently under review by the National Research Council. For the 2012 CVFPP, high-tide conditions during the 1997 flood were used as the boundary conditions for hydraulic analysis; this tide was about 2 feet higher than would normally be expected on the basis of solar and lunar gravitational forces that create tides, and could be considered an initial, surrogate sea-level-rise condition resulting from climate change. DWR will continue to coordinate with other DWR programs, the Delta Stewardship Council's Delta Plan, and ongoing USACE feasibility studies to collectively address how sea-level rise could contribute to potential estuary flooding in the Delta. Improved information about sea-level rise will be used in the 2017 CVFPP Update. DWR will develop approaches to address

sea-level rise that may vary depending on the expected range and rate of sea-level rise. For additional details, see Master Response 17.

T_NOMELL1-07

As stated in Master Response 14, anticipated post-adoption activities include regional flood management planning, development of basin-wide feasibility studies and the CVFPP Financing Plan, completion of project-level proposals and environmental compliance, development of the Conservation Strategy, and State and USACE permitting.

Regional flood management planning, to be conducted in each of nine regions identified in the 2012 CVFPP, is an important next step in identifying specific improvements to rural-agricultural areas, small communities, and urban areas consistent with the SSIA. Upon CVFPP adoption, DWR will work closely with local entities to collect on-the-ground information regarding flood risks and needs, identify potential local and regional improvement projects, assess the performance and feasibility of these projects, and develop proposals that reflect the priorities of local entities in reducing flood risks. Each regional plan will present an assessment of proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. DWR intends to provide guidance as well as technical and financial assistance to local agencies to prepare the regional flood management plans, subject to availability of funds.

Regional flood management plans are anticipated to:

- Assess regional flood risks and management actions (projects) to reduce these risks
- Discuss regional priorities, including criteria used to prioritize individual projects
- Describe specific projects, including their potential costs, regional and systemwide benefits, and beneficiaries
- Provide a financial plan describing how the proposed projects would be funded, including cost sharing and financing for local shares
- Describe regional governance of flood management

Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts. Information and outcomes from

the regional planning process will inform the State-led basin-wide feasibility studies, preparation of a financing plan for the CVFPP, and the first update of the CVFPP (scheduled for completion by 2017). This regional effort is scheduled to be launched publicly in June 2012 and is anticipated to continue through 2013.

DWR will engage regional flood planning partners to develop and implement communication strategies with broad interest groups to brief them on flood management planning in their regions. Regional implementing and operating agencies, land use agencies, and interest groups will be invited to participate in the planning process. Each regional planning process will seek input, as appropriate, from agricultural interests, environmental interests, permitting agencies/resource agencies, local emergency responders, tribes, and other stakeholders. DWR anticipates that a regional flood working group will be formed in each region.

Post-adoption activities will include development of two State-led basin-wide feasibility studies—one in the Sacramento River Basin and one in the San Joaquin River Basin—that will refine the broad description of the SSIA contained in the 2012 CVFPP. The basin-wide feasibility studies will (1) identify State interest in and articulate refinements to system elements and regional elements, (2) inform development of the CVFPP Financing Plan and the 2017 CVFPP update, and (3) help define the State's locally preferred plan for consideration in ongoing and planned USACE federal feasibility studies. The basin-wide feasibility studies will focus on system elements, which may take longer to study and implement than other regional plan elements because of their scale and complexity.

State-led feasibility studies are intended to support State decision making, regardless of the corresponding level of federal participation. They do not necessarily cover the scope of a federal feasibility study; however, these State-led studies will be conducted to minimize, to the extent possible, additional federal study needed to determine federal participation and facilitate subsequent authorization by Congress, if appropriate.

The basin-wide feasibility studies will be conducted in two primary phases. The first phase will be conducted concurrently with regional planning, and will focus on developing specific objectives and analyzing physical options for system elements (such as bypass expansion and new bypasses). The second phase will combine the most promising options for system elements with the prioritized list of regional elements identified in the regional flood management plans. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale, representing refined alternatives for implementing the SSIA.

Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. The studies will be conducted in coordination with USACE (and ongoing cost-share feasibility studies) and local implementing agencies. It is anticipated that working groups will form to help evaluate and refine bypass expansion options, identify implementation challenges, and provide input in the planning process.

The State intends to complete both studies by mid-2015 to provide time to incorporate information and findings into the 2017 CVFPP Update. Interactions with other key planning efforts, such as regional flood management planning, the CVFPP Financing Plan, and Central Valley Floodplain Evaluation and Delineation, are important to meeting the anticipated schedule. For additional details, see Master Response 14.

T_NOMELL2-01

MR. NOMELLINI: I won't repeat what I said before. But I think it's important - and I haven't reviewed the document in any detail, and I will try and submit written comments - but I think it's important to make sure we look at the impact on existing communities by any disqualification that might come out of the imposition of the 200-year level of protection and the certification, you know, that there's adequate progress. Because we can easily collapse these communities. Stockton, as you know, is featured as having a financial problem of some kind. That is just the tip of the iceberg. If we inadvertently freeze development in these already developing communities, you'll collapse it. And I could see it from the seven ballot proceedings we've gone through. It's tenuous already.

T_NOMELL2-02

The other thing is I think there's nothing wrong with trying to develop environmental benefits. Floodplain developments someplace upstream makes -- has different implications than in the Delta where we're in the tidal zone.

Again, I think it's important to look at what we're trying to achieve. And people have said, "Well,

putting more flood space in the reservoirs can be done to improve water development and yield." I would question that. You know, just off the top of my head, that it would be very difficult to make up for that. And therefore the assumption that you can just go and put more flood space in the existing reservoirs I think is a tough one to support.

Anyway, I'll give you some written comments. Hopefully I'll time to do a better job in review.

Thank you.

PRESIDENT EDGAR: Thank you.

Dante John Nomellini (Public Hearing, April 9, 2012—#2)

Response

T_NOMELL2-01

As stated in Master Response 5, the flood legislation passed in 2007, including the Central Valley Flood Protection Act of 2008 (part of SB 5) and ABs 162, 70, 2140, and 156, strengthened the link between local land use decisions and regional flood management. The land use planning and related requirements specified in the 2007 flood legislation vary depending on location (State of California, Sacramento and San Joaquin Drainage District, and Sacramento–San Joaquin Valley). Some requirements apply to all areas within a flood hazard zone, whether or not they are protected by SPFC facilities or connected to the CVFPP.

The requirement for an urban (200-year) level of flood protection is included in SB 5, and through that law is triggered by adoption of the CVFPP. State law (SB 5) requires an urban level of flood protection for urban and urbanizing areas within the Sacramento–San Joaquin Valley (as defined in CGC Section 65007(g)) within a flood hazard zone. CGC Sections 65865.5, 65962, and 66474.5 require all cities and counties within the Sacramento–San Joaquin Valley to make findings related to an urban level of flood protection before they may take any of the following actions:

- Enter into a development agreement for a property
- Approve a discretionary permit or entitlement for any property development or use, or approve a ministerial permit that would result in construction of a new residence
- Approve a tentative map/parcel map for a subdivision
- Existing developments or remodels are not affected by these requirements unless they require one or more of the covered land use decisions listed above.

DWR developed the *Draft Urban Level of Flood Protection Criteria* (April 2012) to assist cities and counties in making findings related to the urban level of flood protection. DWR also developed the *Urban Levee Design Criteria* (May 2012), which contains the engineering criteria that apply when cities and counties use levees and floodwalls to provide an urban level of flood protection. Those criteria are incorporated by reference into the *Draft Urban Level of Flood Protection Criteria*. For additional details, see Master Response 5.

As stated in Master Response 15, flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

The DPEIR addresses the potential effects of the requirement for an urban level of flood protection on land use and planning in affected communities in Impact LU-7 (NTMA) in Section 3.14, "Land Use and Planning." The analysis concluded that it is currently not possible to know which cities and counties would revise their land use plans to redirect land use and development away from flood-prone areas, and to what extent such changed plans would result in adverse or beneficial environmental effects; therefore, further analysis would be too speculative to make a significance determination.

T_NOMELL2-02

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be

more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework.

Appendix E, "2012 Central Valley Flood Protection Plan Conservation Framework," provides a preview of a long-term Conservation Strategy that DWR is developing to support the 2017 CVFPP Update. The Conservation Framework focuses on promoting ecosystem functions and multi-benefit projects in the context of integrated flood management for near-term implementation actions and projects. The Conservation Framework provides an overview of the floodway ecosystem conditions and trends and key conservation goals that further clarify the CVFPP's ecosystem goal. For additional details, see Master Response 7.

DWR and the Board agree with the commenter's conclusion that new reservoirs do not provide a sufficient solution to the State's flood protection needs. As stated in Master Response 10, during the early and mid-20th century, most of the major rivers and tributaries draining into the Central Valley were dammed, providing both intentional and incidental flood management benefits. The aggregate benefit of these reservoirs to flood management has been substantial, and has contributed to the success of the existing flood system in reducing or avoiding damage from major flood events during the past century. However, California's topography and geology limit opportunities for reservoir construction, and most of the feasible locations have already been developed with the existing major dams (e.g., Shasta, Oroville, Folsom). The remaining opportunities are much more limited.

Specifically, unlike the situation that existed at the beginning of the 20th century, only a few remaining dam sites, spread throughout the Central

Valley watersheds, offer the potential to provide large volumes of flood storage capacity. Other than for a few specifics, such as raising Shasta Dam or constructing Sites Reservoir, commenters on this topic did not provide a more detailed proposal or recommendation for implementing upstream storage projects. In particular, commenters provided no specific information regarding the feasibility of using an upstream-reservoir approach to meet the requirements of SB 5.

DWR recognizes the importance of developing additional water storage capacity in California to support an increasing population, to help compensate for the anticipated loss of snowpack storage as a result of climate change, and to maintain the important role of Central Valley agriculture for the nation and the world. For these reasons, multipurpose reservoir projects will likely continue to be proposed and, if successful, may help to meet needs for flood storage capacity.

However, these proposals face daunting challenges. Despite their benefits, new or expanded reservoirs generally face considerable opposition given their environmental effects, costs, perceived risks, and other factors. Also, environmental laws established mostly in the 1970s now apply to these proposals. Among these laws is the requirement under CWA Section 404 that any project affecting waters of the United States can be approved only if it is demonstrated to be the least environmentally damaging practicable alternative. Many other laws also present permitting challenges.

It is significant that no new major onstream reservoir has been constructed in the Central Valley watershed since New Melones Dam was completed in 1978. The Auburn Dam project, which commenced construction in 1968, was never completed because of several factors, including its cost, geologic problems with the site, and potential harm to recreational and ecological values. Recently, successful projects have consisted largely of projects to provide offstream storage (such as Los Vaqueros Reservoir), which can provide only limited flood control benefits outside their watersheds given the need for pumping, and projects to increase the capacity of existing reservoirs (which by their nature are only incremental).

Moreover, to serve as a substitute for floodway conveyance and storage, upstream reservoir capacity would have to be developed throughout the Central Valley watershed. The extreme weather events (i.e., atmospheric rivers) that create the greatest risk of a severe flood are often localized. Floodplain storage protects against floodwaters originating from all upstream areas, but by definition, upstream reservoirs can store only the floodwaters that originate from a particular area or tributary watershed. For example, an increase in the capacity of Shasta Lake would provide little or no benefit in the event of a major atmospheric rivers event focused on the

central or southern Sierra Nevada. There is simply no reasonable scenario under which an array of new reservoir projects spread throughout the Central Valley watershed would be feasible and could serve as an effective substitute for floodplain storage. Suitable and feasible remaining sites do not exist, the costs would likely be prohibitive and the opposition substantial, and environmental permits would be difficult if not impossible to obtain. It would be both speculative and imprudent for the CVFPP to rely on such an approach. None of the comments on the topic have addressed, much less rebutted, the substantial evidence that such an alternative could not feasibly meet the objectives of the CVFPP as directed by SB 5.

Failing to reserve adequate floodway conveyance and storage capacity now would leave future generations with limited options for addressing their flood protection needs. The current generation has benefited from the existing bypass system, and expanding that system would benefit both current and future residents.

It is recognized that in certain cases and to some degree, upstream floodway conveyance and storage could reduce the need for (or scale of) some types of downstream flood management actions associated with the SPFC. However, opportunities to reduce flood risks on lands protected by the SPFC by increasing floodway conveyance and storage are limited, and depend on a variety of factors:

- The location of a reservoir (or multiple reservoirs) with respect to the downstream actions or target area is important. Multipurpose reservoirs are present along many major tributaries to the Sacramento and San Joaquin rivers, but the hydrology (magnitude of rainfall and timing of peak flows from a watershed) and the operations of these reservoirs are very complex. Floodflows in downstream reaches of mainstem rivers are often influenced by the operation of multiple reservoirs, and peak flood stages may result from a combination of hydrologic events on different tributaries. Consequently, increasing flood storage in one reservoir may not reduce peak flood stage along a mainstem river reach because of the operations of other reservoirs, contributions from unregulated streams, or hydrology of the various tributary watersheds.

- The volume of floodway conveyance and storage that could be achieved is related to the size of the watershed and flood flows it generates, which can limit the effectiveness of expanding reservoirs or constructing new reservoirs. Expanding a reservoir is typically most effective when the existing reservoir has a small flood storage allocation compared with its tributary watershed. Similarly, it may not

be effective to construct or expand a reservoir that controls a relatively small watershed.

- Opportunities to expand a reservoir are typically limited by the existing dam's location, size, and type of construction (concrete versus earthen, for example). A reservoir expansion sufficient to achieve the desired flood risk reduction benefits downstream may not be physically possible at all locations.

- The cost and potential impacts of enlarging a reservoir or constructing a new reservoir vary substantially from location to location. The CVFPP is a conceptual plan, and the PEIR is a program-level document; the site-specific analyses that would be needed to assess feasibility were not conducted as part of the CVFPP or PEIR, and will occur at the project level.

Reservoir ownership varies, and studies of specific opportunities to expand reservoirs must be conducted in partnership with owners and operators.

The above factors indicate that a feasible and cost-effective surface-storage project could be developed only under specific circumstances, and that even if it is feasible, additional surface storage may not provide meaningful flood management benefits. These factors, combined with the conceptual systemwide focus of the 2012 CVFPP, precluded DWR from identifying specific reservoir storage elements to include in the SSIA at this time. These factors limited the ability to formulate an approach/alternative to include in the PEIR that focused primarily on increasing flood storage. Further, increasing storage alone would not achieve many of the CVFPP goals or fulfill legislative intent, such as improving ecosystem functions within the flood management system or achieving an urban level of flood protection for all urban areas.

Studies showed that combining bypass expansion, regional levee improvements, and coordinated operations in the SSIA did not result in systemwide hydraulic impacts that would be substantial enough to require including additional surface storage as a hydraulic mitigation measure. However, the plan does not preclude future consideration of new or additional flood storage by State, federal, or local agencies in the regional flood management planning or two basin feasibility studies, or as independent projects. (See Section 3.5.4 in Appendix A, "Central Valley Flood Protection Plan.") For additional details, see Master Response 10.

T_NRDC1-01

MR. SCHMITT: Monty Schmitt with the Natural Resources Defense Council. I'm a senior scientist and project manager on the San Joaquin River Restoration Program for NRDC.

T_NRDC1-02

I'd just like to start off by saying that we really appreciate the hard work that has gone into creating this draft plan. I've worked on flood management issues now for over a decade, and I can remember a lot of folks who were here who worked on the comprehensive study and other previous efforts.

T_NRDC1-03

And I think this is really an important plan. The State of California needs a better flood management program to address public safety issues. But as you can kind of tell from I think the number of things that are

covered in the flood plan and the people who are here today, that the flood plan is going to encompass other issues that are more than just public safety.

T_NRDC1-04

The interconnection between land use and our environment and water supply are critical connectors to a flood plan. And so the way in which the flood plan addresses those issues, I think, will be really critical in actually developing a successful plan that's implemented in the future.

T_NRDC1-05

Specifically though to the environment, the number of conservation groups who are here, I think reflects the fact that we see the incredible importance between making sure that we have a flood management system that not only protects people, but also protects our riverine ecosystems and provides for the recovery of our listed species.

And it's not a -- it's something that we don't see as a one or the other. We think that it's something that can happen together. And frankly, it is more achievable when we do it together.

T_NRDC1-06

And so we look forward to working with the Board in the coming months to revise and adopt a plan that can be really implemented and provides multiple benefits to the people in California.

Thank you.

Natural Resources Defense Council, Monty Schmitt (Public Hearing, January 27, 2012)

Response

T_NRDC1-01

The comment introduces the commenter. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_NRDC1-02

DWR and the Board appreciate the commenter's acknowledgment of the effort required to prepare the CVFPP. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_NRDC1-03

The comment is correct in identifying that the CVFPP encompasses multiple issues beyond strictly flood control. As stated in Master Response 8, the Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in CWC Sections 9600–9625. For additional details, see Master Response 8.

As stated in Master Response 19, the following multiple objectives, established in CWC Section 9616, should be met wherever feasible:

- Section 401 of the Clean Water Act is discussed in the DPEIR in
- Reduce the risk to human life, health, and safety from flooding, including protection of public safety infrastructure.
- Expand the capacity of the flood management system in the Sacramento–San Joaquin Valley to either reduce flood flows or convey floodwaters away from urban areas.
- Link the flood protection system with the water supply system.

- Reduce flood risks in currently nonurbanized areas.
- Increase the engagement of local agencies willing to participate in improving flood protection, ensuring a better connection between State flood protection decisions and local land use decisions.
- Improve flood protection for urban areas to the urban level of flood protection.
- Promote natural dynamic hydrologic and geomorphic processes.
- Reduce damage from flooding.
- Increase and improve the quantity, diversity, and connectivity of riparian, wetland, floodplain, and shaded riverine aquatic habitats, including the agricultural and ecological values of these lands.
- Minimize flood management system operations and maintenance requirements.
- Promote the recovery and stability of native species' populations and overall biotic community diversity.
- Identify opportunities and incentives for expanding or increasing use of floodway corridors.
- Provide a feasible, comprehensive, and long-term financing plan for implementing the CVFPP.
- Identify opportunities for reservoir reoperation in conjunction with groundwater flood storage.

For additional details, see Master Response 19.

T_NRDC1-04

As stated in Master Response 7, the CVFPP includes a high-level discussion on integrating water supply benefits with flood management improvements. The SSIA elements focus on public safety and improvement of flood management, consistent with the legislative direction and CVFPP primary goal; however, implementing these elements could improve water management because expanding floodways and the bypass system could improve the flexibility of reservoir operations and increase in-channel groundwater recharge. The SSIA describes potential opportunities for integrating water supply benefits with proposed flood management actions, but it does not include specific project recommendations related to water supply because of the need for future site-specific proposals and analyses.

During post-adoption activities (regional flood management planning and development of basin-wide feasibility studies), additional details will be developed, including specific water management features as part of multi-benefit projects, in collaboration with interested local and regional agencies and organizations.

In addition, the DPEIR evaluates the potential effects of the proposed program on water supply; for example, see Section 3.11, "Groundwater Resources," and Section 3.13, "Hydrology." The impetus for including both the Southern California and coastal CVP and SWP service areas within the PEIR (i.e., as the "SoCal/coastal CVP/SWP service areas") was to ensure that potential effects of the program on water deliveries outside the Extended SPA and Sacramento and San Joaquin Valley watersheds were evaluated in the PEIR.

The PEIR analysis did not find any significant adverse effects on water supply resulting from the proposed program.

Additionally, the SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important shaded riverine aquatic habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework. For additional details, see Master Response 7.

In addition, as stated in Master Response 5, the flood legislation passed in 2007, including the Central Valley Flood Protection Act of 2008 (part of SB 5) and ABs 162, 70, 2140, and 156, strengthened the link between local land use decisions and regional flood management. For additional details, see Master Response 5. The land use elements of the legislation are reflected in the CVFPP and evaluated in the PEIR.

T_NRDC1-05

This comment is similar to comment T_NRDC1-04. See response to comment T_NRDC1-04, above. In addition, as stated in Master Response 7, Appendix E, "2012 Central Valley Flood Protection Plan Conservation Framework," provides a preview of a long-term Conservation Strategy that DWR is developing to support the 2017 CVFPP Update. The Conservation Framework focuses on promoting ecosystem functions and multi-benefit projects in the context of integrated flood management for near-term implementation actions and projects. The Conservation Framework provides an overview of the floodway ecosystem conditions and trends and key conservation goals that further clarify the CVFPP's ecosystem goal. For additional details, see Master Response 7.

T_NRDC1-06

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_NRDC2-01 MR. SCHMITT: Thank you very much for having this opportunity to provide some comments. I'm Monty Schmitt with the Natural Resources Defense Council.

I'm going to start by saying I've worked on flood management issues now for over ten years. And in a previous period of time I worked a lot on the comprehensive study and spent a lot of time working on that effort, as I have on this. Because fundamentally even though I work for an environmental organization that is concerned about water quality issues and transportation and energy efficiency and many other things, flood safety is a really important element of what impacts our rivers in California.

And I think the comments we've already heard thus far touch upon the biological issues, the public safety issues. I think other folks have already provided comments and will talk about the water supply issues. They're all interconnected. And it would be so much easier of a job I think for all of you and all the great work that has been done thus far if flood management could just happen in a vacuum, and that you didn't have to deal with the environment and you didn't have to deal with the public safety and that you didn't have to deal with local planning.

But I would argue that the reason why the comprehensive study and other previous efforts failed is because they didn't tackle those issues effectively and, in essence, bring along all the people who have a stake in

those issues as well. Because when it comes down to it, this plan is direly needed. It's really needed for public safety, but it's also needed to address some of the environmental issues, it's needed in order to address some of the water supply issues that are key in this State.

And I think honestly when you look at the giant price tag of what this plan looks to entail, and the fact that a big portion of the state is in the southern -- or population is in the southern part of the state, who will need to basically be on board with financing this, there needs to be something in it for those people as well. And I think, you know, since they can't be flooded down there, there needs to be something that will be water supply related, environmentally related, something that's about the public interest. And so ultimately this plan has got the uncomfortable task of needing to address a broader range of issues, and therefore it makes it more complex. And that's why I think you guys are getting a lot of tough comments about the impacts that it has on folks.

So I just want to touch on a couple of things really quickly. I won't belabor the point about levee setbacks and flood bypasses. I think, you know, biologically they're important. There's water supply, water quality benefits, recreational benefits that -- and it's a good investment. Because trying to do flood

bypasses in the future, 50 years from now, and I think with population increasing in the Central Valley, it will become incredibly difficult to do. So it's a tough task. But I really encourage you folks to consider about how to make those kind of actions possible today when I think the investment is -- will be smart and we'll look back and be appreciative that we did it now, not trying to do it a hundred years from now.

T_NRDC2-02

Measurable objectives for the environment. I know that you guys are going to need to come up with measurable objectives on a number of different ranges. And not to say that environmental objectives are the first and foremost, but I think they need to be included. And particularly this -- quantitative objectives like the salmon doubling goal. Here is a requirement that applies to DWR and to DFG, to all the resource management agencies that have an impact on achieving what has already been adopted as a standard. And the flood management system does not need to go into the fish business. That's not what is needed here.

But I think you can all understand that the footprint of the flood management system is the space within which the habitat for fish, particularly floodplain habitat, will exist. So trying to create floodplain habitat on the other side -- outside of a levee is never

going to happen. So this plan sets the footprint. And because it sets the footprint, it sets the ability to basically achieve this objective. And it's a very important objective, as a lot of us have already talked about

But I encourage you folks to understand that connection and to figure out a way going on into the future to provide for that, so that the cumulative impacts on the flood management system, much like we have today, does not support a functioning riverine ecosystem.

So it's not the job of the Board, I think, to come up with how you're going to restore fish habitat. But understand that you need to set aside enough space so that other agencies and local groups can do that work of restoring fish habitat. But it does need a footprint that you folks are going to have a major impact on setting.

T_NRDC2-03 Existing projects. There are projects like the San Joaquin River Restoration Program and others that are going on right now today, and they want to know how to coordinate with you; because this Plan is very important and it will go forward, I hope. And yet at the same time, there are projects that are moving forward today that don't understand how to fit in. And I frankly think honestly the Board will -- I hope will adopt some version of this Plan. But in order to just not be a plan to do

another plan, I think there's a lot of ways that this current Plan can show how existing projects help support and achieve the goals that you have already identified in the current document -- that have been identified in the current document.

And what would it take to help show some coordination between these -- between different projects with the Central Valley Flood Protection Plan? I think that those projects are looking for direction about whether their projects support your goals or not. I think helping to figure out some way to support those programs today will help them to succeed and it will help this project to succeed and the plan to succeed.

T_NRDC2-04

Climate change. You know, again, an uncomfortable topic that is difficult to come up with an answer to. And I don't have an answer to climate change myself here. But much like what Dante was talking about, needing to do the right studies. You guys have a task of being able to see -- in the future the hydrology of the future will not be the hydrology of the past. I think we all sort of know that. But how to adapt toward it.

You don't want to -- this is a monumental undertaking that is not going to be done every five years or every ten or even twenty years, I hope. I hope that what comes out of this is something that is durable and

lasting and adapts to a future where our best understanding is we'll see more frequent -- large events and more frequently. And so if the hydrology changes in that direction, the hundred-year level of protection today is not going to be a hundred-year level of protection tomorrow. And there's a good argument to be made that a hundred-year level of protection isn't good enough to start with.

So into the future we have even greater flood management challenges, I would argue. And I hope that this planning process finds a way to be adaptive toward that future.

T_NRDC2-05 Water supply. I think that -- you know, when you talk about the other part of the State that doesn't get a flood management benefit up here but is going to need to be supportive of funding this process, I think that figuring out ways to integrate flood management with water supply is sort of, kind of -- I would say it's almost a no-brainer. You've got to figure out some way to show those connections - and I think that they're there - reservoir reoperation and coordination enabling reservoirs to work more synergistically so that they provide flood protection but also provide greater water supply benefits.

T_NRDC2-06 Increasing the flood storage space in channel moving downstream. Transitory storage provides greater

infiltration of the groundwater table. Increasing the channel capacity downstream allows you to not -- to be able to reoperate your reservoirs in a way where you've got greater capacity downstream so you can preserve more -- you have less of a need for flood storage space in your existing reservoirs, and so there's a water supply connection there.

T_NRDC2-07 Lastly is enabling local planning. Much like identifying how these different existing restoration programs and other conservation efforts and other flood management efforts are currently underway. If this Plan is ultimately intended to then -- to give direction to local and regional areas, there needs to be enough definition in what a regional plan needs to encompass. And I'll focus on the environmental side because that's the business I'm in.

T_NRDC2-08 But understanding how much habitat area you need in different regions of the flood plan I think is a very important concept. Because ultimately folks will always say, "We're going to build a flood protection element here and we'll mitigate it somewhere else." And it is that kind of piecemealing of the environment that ultimately does not work biologically.

And I think that ultimately the kind of plans that will go through and the type of restoration and flood

management projects that will get approved are ones that are multi-benefit. So I think ultimately a flood management project which can show that it also not only provides increased public protection and public safety but also provides habitat that's important to statewide goals and also identify recreational opportunities and other things that bring on greater partnerships, those are the things I think that will ultimately get funded. I think that regional planning efforts will understand that and they will look to this flood plan to give them guidance about what is a successful plan. And it won't I think just be flood elements. I think it will be how do achieve other multi-benefit aspects that this plan's going to need to address.

That's the end of my comments. Thank you very much.

Natural Resources Defense Council, Monty Schmidt (Public Hearing, April 9, 2012)

Response

T_NRDC2-01

As stated in Master Response 1, the Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency. For additional details, see Master Response 1.

Additionally, as stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction for the CVFPP to "…include a description of both structural and nonstructural means for improving the performance and elimination of deficiencies of levees, weirs, bypasses, and facilities, including facilities of the State Plan of Flood Control, and, wherever feasible, meet multiple objectives…" (CWC Section 9616(a)). The legislation further identifies 14 objectives, two of which address water supply and groundwater recharge (CWC Sections 9616(a)(3) and 9616(a)(14)).

The CVFPP includes a high-level discussion on integrating water supply benefits with flood management improvements. The SSIA elements focus on public safety and improvement of flood management, consistent with the legislative direction and CVFPP primary goal; however, implementing these elements could improve water management because expanding floodways and the bypass system could improve the flexibility of reservoir operations and increase in-channel groundwater recharge. The SSIA describes potential opportunities for integrating water supply benefits with proposed flood management actions, but it does not include specific project recommendations related to water supply because of the need for future site-specific proposals and analyses. During post-adoption activities

(regional flood management planning and development of basin-wide feasibility studies), additional details will be developed, including specific water management features as part of multi-benefit projects, in collaboration with interested local and regional agencies and organizations.

In addition, the DPEIR evaluates the potential effects of the proposed program on water supply; for example, see Section 3.11, "Groundwater Resources," and Section 3.13, "Hydrology." The impetus for including both the Southern California and coastal CVP and SWP service areas within the PEIR (i.e., as the "SoCal/coastal CVP/SWP service areas") was to ensure that potential effects of the program on water deliveries outside the Extended SPA and Sacramento and San Joaquin Valley watersheds were evaluated in the PEIR.

The PEIR analysis did not find any significant adverse effects on water supply resulting from the proposed program.

DWR believes that the approach of focusing the CVFPP on flood management issues is consistent with the Legislature's intent as expressed in the Central Valley Flood Protection Act of 2008, and that including elements that provide a greater focus on water supply is not necessary. For additional details, see Master Response 7.

T_NRDC2-02

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during

post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework.

Appendix E, "2012 Central Valley Flood Protection Plan Conservation Framework," provides a preview of a long-term Conservation Strategy that DWR is developing to support the 2017 CVFPP Update. The Conservation Framework focuses on promoting ecosystem functions and multi-benefit projects in the context of integrated flood management for near-term implementation actions and projects. The Conservation Framework provides an overview of the floodway ecosystem conditions and trends and key conservation goals that further clarify the CVFPP's ecosystem goal. For additional details, see Master Response 7.

In regard to measurable objectives, as stated in Master Response 8, the State Legislature enacted comprehensive flood risk management legislation in 2007, including the Central Valley Flood Protection Act of 2008. This law set a clear directive for an integrated systemwide approach to Central Valley flood management, and provided detailed guidance for DWR to follow in formulating the CVFPP. The Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in CWC Sections 9600–9625. For additional details, see Master Response 8.

T_NRDC2-03

As stated in Master Response 14, as part of post-adoption activities, the Board and DWR will continue to work collaboratively with local, State, and federal agencies, environmental interests, and other parties to develop regional flood management plans and further refine the proposed elements of the SSIA.

The State has a strong interest in coordinating and implementing integrated projects that achieve multiple benefits. Effective integration across planning efforts means that all programs and projects, when implemented, work together to achieve key goals in a cost-effective manner; are sequenced and prioritized appropriately; and do not adversely affect or interfere with intended benefits. Although effectively integrating planning

across programs while considering multiple benefits can be challenging, doing so can also provide opportunities to share knowledge and identify mutually beneficial solutions that might not have been considered otherwise, thus minimizing duplication and reducing costs.

DWR will continue to coordinate with other flood management and ecosystem enhancement efforts during implementation of the CVFPP. A few key examples include the Delta Stewardship Council's Delta Plan, the San Joaquin River Restoration Program, and the BDCP. For additional details, see Master Response 14.

T_NRDC2-04

As stated in Master Response 17, recent CEQA case law suggests that an EIR is not required to evaluate the effects of climate change on proposed projects. However, CWC Section 9614(f) requires the CVFPP to include a "description of the probable impacts of projected climate change . . . on the ability of the system to provide adequate levels of flood protection." To address this requirement and promote the informational and public participation purposes of CEQA, an analysis of the effects of climate change was included in Attachment 8K, "Climate Change Analysis," in Appendix A, "Central Valley Flood Protection Plan."

The current science and best available information do not properly support a complete, quantitative analysis for climate change impacts on flood management. Climate change impacts and considerations have been incorporated into many recent and ongoing California resources planning studies, using varying analytical approaches. The CVFPP is the first major policy-level study with broad applications that addresses climate change for flood management in California. Typical analyses of climate change impacts—that is, assessments for long-term water supply needs—consider likely changes in average temperature and precipitation. However, climate change impacts on extreme events, such as floods, will not result from changes in averages, but from changes in local extremes.

To that end, DWR also has invested resources in developing a unique approach for assessing the impacts of climate change on Central Valley flood management. DWR has worked with leading experts and practitioners in the field to develop a new methodology based on the intensity of "atmospheric rivers," which are fast-moving, concentrated streams of water vapor that can release heavy rains. The commonly known "Pineapple Express" is a form of atmospheric river.

However, insufficient data are available to be able to predict the magnitude or frequency of climate change impacts on extreme storm events, and climate projections from global climate models have difficulty representing

regional- and local-scale precipitation patterns and processes that drive extreme events. DWR is working instead on the concept of prudent decision making that focuses on investments that could accommodate a broader range of climate change scenarios, rather than optimizing investments within a few selected extreme scenarios. DWR recently applied the resulting Threshold Analysis Approach to the Yuba-Feather system in a proof-of-concept pilot study. The results of the pilot study suggest that under F-CO, the Yuba River system is more vulnerable to changing climate conditions because of the limited regulating capacity (outlet release capacity) of New Bullards Bar Dam. This information provides guidance for the overall investment strategy for modifications such as enlarging outlets at New Bullards Bar Dam. DWR intends to fully develop the Threshold Analysis Approach for the 2017 CVFPP Update with new Central Valley hydrology and improved atmospheric river indices. This pilot study and the overview of potential climate change effects on the Central Valley flood management system are further detailed in Attachment 8K, "Climate Change Analysis," in Appendix A, "Central Valley Flood Protection Plan."

Although the 2012 CVFPP does not include a complete, quantitative analysis for climate change impacts on flood management, the CVFPP does includes various system elements in its climate change adaptation strategy. The system elements provide additional benefits to the regional elements, and improve the overall function and performance of the SPFC in managing large floods. They also provide greater flexibility in accommodating future hydrologic changes, including climate change, and provide greater system resiliency in the face of changing downstream conditions. An evaluation of climate change in Section 6.6 of the DPEIR, titled "Effects of Global Climate Change on Program Facilities and Operations," comes to similar conclusions.

The SSIA includes these system elements that provide flexibility to accommodate higher flows resulting from climate change:

1. Wider bypasses to lower floodwater surface elevations would increase flow-carrying capacity and flexibility to deal with higher floodflows that may occur because of climate change.

4. Changes in reservoir operations from Forecast-Based Operations and F-CO can provide additional flexibility and adaptability to changes in extreme flood events.

5. The SSIA does not preclude State participation with others in reservoir expansion projects, and includes obtaining rights for floodplain transitory storage from willing landowners.

Sea-level rise will affect peak water surface elevations within the Delta and some distance upstream along its tributaries. The estimated average sea-level rise is currently under review by the National Research Council. For the 2012 CVFPP, high-tide conditions during the 1997 flood were used as the boundary conditions for hydraulic analysis; this tide was about 2 feet higher than would normally be expected on the basis of solar and lunar gravitational forces that create tides, and could be considered an initial, surrogate sea-level-rise condition resulting from climate change. DWR will continue to coordinate with other DWR programs, the Delta Stewardship Council's Delta Plan, and ongoing USACE feasibility studies to collectively address how sea-level rise could contribute to potential estuary flooding in the Delta. Improved information about sea-level rise will be used in the 2017 CVFPP Update. DWR will develop approaches to address sea-level rise that may vary depending on the expected range and rate of sea-level rise. For additional details, see Master Response 17.

T_NRDC2-05

See response to comment T_NRDC2-01, above.

T_NRDC2-06

As stated in Master Response 7, capturing and using floodflows for groundwater recharge is a component of integrated flood and water management in the CVFPP. The State supports programs that use floodflows for groundwater recharge to improve water management throughout California. However, the State also recognizes the limitations of direct groundwater recharge in lowering flood stage and reducing flood risks, especially in the Sacramento River Basin. Considering these limitations, the SSIA identifies opportunities for groundwater recharge within the flood management system (in-channel recharge and in expanded bypass areas). Although no specific recharge projects are recommended in the SSIA at this time, the State encourages further exploration of feasible recharge opportunities in the San Joaquin River Basin, in particular, to capture a portion of high flows from snowmelt.

DWR also recognizes that although expanding a floodway can assist in recharging groundwater by expanding the surface area of inundated ground during high-water events, a meaningful benefit cannot be assured. The inundated soils must be appropriate to allow groundwater infiltration. Depending on hydrologic conditions, an expanded floodway may be inundated only rarely, allowing only limited opportunities for increased groundwater infiltration. The local aquifer may be recharged from lands away from the river, with groundwater flowing toward and draining into the river. In this circumstance, increasing floodway inundation would have little benefit to local groundwater recharge. Therefore, potential

groundwater recharge benefits from increasing floodplains, flood bypasses, and setback levees are very dependent on site-specific conditions. For additional details, see Master Response 7.

T_NRDC2-07

As stated in Master Response 14, regional flood management planning, to be conducted in each of nine regions identified in the 2012 CVFPP, is an important next step in identifying specific improvements to rural-agricultural areas, small communities, and urban areas consistent with the SSIA. Upon CVFPP adoption, DWR will work closely with local entities to collect on-the-ground information regarding flood risks and needs, identify potential local and regional improvement projects, assess the performance and feasibility of these projects, and develop proposals that reflect the priorities of local entities in reducing flood risks. Each regional plan will present an assessment of proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. DWR intends to provide guidance as well as technical and financial assistance to local agencies to prepare the regional flood management plans, subject to availability of funds.

Regional flood management plans are anticipated to:

- Assess regional flood risks and management actions (projects) to reduce these risks
- Discuss regional priorities, including criteria used to prioritize individual projects
- Describe specific projects, including their potential costs, regional and systemwide benefits, and beneficiaries
- Provide a financial plan describing how the proposed projects would be funded, including cost sharing and financing for local shares
- Describe regional governance of flood management

Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts. Information and outcomes from the regional planning process will inform the State-led basin-wide feasibility studies, preparation of a financing plan for the CVFPP, and the first update of the CVFPP (scheduled for completion by 2017). This regional effort is scheduled to be launched publicly in June 2012 and is anticipated to continue through 2013.

DWR will engage regional flood planning partners to develop and implement communication strategies with broad interest groups to brief them on flood management planning in their regions. Regional implementing and operating agencies, land use agencies, and interest groups will be invited to participate in the planning process. Each regional planning process will seek input, as appropriate, from agricultural interests, environmental interests, permitting agencies/resource agencies, local emergency responders, tribes, and other stakeholders. DWR anticipates that a regional flood working group will be formed in each region.

As part of post-adoption activities, the Board and DWR will continue to work collaboratively with local, State, and federal agencies, environmental interests, and other parties to develop regional flood management plans and further refine the proposed elements of the SSIA.

The State has a strong interest in coordinating and implementing integrated projects that achieve multiple benefits. Effective integration across planning efforts means that all programs and projects, when implemented, work together to achieve key goals in a cost-effective manner; are sequenced and prioritized appropriately; and do not adversely affect or interfere with intended benefits. Although effectively integrating planning across programs while considering multiple benefits can be challenging, doing so can also provide opportunities to share knowledge and identify mutually beneficial solutions that might not have been considered otherwise, thus minimizing duplication and reducing costs.

DWR will continue to coordinate with other flood management and ecosystem enhancement efforts during implementation of the CVFPP. A few key examples include the Delta Stewardship Council's Delta Plan, the San Joaquin River Restoration Program, and the BDCP. For additional details, see Master Response 14.

T_NRDC2-08

See response to comment T_NRDC2-02, above, regarding incorporation of ecological benefits into the CVFPP. See response to comment T_NRDC2-07, above, regarding the process for future CVFPP planning efforts and incorporating multiple issues into this process.

T_PETERSON1

T_PETERSON1-01

MR. PETERSON: Good morning, Mr. Chairman, members of the Board. My name is Dan Peterson, and I'm

representing myself today as a property owner and resident in Sutter County.

I commend the Board and its staff for putting together this plan. However, in reading the plan, its attachments and the EIR, I discovered a number of areas that raised concerns. And I'd like to briefly go over a number of those areas today. I will be following up with written comments by next week.

T_PETERSON1-02

The first concern that I have is that this is a draft plan. And staff has been up here testifying that there's going to be at least two basinwide feasibility studies required. There's going to be a number of hydraulic and hydrology studies required before this plan is fleshed out and fully evaluated.

So the first concern that I have is will this plan be used to evaluate local projects, such as repair in place projects of existing levees to determine whether or not those projects are going to be a "no regrets" project. That's a very large concern, because we have a number of ongoing projects, both from the Sutter Butte Flood Control Agency, the Sacramento Area Flood Control Agency, and other agencies that could be affected if this Central Valley Flood Protection Plan is going to be used to determine whether these local projects are going to be "no regrets" projects.

T_PETERSON1-03

One of the stated co-objectives, or goals, of the Central Valley Flood Protection Plan was to reduce the extent and expense of operations and maintenance of the flood control system. However, I submit to you that when we consider widening the Sutter Bypass by a thousand feet, by widening and lowering the weirs, the Moulton, the Colusa and the Tisdale Weirs that feed the Sutter Bypass, by constructing the new Feather River Bypass, and then dedicating 25 percent of the new lands to habitat, and establishing vegetation goals for the remainder of those channels, what we're going to do is increase the frequency, lengthen the duration and slow the flows through those bypasses. And any hydraulics engineer will tell you that that is a recipe for sedimentation.

T_PETERSON1-04

I submit to the Board that the plan as currently proposed is going to increase operations and maintenance efforts and expenses, not decrease them as what was the stated goal of the plan.

T_PETERSON1-05

Going back to the original FloodSAFE Program. The FloodSAFE Program stated that part of their goals were economic sustainability and also water supply. However, none of the alternatives identified in the Central Valley Flood Protection Plan included any additional storage nor did it improve water supply in any instance that I could find.

T_PETERSON1-06

Furthermore, as proposed, the Central Valley Flood Protection Plan discusses an increase of 40,000 acres of quote unquote flood facilities, and then an additional 25,000 acres of easements. Now, once again, going back to the proposed use of the bypasses, to increase the frequency and lengthen the duration of the flows, you're going to eliminate agricultural activities within those bypasses because farmers are not going to be able to get in there to get the ground prepared, plant the crops, and harvest the crops because of the frequent and longer durations of the inundations.

Furthermore, you're also looking at the mitigation or activities -- or management activities that will further restrict the types of agricultural activities that will go on in those easements and within the bypasses, so that they're habitat friendly. And those additional restraints upon agriculture are further going to impact ag.

T_PETERSON1-07

So as Mr. Conant previously said, what we're going to see is an extensive loss of tax base. We're going to see a loss in the number of jobs. And we're going to see an enormous impact, not only on the individual farmers, but on the entire economy of Sutter County and the other northern California counties.

T_PETERSON1-08

When a person sits down and reads through this

plan in one sitting, which I unfortunately did --

(Laughter.)

MR. PETERSON: -- one comes away with the impression that this plan actually is promoting ecosystem restoration over flood protection and water supply. And definitely by virtue of there being no mention of increased water storage or any specific instance where water supply is benefited from this project, that is carried out, but the flood protection issues becomes a very big issue.

T_PETERSON1-09

Once again, absent any hydraulic modeling, it's going to be very difficult to see what the benefits are of the setback levees and widening the bypasses and putting in the new Feather River Bypass. However, when one goes through and looks at the 25 percent set-aside for habitat between the levees, and then, once again, looking at the encouraged use of the remaining land for revegetation purposes, going back to very basic engineering and the Chezy Manning equation, you're going to buildup such a resistance to flow that you're not going to gain any hydraulic benefit. And therefore, you're not going to gain the amount of flood protection that one would expect from setting back the levees or from widening the bypasses.

So that makes it a very questionable investment

of the taxpayer's dollars, if this is indeed supposed to be a flood protection plan.

T_PETERSON1-10 There's also a very big concern about the ongoing environmental and agricultural stewardship, which is mentioned throughout the plan in its attachments, the plan often refers to habitat conservation plans, corridor management plans, and the RAMP idea, the Regional Advanced Management -- or Mitigation Planning.

All of those contain restraints on activities, such that they are habitat friendly. And very often those

T_PETERSON1-11 restraints can make agriculture infeasible. So that is something that I definitely would encourage the Board to look at and it needs to be mentioned in the EIR, because what could, in effect, end up happening is an inverse condemnation of tens of thousands of acres of agricultural land.

T_PETERSON1-12 And I know that there's been a big issue, even in the Natomas Basin, where the largest irrigation water purveyor had not ever joined the habitat conservation plan, because the restrictions on their maintenance at their high line canals would have made it impossible for them to ever maintain their system.

T_PETERSON1-13 And the Central Valley Flood Protection Plan in its attachments specifically say that these anticipated management activities would affect groundwater pumping.

It would affect access roads for farming. It would affect how the plants are actually -- you know, the land is tilled and when it's prepared. It would affect the high line canal operations for irrigation water, and it would even affect what types of crops are planted.

So there's a definite concern that this could lead to an inverse condemnation of lands, even outside of the levees.

T_PETERSON1-14

There's definitely a potential for a decrease in local land use authority within this plan. Throughout the plan, it talks about the State having an interest in the ongoing management activities, including the Designation of land use for certain areas to preclude future development. And it also specifically says that projects that could have a potential for being growth inducing in rural areas would be prohibited from being considered as part of this plan, which leads to a very big question, who is going to be condemning the property once the land acquisition process begins? Because I'm certain that the locals are not going to want to be condemning property for their property owners.

T_PETERSON1-15

A big concern is the Regional Advanced Mitigation Planning process, which I mentioned earlier. One of the attachments to the Central Valley Flood Protection Plan identified that there is a RAMP work group, and that this

work group has been involved in a pilot project, and that the product of this pilot project is going to be the first regional assessment. And that this first regional assessment will be completed in spring of 2012.

It is now spring of 2012, this regional assessment includes most of Sutter County, and yet none of the Supervisors from Sutter County with whom I spoke knew of this pilot project, nor did the head of the Sutter Butte Flood Control Agency. So I'm very concerned that the locals have not been involved at all in this Regional Advanced Mitigation Planning.

T_PETERSON1-16

Going on. A concern about the cost. It was mentioned earlier that no construction would begin for the next 10 years. And yet the plan identifies that there would be a local contribution of half a billion dollars by the year 2017. So that's going to be a very contentious issue with the locals. I question whether some of that money is money that's already being raised by assessments for local flood protection projects, such as SAFCA or the Sutter Butte Flood Control Agency.

But it is also going to lead to a question as to whether or not there's going to be true federal interest in cost sharing in the future if when the benefit cost analysis is done, based upon the final H&H studies it's determined that the expanse really does not produce the

T_PETERSON1-17

flood protection we anticipated, because so much of the money went to habitat restoration, some of which is actually counterproductive to the goal of flood protection.

Finally, I'd like to speak to the timeline. There were, you know, years spent preparing this plan and in public outreach. And yet once the final plan came out, the public had very little time to review it. In fact, there are still documents being released as recently as a few days ago that are considered part of the Central Valley Flood Protection Plan.

So it may be a little bit of a constricted timeline for the public to review and comment on this project and have this Central Valley Flood Protection Plan actually approved by July 1st.

Thank you.

PRESIDENT EDGAR: Thank you, Dan.

(Applause.)

Dan Peterson, Sutter County Resident (Public Hearing, April 6, 2012)

Response

T_PETERSON1-01

The comment is an introductory statement and does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted

T_PETERSON1-02

As stated on page 4-26 of the CVFPP, the State supports investing in "no-regrets" programs and actions that clearly enhance system resiliency, integrate programs and resources, and preserve flexibility for future generations.

As stated in Master Response 14, the 2012 CVFPP describes the State's vision for a sustainable flood management system in the Central Valley that provides a high degree of public safety, promotes long-term economic stability, and supports restoration of compatible riverine and floodplain ecosystems. The SSIA prioritizes State investments and other activities to contribute to achieving this vision on a systemwide scale, recognizing current funding limitations.

The SSIA is a conceptual plan for flood system improvements, and additional post-adoption work is needed to refine its individual elements. Anticipated post-adoption activities include regional flood management planning, development of basin-wide feasibility studies and the CVFPP Financing Plan, completion of project-level proposals and environmental compliance, development of the Conservation Strategy, and State and USACE permitting.

Some elements of the SSIA have already been implemented (through the Early Implementation Projects Program since 2007, for example). Others may be accomplished before the first update of the CVFPP in 2017, and many will require additional time to fully develop and implement. Ongoing and new planning studies, engineering, feasibility studies, environmental review, designs, funding, and partnering are required to better define, and incrementally fund and implement, elements of the SSIA during the next 20–25 years.

DWR and the Board are the State lead agencies for implementing the CVFPP and preparing the 5-year CVFPP updates. CVFPP consistency is

not a requirement of SB 5, and DWR and the Board retain flexibility in future activities; however, the State intends for all major flood management programs and projects in the Central Valley to be planned and implemented in a manner generally consistent with the vision, goals, and provisions of the CVFPP. DWR will also work closely with USACE and the Board to develop the federal *Central Valley Integrated Flood Management Study* and State basin-wide feasibility studies. In addition, the State is partnering with USACE on several regional feasibility investigations and post authorization change reports aimed at modifying the State-federal flood management system.

Regional flood management planning, to be conducted in each of nine regions identified in the 2012 CVFPP, is an important next step in identifying specific improvements to rural-agricultural areas, small communities, and urban areas consistent with the SSIA. Upon CVFPP adoption, DWR will work closely with local entities to collect on-the-ground information regarding flood risks and needs, identify potential local and regional improvement projects, assess the performance and feasibility of these projects, and develop proposals that reflect the priorities of local entities in reducing flood risks. Each regional plan will present an assessment of proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. DWR intends to provide guidance as well as technical and financial assistance to local agencies to prepare the regional flood management plans, subject to availability of funds.

Regional flood management plans are anticipated to:

- Assess regional flood risks and management actions (projects) to reduce these risks
- Discuss regional priorities, including criteria used to prioritize individual projects
- Describe specific projects, including their potential costs, regional and systemwide benefits, and beneficiaries
- Provide a financial plan describing how the proposed projects would be funded, including cost sharing and financing for local shares
- Describe regional governance of flood management

Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts. Information and outcomes from

the regional planning process will inform the State-led basin-wide feasibility studies, preparation of a financing plan for the CVFPP, and the first update of the CVFPP (scheduled for completion by 2017). This regional effort is scheduled to be launched publicly in June 2012 and is anticipated to continue through 2013.

DWR will engage regional flood planning partners to develop and implement communication strategies with broad interest groups to brief them on flood management planning in their regions. Regional implementing and operating agencies, land use agencies, and interest groups will be invited to participate in the planning process. Each regional planning process will seek input, as appropriate, from agricultural interests, environmental interests, permitting agencies/resource agencies, local emergency responders, tribes, and other stakeholders. DWR anticipates that a regional flood working group will be formed in each region.

Post-adoption activities will include development of two State-led basin-wide feasibility studies—one in the Sacramento River Basin and one in the San Joaquin River Basin—that will refine the broad description of the SSIA contained in the 2012 CVFPP. The basin-wide feasibility studies will (1) identify State interest in and articulate refinements to system elements and regional elements, (2) inform development of the CVFPP Financing Plan and the 2017 CVFPP update, and (3) help define the State's locally preferred plan for consideration in ongoing and planned USACE federal feasibility studies. The basin-wide feasibility studies will focus on system elements, which may take longer to study and implement than other regional plan elements because of their scale and complexity.

State-led feasibility studies are intended to support State decision making, regardless of the corresponding level of federal participation. They do not necessarily cover the scope of a federal feasibility study; however, these State-led studies will be conducted to minimize, to the extent possible, additional federal study needed to determine federal participation and facilitate subsequent authorization by Congress, if appropriate.

The basin-wide feasibility studies will be conducted in two primary phases. The first phase will be conducted concurrently with regional planning, and will focus on developing specific objectives and analyzing physical options for system elements (such as bypass expansion and new bypasses). The second phase will combine the most promising options for system elements with the prioritized list of regional elements identified in the regional flood management plans. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale, representing refined alternatives for implementing the SSIA.

Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. The studies will be conducted in coordination with USACE (and ongoing cost-share feasibility studies) and local implementing agencies. It is anticipated that working groups will form to help evaluate and refine bypass expansion options, identify implementation challenges, and provide input in the planning process. For additional details, see Master Response 14.

T_PETERSON1-03

As stated in Master Response 1, the CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of various bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

As stated in Master Response 6, improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures).

The SSIA promotes efficient and sustainable long-term O&M practices through the following:

- Reforming and consolidating State and local agencies' roles and responsibilities for O&M
- Standardizing criteria by which maintenance practices, procedures, and inspections are performed and reported
- Implementing strategies to adequately and reliably fund routine activities and streamline permitting

Some of the proposed activities may involve legislative action, new institutional arrangements involving local maintaining agencies,

modifications to existing State programs, and additional or redirected funding. For additional details, see Master Response 6.

As stated in Master Response 12, the State is sensitive to the potential effects of repairs or improvements to SPFC facilities that may result in redirected hydraulic impacts upstream or downstream from these facilities, and is developing more detailed policies to minimize and mitigate potential impacts. Based on current evaluations (see Section 3.13; Attachment 8C, "Riverine Channel Evaluations"; and Attachment 8D, "Estuary Channel Evaluations," in Appendix A, "Central Valley Flood Protection Plan"), implementing the SSIA as a whole would not result in adverse systemwide hydraulic effects, including any in the Delta. Peak floodflows may increase slightly (over current conditions) in certain reaches, but the expansion of conveyance capacity proposed in the SSIA would attenuate flood peaks and result generally in reduced peak flood stages throughout the system.

Future feasibility studies are needed to refine the proposed elements of the SSIA, and the ultimate configuration of facilities may vary from those presented in the 2012 CVFPP. Only at that time will the State have project-specific modeling results that indicate the specific magnitude and extent of hydraulic impacts, if any, from planned improvements within the system. Cost estimates for the SSIA in the 2012 CVFPP include an allowance for features to mitigate potential significant hydraulic impacts caused by project implementation.

The issue of potentially redirecting hydraulic impacts is also addressed in Section 3.13, "Hydrology," in the DPEIR under Impact HYD-2 (NTMA), Impact HYD-4 (NTMA), Impact HYD-2 (LTMA), and Impact HYD-4 (LTMA). As indicated in these impact discussions, any project proponent implementing a project consistent with the SSIA that would affect flood stage elevations would need to obtain various applicable permits before project implementation (such as Section 408 and 208.10 authorization from USACE and encroachment permits from the Board). The project proponent would need to analyze the potential for the project to locally impede flow or transfer flood risk by causing changes in river velocity, stage, or cross section. Projects would not be authorized if changes in water surface elevation, and thus flooding potential, would increase above the maximum allowable rise set by these agencies. If the design of a project would result in an unacceptable increase in flooding potential, a project redesign or other mitigation would be required to meet agency standards before the project could be authorized and implemented. For additional details, see Master Response 12.

T_PETERSON1-04

The commenter contends that O&M costs will increase in one geographic area in comment T_Peterson1-03, then extrapolates that assertion to the entire SSIA in comment T_Person1-04, with no evidence to support such a conclusion for the entire SSIA. See response to comment T_Peterson1-03, above, regarding future evaluation of specific projects and O&M.

T_PETERSON1-05

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction for the CVFPP to "…include a description of both structural and nonstructural means for improving the performance and elimination of deficiencies of levees, weirs, bypasses, and facilities, including facilities of the State Plan of Flood Control, and, wherever feasible, meet multiple objectives…" (CWC Section 9616(a)). The legislation further identifies 14 objectives, two of which address water supply and groundwater recharge (CWC Sections 9616(a)(3) and 9616(a)(14)).

The CVFPP includes a high-level discussion on integrating water supply benefits with flood management improvements. The SSIA elements focus on public safety and improvement of flood management, consistent with the legislative direction and CVFPP primary goal; however, implementing these elements could improve water management because expanding floodways and the bypass system could improve the flexibility of reservoir operations and increase in-channel groundwater recharge. The SSIA describes potential opportunities for integrating water supply benefits with proposed flood management actions, but it does not include specific project recommendations related to water supply because of the need for future site-specific proposals and analyses. During post-adoption activities (regional flood management planning and development of basin-wide feasibility studies), additional details will be developed, including specific water management features as part of multi-benefit projects, in collaboration with interested local and regional agencies and organizations.

In addition, the DPEIR evaluates the potential effects of the proposed program on water supply; for example, see Section 3.11, "Groundwater Resources," and Section 3.13, "Hydrology." The impetus for including both the Southern California and coastal CVP and SWP service areas within the PEIR (i.e., as the "SoCal/coastal CVP/SWP service areas") was to ensure that potential effects of the program on water deliveries outside the Extended SPA and Sacramento and San Joaquin Valley watersheds were evaluated in the PEIR.

The PEIR analysis did not find any significant adverse effects on water supply resulting from the proposed program.

DWR believes that the approach of focusing the CVFPP on flood management issues is consistent with the Legislature's intent as expressed in the Central Valley Flood Protection Act of 2008, and that including elements that provide a greater focus on water supply is not necessary. For additional details, see Master Response 7.

As stated in Master Response 10, in developing the CVFPP and formulating the SSIA, DWR considered various forms of storage for flood management, including operational changes to existing reservoirs with flood storage, new or expanded flood storage in reservoirs, and storage in floodplains. Specifically, one of the preliminary approaches—Enhance Flood System Capacity—included enlarging the flood storage allocation of several multipurpose reservoirs to improve management of flood risks on lands protected by the SPFC. This evaluation found potential benefits from and opportunities for reservoir flood storage and operational changes, such as improving flexibility in managing hydrologic changes (such as climate change) and potentially offsetting the hydraulic effects of certain system improvements on downstream reaches. At the same time, these analyses addressed both the physical limitations of these opportunities and the potential negative effects of increasing flood-storage allocations on water supply and other beneficial uses. The analyses of reservoir storage and flood operations that were conducted in support of the 2012 CVFPP are described in Attachment 8B in Appendix A, "Central Valley Flood Protection Plan."

Storage elements ultimately retained in the SSIA are based on preliminary systemwide analyses conducted for the 2012 CVFPP, legislative direction for the CVFPP, and the findings of prior and ongoing studies. Among those studies are ongoing surface storage investigations and prior local, State, and federal studies such as the Shasta Lake Water Resources Investigation, North-of-the-Delta Offstream Storage (Sites Reservoir), In-Delta Storage Program, Los Vaqueros Reservoir Expansion, and Upper San Joaquin River Basin Storage Investigation (Temperance Flat Reservoir). However, no new site-specific investigations of surface storage were included in the systemwide analyses conducted to support the 2012 CVFPP.

In the 2012 CVFPP, the SSIA includes coordinated reservoir operations aimed at making the most efficient and effective use of current flood storage allocations in existing reservoirs, and implementation of the authorized Folsom Dam Raise (see Section 3.5.4 of the CVFPP). These SSIA storage elements appropriately reflect the conceptual level of detail and systemwide focus of the 2012 CVFPP, without precluding future

consideration of new or expanded storage by the State or local agencies. At this time, the SSIA does not include new reservoirs or expansion of storage (other than at Folsom Dam) solely for the purpose of flood management; however, DWR will continue to consider flood management in the context of, and as an objective of, its ongoing multi-benefit surface storage investigations and systemwide reoperation studies. Should these State investigations or other related efforts by local or federal agencies identify flood management as a component of a feasible reservoir storage project, this may be reflected in future updates to the CVFPP.

Ongoing investigations are being conducted to determine the feasibility of surface storage and consider potential environmental effects. The analyses included in these surface-storage studies are more detailed than those conducted at a systemwide scale for the 2012 CVFPP. Consequently, these studies are developing more comprehensive information about the potential costs and benefits of site-specific increases in flood storage. Some specific examples of ongoing multipurpose surface-storage investigations and related investigations that are examining the feasibility of adding new flood storage are the Upper San Joaquin River Basin Storage Investigation, the North-of-Delta Offstream Storage Investigation, and the Shasta Lake Water Resources Investigation.

During the early and mid-20th century, most of the major rivers and tributaries draining into the Central Valley were dammed, providing both intentional and incidental flood management benefits. The aggregate benefit of these reservoirs to flood management has been substantial, and has contributed to the success of the existing flood system in reducing or avoiding damage from major flood events during the past century. However, California's topography and geology limit opportunities for reservoir construction, and most of the feasible locations have already been developed with the existing major dams (e.g., Shasta, Oroville, Folsom). The remaining opportunities are much more limited.

Specifically, unlike the situation that existed at the beginning of the 20th century, only a few remaining dam sites, spread throughout the Central Valley watersheds, offer the potential to provide large volumes of flood storage capacity. Other than for a few specifics, such as raising Shasta Dam or constructing Sites Reservoir, commenters on this topic did not provide a more detailed proposal or recommendation for implementing upstream storage projects. In particular, commenters provided no specific information regarding the feasibility of using an upstream-reservoir approach to meet the requirements of SB 5.

DWR recognizes the importance of developing additional water storage capacity in California to support an increasing population, to help

compensate for the anticipated loss of snowpack storage as a result of climate change, and to maintain the important role of Central Valley agriculture for the nation and the world. For these reasons, multipurpose reservoir projects will likely continue to be proposed and, if successful, may help to meet needs for flood storage capacity.

However, these proposals face daunting challenges. Despite their benefits, new or expanded reservoirs generally face considerable opposition given their environmental effects, costs, perceived risks, and other factors. Also, environmental laws established mostly in the 1970s now apply to these proposals. Among these laws is the requirement under Section 404 of the CWA that any project affecting waters of the United States can be approved only if it is demonstrated to be the least environmentally damaging practicable alternative. Many other laws also present permitting challenges.

It is significant that no new major onstream reservoir has been constructed in the Central Valley watershed since New Melones Dam was completed in 1978. The Auburn Dam project, which commenced construction in 1968, was never completed because of several factors, including its cost, geologic problems with the site, and potential harm to recreational and ecological values. Recently, successful projects have consisted largely of projects to provide offstream storage (such as Los Vaqueros Reservoir), which can provide only limited flood control benefits outside their watersheds given the need for pumping, and projects to increase the capacity of existing reservoirs (which by their nature are only incremental).

Moreover, to serve as a substitute for floodway conveyance and storage, upstream reservoir capacity would have to be developed throughout the Central Valley watershed. The extreme weather events (i.e., atmospheric rivers) that create the greatest risk of a severe flood are often localized. Floodplain storage protects against floodwaters originating from all upstream areas, but by definition, upstream reservoirs can store only the floodwaters that originate from a particular area or tributary watershed. For example, an increase in the capacity of Shasta Lake would provide little or no benefit in the event of a major atmospheric rivers event focused on the central or southern Sierra Nevada. There is simply no reasonable scenario under which an array of new reservoir projects spread throughout the Central Valley watershed would be feasible and could serve as an effective substitute for floodplain storage. Suitable and feasible remaining sites do not exist, the costs would likely be prohibitive and the opposition substantial, and environmental permits would be difficult if not impossible to obtain. It would be both speculative and imprudent for the CVFPP to rely on such an approach. None of the comments on the topic have addressed, much less rebutted, the substantial evidence that such an

alternative could not feasibly meet the objectives of the CVFPP as directed by SB 5.

Failing to reserve adequate floodway conveyance and storage capacity now would leave future generations with limited options for addressing their flood protection needs. The current generation has benefited from the existing bypass system, and expanding that system would benefit both current and future residents.

It is recognized that in certain cases and to some degree, upstream floodway conveyance and storage could reduce the need for (or scale of) some types of downstream flood management actions associated with the SPFC. However, opportunities to reduce flood risks on lands protected by the SPFC by increasing floodway conveyance and storage are limited, and depend on a variety of factors:

- The location of a reservoir (or multiple reservoirs) with respect to the downstream actions or target area is important. Multipurpose reservoirs are present along many major tributaries to the Sacramento and San Joaquin rivers, but the hydrology (magnitude of rainfall and timing of peak flows from a watershed) and the operations of these reservoirs are very complex. Floodflows in downstream reaches of mainstem rivers are often influenced by the operation of multiple reservoirs, and peak flood stages may result from a combination of hydrologic events on different tributaries. Consequently, increasing flood storage in one reservoir may not reduce peak flood stage along a mainstem river reach because of the operations of other reservoirs, contributions from unregulated streams, or hydrology of the various tributary watersheds.

- The volume of floodway conveyance and storage that could be achieved is related to the size of the watershed and floodflows it generates, which can limit the effectiveness of expanding reservoirs or constructing new reservoirs. Expanding a reservoir is typically most effective when the existing reservoir has a small flood storage allocation compared with its tributary watershed. Similarly, it may not be effective to construct or expand a reservoir that controls a relatively small watershed.

- Opportunities to expand a reservoir are typically limited by the existing dam’s location, size, and type of construction (concrete versus earthen, for example). A reservoir expansion sufficient to achieve the desired flood risk reduction benefits downstream may not be physically possible at all locations.

- The cost and potential impacts of enlarging a reservoir or constructing a new reservoir vary substantially from location to location. The CVFPP is a conceptual plan, and the PEIR is a program-level document; the site-specific analyses that would be needed to assess feasibility were not conducted as part of the CVFPP or PEIR, and will occur at the project level. See Master Response 24.

- Reservoir ownership varies, and studies of specific opportunities to expand reservoirs must be conducted in partnership with owners and operators.

The above factors indicate that a feasible and cost-effective surface-storage project could be developed only under specific circumstances, and that even if it is feasible, additional surface storage may not provide meaningful flood management benefits. These factors, combined with the conceptual systemwide focus of the 2012 CVFPP, precluded DWR from identifying specific reservoir storage elements to include in the SSIA at this time. These factors limited the ability to formulate an approach/alternative to include in the PEIR that focused primarily on increasing flood storage. Further, increasing storage alone would not achieve many of the CVFPP goals or fulfill legislative intent, such as improving ecosystem functions within the flood management system or achieving an urban level of flood protection for all urban areas.

Studies showed that combining bypass expansion, regional levee improvements, and coordinated operations in the SSIA did not result in systemwide hydraulic impacts that would be substantial enough to require including additional surface storage as a hydraulic mitigation measure. However, the plan does not preclude future consideration of new or additional flood storage by State, federal, or local agencies in the regional flood management planning or two basin feasibility studies, or as independent projects. (See Section 3.5.4 in Appendix A, “Central Valley Flood Protection Plan.”). For additional details, see Master Response 10.

T_PETERSON1-06

See response to comment T_PETERSON1-03, above, and in particular the discussion of Master Response 1 regarding the high-level nature of the CVFPP and the need for future study and evaluation before details of bypass projects can be determined.

As stated in Master Response 2, the 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program

level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

A portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of levees in rural areas. For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements.

The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable.

The PEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

In addition, as stated in Master Response 3, the PEIR includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and 3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed. For additional details, see Master Response 3.

T_PETERSON1-07

As stated in Master Response 3, the SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. Implementing the SSIA would increase the percentage of the population receiving at least 100-year (1 percent annual chance) flood protection from the current 21 percent to more than 90 percent (CVFPP, page 3-40). The remaining 10 percent of the population would receive benefits through residual risk management actions. Based on initial planning-level cost estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to provide flood stage reduction benefits to many of the areas in the system, including small communities and rural-agricultural areas.

As stated above in response to comment T_PETERSON1-06, the PEIR includes mitigation measures that further protect agricultural resources, or

minimize adverse effects on agricultural resources that could result from implementation of the SSIA.

The State supports the continued viability of small communities to preserve cultural and historical continuity and provide important social, economic, and public services to rural populations and agricultural enterprises. The SSIA describes State investment priorities in small community flood protection while avoiding the inducement of imprudent growth within SPFC floodplains. Under the SSIA, many small communities would receive increased flood protection benefits as a result of system improvements focused on protecting nearby urban areas. For example, levee improvements may be constructed upstream from an urban area to prevent a scenario in which floodwaters from an upstream levee breach would flow down gradient into the urban area. The upstream levee improvement that may extend into rural locations would therefore also reduce flood risks for the rural area immediately adjacent to the improved levee segment. Conditions in small communities would also be evaluated on a case-by-case basis to identify appropriate State investments in additional structural and/or nonstructural actions (e.g., levees, flood walls, floodproofing, or relocations).

The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas outside small communities. These actions are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development or increasing flood risks within lands protected by the SPFC. No target minimum level of flood protection has been established for prioritizing State investments in rural-agricultural areas (see CWC Section 9603). However, the SSIA proposes (1) projects that maintain levee crown elevations for rural SPFC levees and provide all-weather access roads for inspection and floodfighting; (2) economically feasible projects that resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs; (3) system elements (e.g., bypass expansion) that lower peak flood stages within some rural channels; and (4) actions to manage residual flood risks.

All areas protected by the SPFC would benefit from State investments included in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery. The SSIA also proposes State investments to preserve agriculture and discourage urban development in rural floodplains (e.g., purchasing agricultural easements from willing landowners, when consistent with local land use planning). In addition, the SSIA proposes FEMA flood insurance reforms to support the sustainability of rural-agricultural enterprises. For additional details, see Master Response 3.

The potential for the loss of jobs is evaluated in PEIR Section 3.16, "Population, Employment, and Housing." The threshold of significance used for job loss is whether implementation of the proposed program would:

> Induce substantial unemployment in an area, either directly (for example, by displacing places of business in areas where no adequate relocation possibilities exist) or indirectly, by affecting land uses closely tied to regional economic output and employment (for example, by affecting recreational areas)

As described in the discussion of Impact PEH-3 (NTMA and LTMA), "Changes in Employment, Either Directly or Indirectly, through Changes in Land Use or Policy Changes" (DPEIR pages 3.16-60 and 3.16-62), when considering the entirety of the CVFPP, including elements that would generate jobs, potentially result in job losses, and support greater economic stability (e.g., via improved flood protection), the program would not result in a substantial decrease in employment, especially if considered on a countywide or regional level.

T_PETERSON1-08

As stated in Master Response 8, the State Legislature enacted comprehensive flood risk management legislation in 2007, including the Central Valley Flood Protection Act of 2008. This law set a clear directive for an integrated systemwide approach to Central Valley flood management, and provided detailed guidance for DWR to follow in formulating the CVFPP. The Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in CWC Sections 9600–9625.

DWR, in coordination with USACE, the Board, and multiple stakeholders, used this legislative direction to formulate the CVFPP's primary and supporting goals, listed below.

CVFPP Primary Goal:
Improve Flood Risk Management—Reduce the chance of flooding and damages, once flooding occurs, and improve public safety, preparedness, and emergency response through the following:

- Identifying, recommending, and implementing structural and nonstructural projects and actions that benefit lands currently receiving protection from facilities of the SPFC

- Formulating standards, criteria, and guidelines to facilitate implementation of structural and nonstructural actions for protecting urban areas and other lands of the Sacramento and San Joaquin river basins and the Delta

CVFPP Supporting Goals:

- *Improve Operations and Maintenance*—Reduce systemwide maintenance and repair requirements by modifying the flood management systems in ways that are compatible with natural processes, and adjust, coordinate, and streamline regulatory and institutional standards, funding, and practices for operations and maintenance, including significant repairs.

- *Promote Ecosystem Functions*—Integrate the recovery and restoration of key physical processes, self-sustaining ecological functions, native habitats, and species into flood management system improvements.

- *Improve Institutional Support*—Develop stable institutional structures, coordination protocols, and financial frameworks that enable effective and adaptive integrated flood management (designs, operations and maintenance, permitting, preparedness, response, recovery, and land use and development planning).

- *Promote Multi-Benefit Projects*—Describe flood management projects and actions that also contribute to broader integrated water management objectives identified through other programs.

In addition, the DPEIR includes the following specific statutory objectives:

- *Maximize Flood Risk Reduction Benefits within the Practical Constraints of Available Funds*—Ensure that technically feasible and cost-effective solutions are implemented to maximize the flood-risk reduction benefits given the practical limitations of available funding, and provide a feasible, comprehensive, and long-term financing plan for implementing the plan.

- *Adopt the CVFPP by July 1, 2012*—Complete all steps necessary to develop and adopt the CVFPP by July 1, 2012, or such other date as may be provided by the Legislature.

- Meet Multiple Objectives Established in Section 9616 of the California Water Code, as Feasible.

In accordance with legislative direction and reflecting stakeholder input, DWR prepared the 2012 CVFPP to describe the State's vision for flood management in the Central Valley. This vision for flood management in the Central Valley is for a sustainable flood management system that provides a high degree of public safety, promotes long-term economic stability, and supports restoration of compatible riverine and floodplain ecosystems.

In the CVFPP, DWR describes the SSIA, which is a proposal for achieving the State's vision for flood management. The SSIA helps achieve the State's vision for flood management in a balanced manner by promoting responsible investment of public funds, commensurate with flood risks, in projects that integrate multiple benefits, in proactive maintenance of SFPC facilities and residual risk management, and in wise management of floodplains protected by the SPFC. For additional details, see Master Response 8.

Regarding the issue of water storage, see the discussion of reservoirs in response to comment T_PETERSON1-05, above.

Regarding water supply, as stated in Master Response 7, the CVFPP includes a high-level discussion on integrating water supply benefits with flood management improvements. The SSIA elements focus on public safety and improvement of flood management, consistent with the legislative direction and CVFPP primary goal; however, implementing these elements could improve water management because expanding floodways and the bypass system could improve the flexibility of reservoir operations and increase in-channel groundwater recharge. The SSIA describes potential opportunities for integrating water supply benefits with proposed flood management actions, but it does not include specific project recommendations related to water supply because of the need for future site-specific proposals and analyses. During post-adoption activities (regional flood management planning and development of basin-wide feasibility studies), additional details will be developed, including specific water management features as part of multi-benefit projects, in collaboration with interested local and regional agencies and organizations.

In addition, the DPEIR evaluates the potential effects of the proposed program on water supply; for example, see Section 3.11, "Groundwater Resources," and Section 3.13, "Hydrology." The impetus for including both the Southern California and coastal CVP and SWP service areas within the PEIR (i.e., as the "SoCal/coastal CVP/SWP service areas") was to ensure that potential effects of the program on water deliveries outside the Extended SPA and Sacramento and San Joaquin Valley watersheds were evaluated in the PEIR.

The PEIR analysis did not find any significant adverse effects on water supply resulting from the proposed program.

DWR believes that the approach of focusing the CVFPP on flood management issues is consistent with the Legislature's intent as expressed in the Central Valley Flood Protection Act of 2008, and that including elements that provide a greater focus on water supply is not necessary. For additional details, see Master Response 7.

T_PETERSON1-09

See response to comment T_PETERSON1-03, above.

T_PETERSON1-10

Development of many of the plans referenced in the comment has not begun. The content of the plans referenced and the potential effects on agricultural operations are speculative. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted

T_PETERSON1-11

Because the locations of future ecosystem restoration efforts conducted as part of the CVFPP are not known at this time, the issue of compatibility of ecosystem restoration and adjacent land uses is speculative. Details regarding compatibility of habitat and adjacent land uses will be addressed as needed as plan implementation proceeds. However, there seems to be little potential for meaningful conflicts between habitat created as part of the plan and existing agricultural uses, particularly conflicts severe enough to result in incidents of inverse condemnation as implied by the commenter. Where DWR, the Board, or others create habitat, the land would be part of a specific project and owned in fee title by an appropriate agency to preserve and maintain the habitat. Where this habitat is in an expanded floodway, DWR or another appropriate agency would own the surrounding land in the floodway in fee title and land would be leased for agricultural production as appropriate. In this circumstance, the habitat would not conflict with continuing nearby agricultural operations owned by a private entity. If habitat were created on the edge of an existing or expanded floodway, typically a levee and associated maintenance easements would separate the habitat from any privately held agricultural land on the landside of the levee, minimizing the potential for conflicts between sensitive species that might occupy the habitat and agricultural operations.

T_PETERSON1-12

The comment provides information on a particular event with no direct connection to the CVFPP. See responses to comments T_PETERSON1-10 and T_PETERSON1-11, above.

T_PETERSON1-13

See responses to comments T_PETERSON1-02 and T_PETERSON1-03, above, regarding the high-level nature of the CVFPP and the future work required before project details are determined. See response to comment T_PETERSON1-05 regarding water supply. See responses to comments T_PETERSON1-06 and T_PETERSON1-07 regarding program impacts on agricultural resources. The comment provides no evidence to support the assertion that SSIA implementation would result in incidents of inverse condemnation.

T_PETERSON1-14

As stated in Master Response 2, the conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable.

In addition, the SSIA does include State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans. These easements would be used to preserve agriculture and prevent urban development in current agricultural areas, discouraging conversion to land uses that would increase flood risks within floodplains protected by SPFC facilities. Agricultural conservation easements could be purchased through various DWR programs; an example is DWR's Flood Corridor Program, which focuses on nonstructural flood risk reduction integrated with protection of natural resources and agricultural lands. For additional

details, see Master Response 2. As stated above, purchases of easements would be from willing landowners. Obtaining such easements through condemnation is not being considered.

T_PETERSON1-15

The RAMP process, although consistent with CVFPP goals, is currently separate from CVFPP preparation. The public involvement process for the RAMP is unrelated to the public involvement process for the CVFPP. As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

Anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated

with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_PETERSON1-16

As stated in Master Response 15, in recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form

SSIA "alternatives" for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas

and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

T_PETERSON1-17

As stated in Master Response 22, the CVFPP SSIA is a complex integrated flood management plan that covers a large geographic area. The State Legislature required DWR to prepare the first public draft CVFPP by January 1, 2012, for adoption by the Board by July 1, 2012, or as such other date as may be provided by the Legislature. DWR believes that the CVFPP and DPEIR speak for themselves regarding the magnitude of the required effort in light of these statutory deadlines, and appreciates the compliments from a number of commenters in that regard.

The Public Draft CVFPP was released, on time, on December 30, 2011. Several of the attached supporting documents, specifically the *State Plan of Flood Control Descriptive Document* (November 2010) and the *Draft Flood Control System Status Report* (December 2011), were published before the Public Draft CVFPP and informed its development. Most CVFPP attachments were released with the public draft or in early February 2012; exceptions include the "Flood Damage Analysis," "Riverine Channel Evaluations," "Cost Estimates," and "Reservoir Analysis" attachments, which were released between mid-February and the publication of the DPEIR.

CEQA Guidelines Section 15105(a) provides a timeframe for public review of the draft EIR, stating that when a draft EIR is submitted to the State Clearinghouse for review by State agencies, the public review period shall not be less than 45 days. The DPEIR was made available for public comment on March 6, 2012; however, as described above, most attachments (the CFVPP and attachments) were publicly available several months before.

Of the thousands of comments received on the CVFPP and DPEIR, four comments, received on the last day of the noticed DPEIR comment period, requested an extension of the time to comment. No requests for extension were made before then. DWR decided not to extend the 45-day public comment period, or otherwise deviate from the CVFPP and PEIR schedule, after considering several factors: (1) Many of the key documents had been available for more than 45 days; (2) the vast majority of commenters did not see a need to request an extension; (3) a number of commenters had already responded in a timely manner, many with very detailed comments; (4) the commenters requesting extensions were simultaneously filing comments reflecting a thoughtful review; (5) a highly publicized outreach and engagement program was initiated with stakeholders; and (6) it was necessary to ensure compliance with the rapidly approaching July 1

statutory deadline. DWR appreciates the diligent efforts made by all of those who have participated in the development of the CVFPP, including those who submitted timely comments on the DVFPP and DPEIR. For additional details, see Master Response 22.

T_PGE1

T_PGE1-01

MR. BELL: Thank you. My name is Rex Bell. I'm the manager of Environmental Policy at Pacific Gas and Electric Company. PG&E has significant gas and electric structure -- or infrastructure located on or near levees. And we just hope that as the plan is implemented, it takes reliability and safety for those utilities into account.

T_PGE1-02

We're particularly interested in the adoption of the Tier 2, title 23 regulations, and would like to work with the Board as those regulations are adopted to ensure that we can maintain safety and reliability. And I'm particularly interested in knowing what the adoption schedule and public comment is for those regulations.

Thank you very much.

Pacific Gas and Electric Company, Rex Bell (Public Hearing, January 27, 2012)

Response

T_PGE1-01

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

As these planning processes are implemented, and when project-specific planning is being conducted, DWR will coordinate with local utilities, including PG&E. In addition, Mitigation Measure UTL-1 (NTMA and LTMA) in DPEIR Section 3.20, "Utilities and Service Systems," requires that the project proponent and its primary contractors coordinate with utility providers before construction begins to implement orderly relocation of utilities, if needed.

T_PGE1-02

Information about proposed technical amendments to Title 23 of the California Code of Regulations is available on the Board's Web site (http://www.cvfpb.ca.gov/regulations/index.cfm). The Board would appreciate PG&E's participation in the public involvement portion of the amendment process. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR. The comment is noted.

T_PGE2-01

MR. MAIER: Good afternoon, President Edgar and members of the Board. Thank you for giving us the opportunity to speak this afternoon. My name is Lonn Maier. I'm a licensing and permitting specialist at Pacific Gas and Electric in Sacramento. And we have some prepared comments I'd like to provide to you.

PG&E provides natural gas and electric service to over 15 million customers in northern and central California, roughly two-thirds of the State, many of whom live in the areas addressed by the Central Valley Flood Protection Plan.

As we begin the process of reviewing the plan and the Draft Programmatic EIR, it's essential to understand the number of Pacific Gas & Electric facilities in proximity to existing levees. In recent months, we've reached out to Flood Protection Board, DWR, Army Corps of Engineers and have been working collaboratively with staff to provide data on these facilities.

And just to give you a rough sense of what we're talking about. Within the 1,600 miles of jurisdictional

levees, that the State and federal government has, we have over 850 transmission line towers, 9,000 electric distribution poles, and over 25 miles of gas transmission lines, not to mention any of the gas distribution lines, which there are hundreds and hundreds of miles.

Many of these facilities were originally sited along or near levees to provide gas and electric service to the agricultural industry and communities. And now we're providing that critical service to metropolitan commercial, residential customers as well.

Given the large number of facilities and the critical role that they play in delivering gas and electric service, it's imperative that PG&E be involved at the earliest possible planning stage when flood protection facilities are scheduled for upgrades or renovations.

Our facilities can coexist with levees. Of that, we are convinced. But if relocation is necessary in special circumstances, it's a very long review and approval process. And the handouts that I provided to you are photos of the Marysville Ring Levee project where PG&E has electrical facilities that are being relocated as a result of the project.

The significant urban development of the Central Valley means that relocation of our facilities would require extensive rerouting at very substantial expenses

to our customers. And the rerouting would trigger additional environmental concerns and be subject to environmental review.

And again, the reroute at the Marysville Ring Levee project, our estimated cost just to relocate our facilities is around 10 and a half million dollars.

Rerouting must be viewed as a last resort, and, if necessary, it must be identified at the earliest stages of project development, so that necessary approvals can be obtained in a timely manner.

In summary, we believe that the Board, DWR, Army Corps of Engineers needs to engage PG&E and other utilities in the planning process to ensure that improvement of the flood protection facilities allows for continued ability of utilities to provide safe and affordable gas and electric service, and that any potential impacts to utility facilities are adequately addressed in the Draft Programmatic EIR.

Thank you.

PRESIDENT EDGAR: Thank you. Have you provided those written comments to DWR as input to the Draft Programmatic EIR?

MR. MAIER: Yeah. We'll be providing those comments separately.

PRESIDENT EDGAR: By the deadline?

Pacific Gas and Electric Company, Lonn Maier (Public Hearing, April 11, 2012)

Response

T_PGE2-01

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form “alternatives” for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

As these planning processes are implemented, as well as when project specific planning is being conducted, local utilities, including PG&E, will be coordinated with. In addition, Mitigation Measure UTL-1 (NTMA and LTMA), included in DPEIR Section 3.20, "Utilities and Service Systems," requires that the project proponent and its primary contractors coordinate with utility providers before construction begins to implement orderly relocation of utilities, if needed.

T_PIMENTEL1-01 WOODLAND MAYOR PIMENTEL: Thank you very much, Chairman. Good afternoon, or good evening, I should say to all of you. Thank you very much for giving me the opportunity to speak. I am lucky enough to be the Mayor for the City of Woodland. And I wanted to talk about some of our concerns that we have with the Central Valley Flood Protection Plan.

Just specifically with the way that things have been -- basically, historically been done. And it seems like Yolo County, and the City of Woodland in particular, have always been placed kind of in the middle of trying to solve other people's flood issues. And that's what our major concern really is here today.

T_PIMENTEL1-0

In the past, when the bypass was developed and now we're talking about expanding the bypass and the capability once again and flooding farm land, we were told in the past that when the settling basin was developed and levees were raised, that the City of Woodland would not see any particular or major impacts to flooding. And we know that that was completely incorrect, because FEMA came later and put 4,300 homes and businesses in the 100-year flood zone, which we have now been able to successfully fight and remove, and we still have a little bit more ways to go.

So the skepticism of our community and our neighborhoods continues to remain whenever we find that we're trying to again resolve someone else's flood issue by having -- by putting Yolo County right in the middle of it.

T_PIMENTEL1-0

I think that I've heard a lot of the speakers, a lot of the farmers that certainly will be directly impacted. And Woodland is very much an agricultural community. We have relied heavily on the agricultural industry here. And any major impacts to farming nearby or in the region will certainly have an impact to a lot of the suppliers that have the businesses here in the City of Woodland.

And I simply want to just say that I would like

for you to continue working with not just the farmers and the landowners and the Board of Supervisors, and some of the other important agencies, but also work closely with the communities and the cities that you will directly impact.

Even though you may not see it now, we certainly believe that there could be some potential negative impact to our communities, and certainly to the City of Woodland. And I ask that you continue to accept input from other parties that are directly involved in what you are trying to help.

So thank you again for giving me the opportunity to speak this evening.

PRESIDENT EDGAR: Thank you for being here, Mayor. Appreciate it.

City of Woodland, Mayor Art Pimentel (Public Hearing, April 11, 2012)

Response

T_PIMENTEL1-01

The comment provides introductory remarks and an opinion on past events. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_PIMENTEL1-02

As stated in Master Response 1, the existing bypass system in the Sacramento River Basin (including the Sutter and Yolo bypasses and associated inflow weirs) forms the central backbone of the Sacramento River Flood Control Project and redirects damaging floodflows away from the main channels of the Sacramento and Feather rivers. The considerable capacity of the bypass system (up to 490,000 cfs) also slows the movement of floods, effectively attenuating flood peaks and flows into the Delta. In the San Joaquin River Basin, the bypass system includes the Chowchilla, Eastside, and Mariposa bypasses.

The Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC, Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike.

Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

T_PIMENTEL1-03

As stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The PEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

Additionally, as stated in Master Response 3, the DPEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) in Section 3.3, "Agriculture and Forestry Resources," of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed. For additional details, see Master Response 3.

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and

stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

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The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_POLLOCK1-01

MS. POLLOCK: Good afternoon. It's Lynnel Pollack, and I'm speaking --

PRESIDENT EDGAR: Good afternoon, Lynnel. It's good to see you again.

MS. POLLOCK: Good afternoon.

I speaking to you today as a farmer and landowner in Yolo County. I do wear many hats concerning water, the

bypass, and the area, but I'm speaking as an individual.

And I, too, am one of those landowners or area residents who first found about this plan with the Sacramento Bee article, which showed a map that basically put us under water, we think. It's very conceptual, I know. There was a big blob right on our home ranch, so I'm not sure exactly what it means. But my husband and I, along with our sons, do farm in northern Yolo County along the Sacramento River, down river from Knights Landing at various sites. And our home ranch lies just to the west of the Fremont Weir. And so we farm particularly in that area between the west levee of the bypass and the ridge -- Knights Landing Ridge Cut Canal that comes down from the Colusa Drain.

So I'm very familiar with the area. And I'm going to be -- try to be brief in my comments. I have not had a chance to go through the entire plan. I appreciate the updates today and the overview by the DWR staff. I know one of the things that was mentioned was that public safety is the highest priority. And I applaud you for that. But when you talk about public safety, don't forget about our rural and rural community and the rural agricultural areas also where many people do live. Our safety is important also, and I hope that you will keep that in mind.

T_POLLOCK1-02

I do have a couple of questions. And I know you just heard from the Mayor of the City of Woodland, but I would also like to know how the City of Woodland is viewed, whether it is an urban area slated for 200-year protection or whether it has the lesser 100-year protection. And I think that needs to be made clear as the plan moves forward.

T_POLLOCK1-03

Also, your staff -- the DWR staff indicated that as the plan moves forward, they would work with local flood control agencies. But for many of us, DWR is our local flood control agency, both the bypass levees where our home ranch is, and where I live our own personal home on Cache Creek are -- the levees are maintained by DWR. So I hope that there will be more outreach to the local landowners who do not have a specific district locally that will be our -- hopefully our -- where input can be gained.

We do want to be involved as this plan moves forward, because it certainly has significant implications

T_POLLOCK1-04

for us. Also, I think in the plan, I'm not sure how some of the west side tributaries, such as Cache Creek and the Cache Creek Settling Basin, and the Knights Landing Ridge Cut that drains into the Yolo Bypass are analyzed. They do need to be included. There are impacts to both of those systems.

T_POLLOCK1-05

Let's see as I move down here. And also more of a suggestion than a question on the economic analysis. It needs to be expanded, because the area of impact is not just within the bypass as they are created and perhaps land is taken out of production, but you now have, as someone who has farmed along the bypass for a number of years, there is significant seepage.

And even this last year, which was not a very high water year, we did have damage to winter wheat crops from seepage along the Sacramento River levees. So the impact is also felt on the outside of the levees to the agricultural production, not just within them.

I hope that, again, increasing the public outreach is -- and the mapping of the farm land and the crop types is very important as you move forward with the plan development.

T_POLLOCK1-06

And in the staff report, we heard terms such as maintenance, streamline permitting, significant public engagement. These are terms that have been bantered about for a number of years, promises made and not always kept by the agencies. And so I would strongly encourage that there be assurances to the public, to the local agencies, to local land-use authority, to local governments, that there are assurances that when promises are made, they be kept.

Mr. Tim Miramontes, the past president of the Farm Bureau, showed a photo of the head of the Yolo Bypass near the Fremont Weir. We have farmed in that area for a significant number of years, and I'm very familiar with that area. And going back to the 1970s, there's a story that goes along with why it is the way it is today. And again, it goes back to assurances, promises, and State authority that perhaps does not always follow through. So I'm not going to go into the story here, but it's -- there's a reason why it is the way it is today.

T_POLLOCK1-07 So with that, this plan brings a lot of uncertainty to the area, and for those of us affected by it, either living and/or farming in the area. What do we do? Do we plant that walnut tree? Do we develop a new orchard or do we wait and see for five years or maybe 10 years what's going to happen? Is our land going to be taken away from us for flood control and safety, or are we going to continue to farm?

Farming is not just a year-to-year proposition. And you've heard from many other farmers here today. It's almost generational. And so this uncertainty is something that we have to live with until you decide what is going to happen to our livelihoods and to our lives.

I think the other big uncertainty for a lot of us is the financial means by which this whole plan is going

to come to fruition, if it ever is to be, and that can be a big concern. I think it needs to be analyzed very, very carefully, because I think while you have estimates of costs, you've also heard from others that those costs can be expanded greatly, because when you start taking the land away from people, it drags on and on. And there are significant expenses that perhaps have not been calculated into the analysis.

So with that, I thank you for the opportunity to present these brief comments. I do hope to submit written comments in the future, and we hope that we can all stay engaged and learn more and help contribute to making a plan that is good for all of us.

Thank you.

PRESIDENT EDGAR: Thank you, Lynnel.

Farmer and Landowner in Yolo County, Lynell Pollock (Public Hearing, April 11, 2012)

Response

T_POLLOCK1-01

As stated in Master Response 3, the SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. Implementing the SSIA would increase the percentage of the population receiving at least 100-year (1 percent annual chance) flood protection from the current 21 percent to more than 90 percent (CVFPP, page 3-40). The remaining 10 percent of the population would receive benefits through residual risk management actions. Based on initial planning-level cost estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to provide flood stage reduction benefits to many of the areas in the system, including small communities and rural-agricultural areas.

In addition, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and 3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed.

The State supports the continued viability of small communities to preserve cultural and historical continuity and provide important social, economic, and public services to rural populations and agricultural enterprises. The SSIA describes State investment priorities in small community flood protection while avoiding the inducement of imprudent growth within SPFC floodplains. Under the SSIA, many small communities would receive increased flood protection benefits as a result of system improvements focused on protecting nearby urban areas. For example,

levee improvements may be constructed upstream from an urban area to prevent a scenario in which floodwaters from an upstream levee breach would flow down gradient into the urban area. The upstream levee improvement that may extend into rural locations would therefore also reduce flood risks for the rural area immediately adjacent to the improved levee segment. Conditions in small communities would also be evaluated on a case-by-case basis to identify appropriate State investments in additional structural and/or nonstructural actions (e.g., levees, flood walls, floodproofing, or relocations).

The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas outside small communities. These actions are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development or increasing flood risks within lands protected by the SPFC. No target minimum level of flood protection has been established for prioritizing State investments in rural-agricultural areas (see CWC Section 9603). However, the SSIA proposes (1) projects that maintain levee crown elevations for rural SPFC levees and provide all-weather access roads for inspection and floodfighting; (2) economically feasible projects that resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs; (3) system elements (e.g., bypass expansion) that lower peak flood stages within some rural channels; and (4) actions to manage residual flood risks.

All areas protected by the SPFC would benefit from State investments included in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery. The SSIA also proposes State investments to preserve agriculture and discourage urban development in rural floodplains (e.g., purchasing agricultural easements from willing landowners, when consistent with local land use planning).

In addition, the SSIA proposes FEMA flood insurance reforms to support the sustainability of rural-agricultural enterprises. The State supports efforts to reform FEMA's NFIP to more equitably reflect corresponding flood risks, including establishing a flood zone for agriculturally based communities to allow replacement of existing structures or reinvestment development in the floodplain. The State also supports identifying a special, lower-premium rate structure that reflects actual flood risks for agricultural buildings in rural-agricultural areas located in Special Flood Hazard Areas. The State will work with local flood management interests to pursue reform of the FEMA NFIP. For additional details, see Master Response 3.

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP. For additional details, see Master Response 13.

T_POLLOCK1-02

Under SB 5, cities and counties within the Sacramento–San Joaquin Valley that wish to continue to develop in urban areas are required to achieve the urban level of flood protection (protection against the 200-year or 0.5-percent-chance flood) for urban and urbanizing areas, as defined in CGC Section 65007(l) and CWC Section 9602(i). As defined in CGC Section 65007(j), "urban area" means a developed area in which there are 10,000 residents or more. Because Woodland has a population exceeding 10,000 residents (population of 56,000 per the City of Woodland's Web site), the urban level of flood protection requirements would apply to Woodland.

T_POLLOCK1-03

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect

the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

As stated in Master Response 14, regional flood management planning, to be conducted in each of nine regions identified in the 2012 CVFPP, is an important next step in identifying specific improvements to rural-agricultural areas, small communities, and urban areas consistent with the SSIA. Upon CVFPP adoption, DWR will work closely with local entities to collect on-the-ground information regarding flood risks and needs, identify potential local and regional improvement projects, assess the performance and feasibility of these projects, and develop proposals that reflect the priorities of local entities in reducing flood risks. Each regional plan will present an assessment of proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. DWR intends to provide guidance as well as technical and financial assistance to local agencies to prepare the regional flood management plans, subject to availability of funds. For additional details, see Master Response 14.

T_POLLOCK1-04

Figure 3-2 on page 3-5 of Attachment 8C, "Riverine Channel Evaluations," shows the Cache Creek system, including the Settling Bain, as well as Knights Landing Ridge Cut, part of the UNET coverages and included in the system analysis.

T_POLLOCK1-05

As stated in Master Response 1, the CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1. The levee seepage concern mentioned in the comment would be best addressed during project specific-review, because seepage may or may not be a concern in various areas based on multiple variables. Among these variables are whether seepage occurs along a particular levee segment, the severity of seepage where it does occur, and the land use adjacent to the levee where seepage occurs. Mapping done for regional planning would be determined with local input and may include Unique Farmland, Prime Farmland, and Urban Grasslands. The commenter is encouraged to participate in the post-adoption public involvement efforts described in response to comment T_POLLOCK1-03.

T_POLLOCK1-06

The comment requests assurances that in the future, any promises made by agencies will be kept. The comment then refers to a circumstance in which the commenter believes that State promises were not kept. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_POLLOCK1-07

With regard to the level of landowner uncertainty expressed by the commenter, see responses to comments T_POLLOCK1-03 and T_POLLOCK1-05 regarding the process of and anticipated timing for future planning and other post-adoption activities. The commenter is encouraged to participate in the post-adoption public involvement efforts described in response to comment T_POLLOCK1-03.

T_PORGANS1

T_PORGANS1-01

MR. PORGANS: Yes, Mr. Chairman and members of the Board. I also have a vision issue here. I'm under doctor's care at the moment. So I have a vision impairment with my vision and I'd have a vision impairment with the Plan.

So just so you understand, my name is Patrick Porgans. I'm independent. I am not now nor will I ever be a stakeholder. Okay? So we have that straight. I'm a citizen. And I'm here as a taxpayer and as person to inform you that this plan is so grandiose. And I don't know what the objectives are, because I don't see any numbers, yeah. And I don't know where the money's coming

T_PORGANS1-02

from. And if you want to talk numbers, we can talk numbers. And if you want to talk about conditions, we can talk about conditions.

This was inland sea at one time. The gentleman there knows that - Mr. Countryman. The operations of these reservoirs, they're sometime in the conflict. I brought that to your attention too, Mr. Countryman, quite frankly.

And what I'm seeing here is that we have a flood control system that, as far as I'm concerned, is a masterful one. And it works -- when it works according to the master flood control manual, it's divine. Okay? I'm saying that about the government, because it does work.

But there are times when the government, like the Department of Water Resources, has a conflict of interest. It's a water purveyor and then it's a public trustee. We have stored water, more water in protracted periods of time at Oroville. And similar conditions were happening at New Bullards Bar. And, you know, I documented the fact that they held back too much water on two major flood events, which compounded downstream flooding problems and exceeded the flood control design capacity, undocumented.

So when we lost lives and we talked about money and we talked about going forward and getting more money, remember that the State has an $80 billion deficit right

T_PORGANS1-03

now from the general obligation bonds. That's 80 billion in addition to that for the interest.

I'm almost done, Mr. Chairman.

PRESIDENT EDGAR: No, that's fine.

MR. PORGANS: I don't want to take too much of you're time.

PRESIDENT EDGAR: No, no. You're doing fine.

MR. PORGANS: I have 40 years in water. Now, maybe that's why I'm inundated with it and my wife doesn't want to talk about it any longer. I mean that's all possible.

But what I'm saying to you now is that you need to look at the system you have and make sure the system that you have, the 600,000 capacity, second fee capacity, unless it's changed, is still up to speed. And then I'd look at, you know, going back and making sure that's intact.

Then I make sure that the agencies were complying and that the federal law required that they take an action when they fail to comply. Of course all they do is write a letter. I don't have to force them to write the letter.

T_PORGANS1-04

So, lastly, I'm saying the Plan is too vague. There's not enough information in there. Right now the bond debt is eating up about 11 percent of the General Fund. That's 11 percent. There's another 80 billion out

there. When that's issued, you add another 80 billion in interest. You're talking about 320 billion.

This infrastructure deals -- starting to sound fishy to me -- I heard something about groundwater. And I know it could be used in the bypass from the dam and I know it can allow DWR to keep more water up there. I know all of that. They know that too.

But I'm saying to you, let's not move too fast. If you want to put a framework together, that's good. There's 4 or 5 billion sitting out there in the 1E. I'm saying to you let's not rush forward and do that. We don't have the flood conditions. We already know when the pineapple express is coming before it gets here. We know what the wetness index is before they do that. We know how projects are supposed to be jointly operated. And I stand here before you -- Mr. Countryman did a good job. I mean remember, one of the biggest clients of the Corps is DWR. And this is another way to increase the water supply reliability for the Department's state water contractors.

And, lastly, I had to stop DWR from putting the proposed flood control center in the hundred-year floodplain. They were going to put it over at Jibboom Street. We showed them that the levees would liquefact. And when I tried to testify before the Senate, Mr. Costa denied me and my attorney and -- excuse me -- my engineer

the opportunity to show how they failed to comply with the reservoir control manual during that flood at Marysville. Then when they lost the case, we're paying that money back, the people, from the General Fund.

Thank you very much. I have to go because I'm a little sick.

And I want to thank this man, Eric, and you, Mr. Chairman. If you're really sincere and you want to do something, get control of the reservoirs.

Thank you. Is there anything else?

PRESIDENT EDGAR: No. I Thank you for your testimony. Appreciate it very much.

MR. PORGANS: Very best to you. And if anyone celebrates this holiday, holy season, bless you.

PRESIDENT EDGAR: Thank you.

Patrick Porgans (Public Hearing, April 5, 2012)

Response

T_PORGANS1-01

As stated in Master Response 8, the State Legislature enacted comprehensive flood risk management legislation in 2007, including the Central Valley Flood Protection Act of 2008. This law set a clear directive for an integrated systemwide approach to Central Valley flood management, and provided detailed guidance for DWR to follow in formulating the CVFPP. The Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in Sections 9600–9625 of the California Water Code.

DWR, in coordination with USACE, the Board, and multiple stakeholders, used this legislative direction to formulate the CVFPP's primary and supporting goals, listed below.

CVFPP Primary Goal:

- *Improve Flood Risk Management*—Reduce the chance of flooding and damages, once flooding occurs, and improve public safety, preparedness, and emergency response through the following:

  – Identifying, recommending, and implementing structural and nonstructural projects and actions that benefit lands currently receiving protection from facilities of the SPFC

  – Formulating standards, criteria, and guidelines to facilitate implementation of structural and nonstructural actions for protecting urban areas and other lands of the Sacramento and San Joaquin river basins and the Delta

CVFPP Supporting Goals:

- *Improve Operations and Maintenance*—Reduce systemwide maintenance and repair requirements by modifying the flood management systems in ways that are compatible with natural processes, and adjust, coordinate, and streamline regulatory and institutional standards, funding, and practices for operations and maintenance, including significant repairs.

- *Promote Ecosystem Functions*—Integrate the recovery and restoration of key physical processes, self-sustaining ecological functions, native habitats, and species into flood management system improvements.

- *Improve Institutional Support*—Develop stable institutional structures, coordination protocols, and financial frameworks that enable effective and adaptive integrated flood management (designs, operations and maintenance, permitting, preparedness, response, recovery, and land use and development planning).

- *Promote Multi-Benefit Projects*—Describe flood management projects and actions that also contribute to broader integrated water management objectives identified through other programs.

In addition, the DPEIR includes the following specific statutory objectives:

- *Maximize Flood Risk Reduction Benefits within the Practical Constraints of Available Funds*—Ensure that technically feasible and cost-effective solutions are implemented to maximize the flood-risk reduction benefits given the practical limitations of available funding, and provide a feasible, comprehensive, and long-term financing plan for implementing the plan.

- *Adopt the CVFPP by July 1, 2012*—Complete all steps necessary to develop and adopt the CVFPP by July 1, 2012, or such other date as may be provided by the Legislature.

- Meet Multiple Objectives Established in Section 9616 of the California Water Code, as Feasible.

In accordance with legislative direction and reflecting stakeholder input, DWR prepared the 2012 CVFPP to describe the State's vision for flood management in the Central Valley. This vision for flood management in the Central Valley is for a sustainable flood management system that provides a high degree of public safety, promotes long-term economic stability, and supports restoration of compatible riverine and floodplain ecosystems.

In the CVFPP, DWR describes the SSIA, which is a proposal for achieving the State's vision for flood management. The SSIA helps achieve the State's vision for flood management in a balanced manner by promoting responsible investment of public funds, commensurate with flood risks, in projects that integrate multiple benefits, in proactive maintenance of SFPC facilities and residual risk management, and in wise management of floodplains protected by the SPFC. For additional details, see Master Response 8.

In regard to funding, as stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA "alternatives" for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

T_PORGANS1-02

As stated in Master Response 7, the SSIA includes an F-CO Program that seeks to coordinate flood releases from existing reservoirs located on tributaries to major Central Valley rivers. Considering the timing and magnitude of flood releases from reservoirs, the F-CO Program seeks to optimize the use of downstream channel capacity in balance with total available flood storage space in the system to reduce overall downstream peak floodflows. The F-CO Program also can modify operation of reservoirs in a way that will improve flood management and provide opportunities for more aggressive refilling of reservoirs during dry years. Such operations could increase water supplies within reservoirs, especially in dry years when the water supply system is most stressed.

Water supply benefits from the F-CO Program would vary depending on current reservoir operations rules, watershed hydrology, flexibility in reservoir operation and physical outlet facilities (i.e., adequate release capacity), quality of reservoir inflow forecasts, and other factors. Therefore, a case-by-case study of flood management and multipurpose reservoirs will be needed to adequately define and quantify the potential benefits.

The comment expresses opinions regarding current operation of the SPFC and State finances. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_PORGANS1-03

As stated in Master Response 6, DWR recognizes the importance of proper maintenance to protect State, local, and federal investments in the flood management system. However, maintenance activities alone do not meet current needs or legislative requirements for the CVFPP (e.g., urban level of protection, systemwide approach, and providing multiple benefits). This is highlighted in the evaluation conducted for the preliminary approach called "Achieve SPFC Design Flow Capacity."

The Achieve SPFC Design Flow Capacity preliminary approach focuses on reconstructing SPFC facilities to meet current engineering criteria without making major changes to facility footprints or operations. To achieve the design flow capacity, reconstruction is required because the original specifications focused primarily on levee prism geometry, and current evaluations have shown them to be insufficient in passing design flows if geotechnical and other engineering conditions (e.g., underseepage) are not improved. This approach was formulated to address legislation that required DWR to consider structural actions necessary to reconstruct SPFC facilities to their design standard (CWC Section 9614(g)). It also addresses requests from stakeholders to consider reconstructing the existing flood management system in place, or without major modification to facility locations.

Based on an initial assessment, this preliminary approach is estimated to cost approximately $19 billion to $23 billion and take 30–35 years to implement. This approach would improve the reliability of SPFC facilities compared to existing conditions. However, in many locations, upstream levee reconstruction would increase peak flows and stages downstream because upstream levee failures would be reduced compared to existing conditions. Further, the level of protection would be highly variable throughout the system and would not be linked to the current public safety needs and legislated requirements, and to assets at risk within the floodplain. Consequently, this approach would only partially address the primary CVFPP goal of improving flood risk management.

Investments in SPFC reconstruction would initially reduce SPFC O&M costs, but long-term costs to maintain the system would remain high. Thus, this approach would only partially contribute to the goal of improving

O&M. Opportunities to integrate ecosystem restoration and enhancement would be limited and would not contribute to improved ecosystem functions on a systemwide scale. There would also be few opportunities to promote multipurpose benefits including incorporating new groundwater recharge or other water-related benefits, and promoting ecosystem functions, recreation, or agricultural sustainability. Consequently, an approach focusing on maintenance, repair, and reconstruction of existing facilities would contribute in only a minor way to the supporting goals of multi-benefit projects.

Improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures).

The SSIA promotes efficient and sustainable long-term O&M practices through the following:

- Reforming and consolidating State and local agencies' roles and responsibilities for O&M
- Standardizing criteria by which maintenance practices, procedures, and inspections are performed and reported
- Implementing strategies to adequately and reliably fund routine activities and streamline permitting

Some of the proposed activities may involve legislative action, new institutional arrangements involving local maintaining agencies, modifications to existing State programs, and additional or redirected funding. For additional details, see Master Response 6.

T_PORGANS1-04

As stated in Master Response 14, the 2012 CVFPP describes the State's vision for a sustainable flood management system in the Central Valley that provides a high degree of public safety, promotes long-term economic stability, and supports restoration of compatible riverine and floodplain ecosystems. The SSIA prioritizes State investments and other activities to contribute to achieving this vision on a systemwide scale, recognizing current funding limitations.

The SSIA is a conceptual plan for flood system improvements, and additional post-adoption work is needed to refine its individual elements. Anticipated post-adoption activities include regional flood management planning, development of basin-wide feasibility studies and the CVFPP Financing Plan, completion of project-level proposals and environmental compliance, development of the Conservation Strategy, and State and USACE permitting.

Some elements of the SSIA have already been implemented (through the Early Implementation Projects Program since 2007, for example). Others may be accomplished before the first update of the CVFPP in 2017, and many will require additional time to fully develop and implement. Ongoing and new planning studies, engineering, feasibility studies, environmental review, designs, funding, and partnering are required to better define, and incrementally fund and implement, elements of the SSIA during the next 20–25 years.

Regional flood management planning, to be conducted in each of nine regions identified in the 2012 CVFPP, is an important next step in identifying specific improvements to rural-agricultural areas, small communities, and urban areas consistent with the SSIA. Upon CVFPP adoption, DWR will work closely with local entities to collect on-the-ground information regarding flood risks and needs, identify potential local and regional improvement projects, assess the performance and feasibility of these projects, and develop proposals that reflect the priorities of local entities in reducing flood risks. Each regional plan will present an assessment of proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. DWR intends to provide guidance as well as technical and financial assistance to local agencies to prepare the regional flood management plans, subject to availability of funds.

Regional flood management plans are anticipated to:

- Assess regional flood risks and management actions (projects) to reduce these risks
- Discuss regional priorities, including criteria used to prioritize individual projects
- Describe specific projects, including their potential costs, regional and systemwide benefits, and beneficiaries
- Provide a financial plan describing how the proposed projects would be funded, including cost sharing and financing for local shares

- Describe regional governance of flood management

Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts. Information and outcomes from the regional planning process will inform the State-led basin-wide feasibility studies, preparation of a financing plan for the CVFPP, and the first update of the CVFPP (scheduled for completion by 2017). This regional effort is scheduled to be launched publicly in June 2012 and is anticipated to continue through 2013.

DWR will engage regional flood planning partners to develop and implement communication strategies with broad interest groups to brief them on flood management planning in their regions. Regional implementing and operating agencies, land use agencies, and interest groups will be invited to participate in the planning process. Each regional planning process will seek input, as appropriate, from agricultural interests, environmental interests, permitting agencies/resource agencies, local emergency responders, tribes, and other stakeholders. DWR anticipates that a regional flood working group will be formed in each region.

Post-adoption activities will include development of two State-led basin-wide feasibility studies—one in the Sacramento River Basin and one in the San Joaquin River Basin—that will refine the broad description of the SSIA contained in the 2012 CVFPP. The basin-wide feasibility studies will (1) identify State interest in and articulate refinements to system elements and regional elements, (2) inform development of the CVFPP Financing Plan and the 2017 CVFPP update, and (3) help define the State's locally preferred plan for consideration in ongoing and planned USACE federal feasibility studies. The basin-wide feasibility studies will focus on system elements, which may take longer to study and implement than other regional plan elements because of their scale and complexity.

State-led feasibility studies are intended to support State decision making, regardless of the corresponding level of federal participation. They do not necessarily cover the scope of a federal feasibility study; however, these State-led studies will be conducted to minimize, to the extent possible, additional federal study needed to determine federal participation and facilitate subsequent authorization by Congress, if appropriate.

The basin-wide feasibility studies will be conducted in two primary phases. The first phase will be conducted concurrently with regional planning, and will focus on developing specific objectives and analyzing physical options for system elements (such as bypass expansion and new bypasses). The

second phase will combine the most promising options for system elements with the prioritized list of regional elements identified in the regional flood management plans. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale, representing refined alternatives for implementing the SSIA.

Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. The studies will be conducted in coordination with USACE (and ongoing cost-share feasibility studies) and local implementing agencies. It is anticipated that working groups will form to help evaluate and refine bypass expansion options, identify implementation challenges, and provide input in the planning process.

The State intends to complete both studies by mid-2015 to provide time to incorporate information and findings into the 2017 CVFPP Update. Interactions with other key planning efforts, such as regional flood management planning, the CVFPP Financing Plan, and Central Valley Floodplain Evaluation and Delineation, are important to meeting the anticipated schedule. For additional details, see Master Response 14.

In regard to funding, as stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA "alternatives" for further evaluation in two basin-wide feasibility

studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

T_PRBO1-01

DR. SEAVY: Dr. Nat Seavy, the Central Valley Research Director PRBO Conservation Science, a nonprofit that's based out of Petaluma, California.

PRBO Conservation Science has a long history of working in the Central Valley with multiple public and private landowners, and resource managers to develop win-win conservation solutions to make the best use of every dollar invested.

T_PRBO1-02

The completion of the Central Valley Flood Protection Plan is an exciting benchmark for California. The information in this plan presents an opportunity to protect people and property in the Central Valley, while also improving floodplain habitats for bird populations, other wildlife, and the other benefits that healthy

T_PRBO1-03

floodplains provide the people of California.

PRBO Conservation Science looks forward to working with the Department of Water Resources and the Central Valley Flood Protection Board to help ensure the best available science guides and enhances the plan's implementation to benefit both people and their environment in California.

Thank you.

PRESIDENT CARTER: Thank you, Dr. Seavy.

PRBO Conservation Science, Dr. Nat Seavy, Central Valley Research Director (Public Hearing, January 27, 2012)

Response

T_PRBO1-01

The comment identifies the commenter's professional affiliation and provides background on PRBO. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_PRBO1-02

The comment is consistent with legislative direction regarding multiple objectives of the CVFPP. As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)). The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. For additional details, see Master Response 7.

The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_PRBO1-03

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction. For additional

details see Master Response 13. DWR and the Board encourage PRBO's participation in these efforts.

T_PRBO2-01

DR. SEAVY: Good day, Mr. President and Board. Thank you for hearing our comments today.

I'm Dr. Nathaniel Seavy, Central Valley Research Director of PRBO Conservation Science, a nonprofit based out of Petaluma, California.

PRBO's staff and seasonal scientists study birds and ecosystems to improve conversation outcomes from the Sierra to the sea. We have a long history of working in the Central Valley with multiple public landowners, and also we've had the great privilege of working with many private landowners, including many farmers to look for win-win conservation solutions that make the best use of every dollar invested.

Agriculture is a vital part of the California

economy, and these working lands provide important habitat for wildlife. Farm land, such as rice fields, provide habitat that we may not have any other opportunity to consider. It's for this reason that we strongly support a flood plan that protects people and property while also looking to conserve farm land and improving Fish and Wildlife habitat.

We need to look for creative shared solutions that are supported by science. If done carefully, expanding flood bypasses and setback levees can provide a shared solution for people and for nature. Bypasses in the Central Valley greatly reduce the probability of uncontrolled flooding of agricultural lands in the early 20th century. By expanding bypasses and setback levees, we can provide better flood protection in the future, and we can provide greater economic certainty for agriculture, greater habitat value for fish and wildlife, and more of nature's important benefits that healthy floodplains provide the people of California.

T_PRBO2-02

You asked about specific changes that can be made. And we encourage you to try to articulate a vision that includes the importance of these shared solutions; to develop a plan that is as transparent as possible, so that we can all understand the benefits that we will gain from this plan; and look for other -- overlap with other

programs in the State that will provide the political and financial resources that will be necessary to move this plan ahead.

T_PRBO2-03

The Central Valley Flood Protection Plan is an exciting opportunity for California to create a future with the best flood protection and economic -- an economy that profits from agriculture productivity and floodplain ecosystems that are healthy. This will benefit us all.

Thank you very much for your work on this plan for a better California.

Thank you.

PRESIDENT EDGAR: Thank you, Doctor.

PRBO Conservation Science, Dr. Nathaniel Seavy (Public Hearing, April 11, 2012)

Response

T_PRBO2-01

The comment expresses support for expanding flood bypasses and setback levees when such facilities are integrated with agriculture and ecosystem benefits; the comment is noted.

T_PRBO2-02

The comment is consistent with legislative direction regarding multiple objectives of the CVFPP. As stated in Master Response 8, the Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in CWC Sections 9600–9625.

DWR, in coordination with USACE, the Board, and multiple stakeholders, used this legislative direction to formulate the CVFPP's primary and supporting goals, listed below.

CVFPP Primary Goal:

- *Improve Flood Risk Management*—Reduce the chance of flooding and damages, once flooding occurs, and improve public safety, preparedness, and emergency response through the following:
  - Identifying, recommending, and implementing structural and nonstructural projects and actions that benefit lands currently receiving protection from facilities of the SPFC
  - Formulating standards, criteria, and guidelines to facilitate implementation of structural and nonstructural actions for protecting urban areas and other lands of the Sacramento and San Joaquin river basins and the Delta

CVFPP Supporting Goals:

- *Improve Operations and Maintenance*—Reduce systemwide maintenance and repair requirements by modifying the flood management systems in ways that are compatible with natural processes, and adjust, coordinate, and streamline regulatory and institutional standards, funding, and practices for operations and maintenance, including significant repairs.

- *Promote Ecosystem Functions*—Integrate the recovery and restoration of key physical processes, self-sustaining ecological functions, native habitats, and species into flood management system improvements.

- *Improve Institutional Support*—Develop stable institutional structures, coordination protocols, and financial frameworks that enable effective and adaptive integrated flood management (designs, operations and maintenance, permitting, preparedness, response, recovery, and land use and development planning).

- *Promote Multi-Benefit Projects*—Describe flood management projects and actions that also contribute to broader integrated water management objectives identified through other programs.

In addition, the DPEIR includes the following specific statutory objectives:

- *Maximize Flood Risk Reduction Benefits within the Practical Constraints of Available Funds*—Ensure that technically feasible and cost-effective solutions are implemented to maximize the flood-risk reduction benefits given the practical limitations of available funding, and provide a feasible, comprehensive, and long-term financing plan for implementing the plan.

- *Adopt the CVFPP by July 1, 2012*—Complete all steps necessary to develop and adopt the CVFPP by July 1, 2012, or such other date as may be provided by the Legislature.

- *Meet Multiple Objectives Established in Section 9616 of the California Water Code, as Feasible.*

In accordance with legislative direction and reflecting stakeholder input, DWR prepared the 2012 CVFPP to describe the State's vision for flood management in the Central Valley. This vision is for a sustainable flood management system that provides a high degree of public safety, promotes long-term economic stability, and supports restoration of compatible riverine and floodplain ecosystems. For additional details, see Master Response 8.

T_PRBO2-03

DWR appreciates the support for the Central Valley Flood Protection Plan as expressed by the commenter. The comment is noted.

T_RD1081-01

MR. BAIR: President Carter, members of the Board, Executive Officer Jay Punia, thank you for the opportunity to speak today. My name is Lewis Bair. I'm the General Manager for Reclamation District 108, the Sac River Westside Levee District and the Knights Landing Ridge Drainage District.

We collectively maintain approximately 90 miles of federal project levees in the Sacramento system, in both Yolo and Colusa County, along both the Sacramento River and the Colusa Basin Drain and have been doing so since the late 1800s. So we have a long history with the system and partnership with the Flood Board.

T_RD1081-02

I have appreciated the energy and effort certainly that's been put forward by the Department of Water Resources staff. And I think they even went beyond what was called for them, in many respects. We had several of the staff members up actually visit our area, try to learn and understand our area. And to that effort, I applaud them.

T_RD1081-03

My area protects really three rural communities, Colusa, Grimes, and Knights Landing, as well as about a hundred thousand acres of really very amazing farm land

and habitat. And so I'm going to focus my points today on that rural area.

So these meetings get a little bit dry. And

T_RD1081-04

although I put a tie on, I'm going to jeopardize my professionalism, but I think the plan reminds me of song a little bit. And it's Somebody Got the Gold Mine. And, well, I hope the song doesn't finish the same way for the rural area in giving the shaft.

And I don't think it was the intent of DWR and the staff in writing this plan. And I hope that over the next four months that we can consider certain things that are in the plan, that I think were listened to by staff, and they heard them, and they included them in the plan. And then it fell short of assuring the rural areas that these are things that are actually going to happen. So I'd like to tick off what I think those issues are, and how they potentially jeopardize the rural areas.

T_RD1081-05

You've heard it touched on today, the plan clearly rolls out levels of flood protection for the urban areas, for the small communities of a hundred year flood protection, and then it actually, instead of improving the flood protection in the rural areas, leaves -- departs from the approach which targeted the system design capacity, and has a very ambiguous future.

It's one that I actually supported in the

planning process. One that focuses on known deficiencies. But I think the plan falls short of describing what that is. And it leaves it very uncertain.

T_RD1081-06

And for the rural areas to accept a departure from something, it was actually there and in play, we need better definition on what that future looks like. We are certainly accepting a, what I would call, a de facto transitory flood storage system. The rural areas are going to be improved significantly above the rural areas.

Unlike others maybe, I actually believe that's the right thing to do. None of us want to see the urban areas flood. I think though that you are asking a lot of the rural areas to accept that without some sort of exchange of resources.

They'll raise their levees to 200-year flood protection, making certain that the rural areas will fail before the urban areas. When that happens, it actually provides them significantly better flood protection than 200 year. In fact I would, you know, venture to say that hopefully we'll never see any of the urban areas flood.

T_RD1081-07

It then -- in the description of the repair that will take place, this new deficiency repairs for the rural areas, it suggests that those will take place if funding is available and where feasible.

So we're walking away from a system that really

didn't work very well, but clearly we're walking towards one that has a lower priority on the funding chain. And I think that's especially important, because we know we have about $2 billion left from Prop 1E and roughly $2 billion left from Prop 1E and Prop 84. And there is clear directives in the plan that we must get to 200-year flood protection in the urban areas. And that flood protection is something that's mandated and directed. And then you have something that's conditional on the other side. And I see it very difficult for the State, in the future, to somehow divide off some of those funds to the rural areas when they haven't fulfilled a commitment in the urban areas.

T_RD1081-08

I think the change from targeting design capacity to something different from rural areas -- for rural areas is a huge paradigm shift in our system that's not kind of declared and boldly stated in the plan. I think if you do that in the plan, if that is very clear that that is the approach in the plan, it makes it a lot easier to talk about how you exchange resources for the folks that are helping provide that, and the folks that are receiving the benefit for that.

It's almost as if we don't want to talk about that, because it's a very difficult conversation. And because we can't talk about it, we can't talk about the

solutions that need to come out of that, and the burden that's being placed on the rural areas.

T_RD1081-09 As part of that, I think we need to talk about the fact that the plan at -- I think it's a principle that I agree with wholeheartedly, we need to have a systemwide approach to this plan. The plan clearly talks about a systemwide approach. And I think, you know, the Flood Control Association made some comments that were incorporated in the final draft plan. I think those were good.

T_RD1081-10 What we don't discuss is the reality that the plan talks about federal funding. Federal funding, as you guys are all very familiar with, is on a project by project basis. And repeatedly in the plan, we talk about how important federal funding is for completing our total funding that we need for this project. What we don't say is that the rural areas will have a extremely hard time competing for federal funding.

And if that's the reality, what are we going to do about that? Are we going to commit with the systemwide plan -- really a systemwide investment approach that says in those rural areas we recognize we're not going to get federal funding. Yet, we're still willing to commit a certain amount of funding to that effort.

T_RD1081-11 I compliment the plan on the National Flood

Insurance Program language that's in there, but I also think it falls short. It's very generic and general, and it needs to really be very specific on what the State is willing to commit in supporting that effort.

T_RD1081-12

So lastly, I guess, and what I'd like to close with is, you know, we were -- we set out on this venture together. And there was a four-step plan for completing this process. And, you know, all of us have reality and we ended up cutting out steps 3 and 4.

Steps 3 and 4 were really going to get into how we generate what the elements of this plan look like. And now we've put them out beyond the plan, but yet in the plan, we still tried to have some sort of tangible vision for what this plan is going to look like, what types of things are we going to do.

T_RD1081-13

And a couple of things came into the plan. One is that Cherokee Canal. You've heard others speak about that. I have talked to a few folks in the Butte Basin and how disastrous that type of project could be. It seems early on that putting something in like that without a vetting process, without comforting folks and saying yes we're going to bring that water over, but here's how we're going to do it, and here's how we're going to pass it through system, you've really created a lot of anxiety among folks, and possibly a lot of protests -- obviously,

a lot protests from folks with concerns.

T_RD1081-14

So in closing, I think the plan is actually very good, and it touches on each one of the things that need to occur for the rural areas. Where it falls short is assuring those rural areas that those things are actually going to happen.

And, in fact, you read -- I encourage you to read the plan again, even if it's just chapters 3 and 4, and read it from the perspective of a rural individual, read what's going to happen in the urban areas, and then read what's going to happen in the rural areas, and you'll see that everything that's going to happen in the rural areas is if funding available, where feasible.

T_RD1081-15

And if you want to achieve all of the plan goals, you certainly need to have the largest portion of the flood control project on your side supporting the plan and helping you complete your goals.

So thank you very much.

PRESIDENT CARTER: Thank you Mr. Bair.

Reclamation District 108, Sacramento River West Side Levee District, and Knights Landing Ridge Drainage District, Lewis Bair, General Manager (Public Hearing, February 24, 2012)

Response

T_RD1081-01

The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_RD1081-02

The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_RD1081-03

The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_RD1081-04

As stated in Master Response 4, these impacts generally are social and economic in nature, and CEQA does not require addressing them except to the extent that they relate to potentially significant adverse effects on the physical environment. Nonetheless, the responses shown below have been prepared to maximize responsiveness to public participation in the CVFPP.

State law (SB 5) requires an urban level of flood protection for urban and urbanizing areas within the Sacramento–San Joaquin Valley so that these areas will withstand a 1-in-200-year flood event (CGC Sections 65865.5, 65962, and 66474.5). Under the terms of SB 5, adoption of the 2012 CVFPP by the Board would trigger the schedule of compliance actions required for cities and counties to make findings related to an urban level of flood protection.

However, the CVFPP does not create any new requirements or assurances for levels of flood protection in the Central Valley; the local findings requirements regarding the required levels of protection were established by the State Legislature with the passage of SB 5. Similarly, the plan does not change existing State requirements related to new development in

nonurbanized areas, including small communities, which must continue to meet the national FEMA standard of flood protection (per CGC Sections 65865.5, 65962, and 66474.5). This national standard corresponds to the minimum level of flood protection (100-year flood) required for participation in the NFIP, and is consistent with the existing Building Code. The Central Valley Flood Protection Act of 2008 further clarifies that the CVFPP is a descriptive document, and neither the development nor the adoption of the CVFPP constitutes a commitment by the State to provide any particular level of flood protection (CWC Sections 9603(a) and 9603(b)).

The Central Valley Flood Protection Act of 2008 establishes legislative requirements for the CVFPP. For example, the legislation directs DWR to consider structural and nonstructural methods for providing an urban level of flood protection (200-year or 0.5 percent chance) to current urban areas (CWC Sections 9614(i) and 9616(a)(6)), and encourages wise use of floodplains through a better connection between State flood protection decisions and local land use decisions (CWC Section 9616(a)(5)). The SSIA proposes flood protection investments for rural-agricultural areas, small communities, and urban areas consistent with legislative direction and commensurate with flood risk to people and property.

The SSIA identifies minimum flood protection targets when State investments are made to protect public safety in urban areas and small communities (protection from 200- and 100-year flood events, respectively). However, the plan acknowledges that State investments alone cannot achieve these targets in all communities without leveraging federal and local funds, and encourages higher levels of flood protection whenever feasible. The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas, and that are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development in floodplains. The SSIA does not target a minimum level of flood protection for State investments in rural-agricultural areas outside of the small communities because conditions and local interests differ from one area to another, and additional regional planning efforts are needed to formulate solutions that meet community needs and State investment priorities. However, the SSIA includes various options for addressing flood risks in rural-agricultural areas, including the following:

- Projects to maintain levee crown elevations for existing rural SPFC levees and provide all-weather access roads for inspection and floodfighting

- Economically feasible projects to resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs

- System elements (such as new and expanded bypasses) that would lower water surface elevations within some rural and urban channels

All areas would benefit from State investments in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery.

In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments would vary from region to region depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, all areas protected by the SPFC would receive flood risk management benefits from fully implementing the SSIA. Further, the State places a priority on flood management improvement projects that provide multiple benefits to support broad State interests and expand cost-sharing opportunities.

The CVFPP does not include levee design criteria for rural areas, but recognizes that the urban levee design criteria are not always practical or affordable for protecting rural areas. DWR supports future development and implementation of rural levee repair criteria in coordination with local and regional flood management agencies.

Cost-sharing rules are governed by federal and State laws, regulations, and policies, which have continued to evolve over time. CWC Section 12585.7 identifies the State cost-share of nonfederal capital costs for flood management projects. The State normally pays 50 percent of the nonfederal cost-share, but will pay up to 20 percent more (for a maximum of 70 percent of the nonfederal cost-share) if the project makes significant contributions to other State interests and objectives (e.g., the ecosystem, recreation, open space, protection for disadvantaged communities, and protection for transportation and water supply facilities).

The 2012 CVFPP includes an estimate of potential cost-sharing by State, federal, and local entities for the SSIA, developed to assist with CVFPP development and analysis. However, cost-sharing for implementation of the SSIA will be refined during feasibility studies and project implementation as additional project-level information is gathered and the interests of the partnering agencies in elements of the SSIA are identified. Post-adoption activities (e.g., regional flood management planning,

development of basin-wide feasibility studies, and development of a financing plan for the CVFPP) will address cost-sharing and local capacity to pay.

The CVFPP does not provide funding assurances for any specific project or improvement element, and current bond funding is not sufficient to fully implement the SSIA. A financing plan will be prepared as part of the post-adoption activities (CWC Section 9620(c)). For additional details, see Master Response 4.

T_RD1081-05

See response to comment T_RD1081-04, above.

Additionally, as stated in Master Response 9, three preliminary approaches were used to explore a range of potential physical changes to the existing flood management system and help highlight needed policies or other management actions: Achieve SPFC Design Flow Capacity, Protect High-Risk Communities, and Enhance Flood System Capacity. Evaluating these preliminary approaches provided information on their costs, benefits, and overall effectiveness. None of the three preliminary approaches were found to fully satisfy the legislative requirements and CVFPP goals in a cost-effective manner. However, the most promising elements of each were combined to formulate the State's preferred approach—the SSIA. The CVFPP and accompanying attachments provide additional details about the formulation and screening of elements included in the SSIA. For additional details, see Master Response 9.

T_RD1081-06

See response to comment T_RD1081-04, above.

T_RD1081-07

See response to comment T_RD1081-04, above.

In addition, as stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA "alternatives" for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin. For additional details, see Master Response 15.

The SSIA identifies minimum flood protection targets when State investments are made to protect public safety in urban areas and small communities (protection from 200- and 100-year flood events, respectively). However, the plan acknowledges that State investments alone cannot achieve these targets in all communities without leveraging federal and local funds, and encourages higher levels of flood protection whenever feasible. The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas, and that are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development in floodplains. The SSIA does not target a minimum level of flood protection for State investments in rural-agricultural areas outside of the small communities because conditions and local interests differ from one area to another, and additional regional planning efforts are needed to formulate solutions that meet community needs and State investment priorities. However, the SSIA includes various options for addressing flood risks in rural-agricultural areas, including the following:

- Projects to maintain levee crown elevations for existing rural SPFC levees and provide all-weather access roads for inspection and floodfighting

- Economically feasible projects to resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs

- System elements (such as new and expanded bypasses) that would lower water surface elevations within some rural and urban channels

All areas would benefit from State investments in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery.

As stated in Master Response 4, the SSIA identifies minimum flood protection targets when State investments are made to protect public safety in urban areas and small communities (protection from 200- and 100-year flood events, respectively). However, the plan acknowledges that State investments alone cannot achieve these targets in all communities without leveraging federal and local funds, and encourages higher levels of flood protection whenever feasible. The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas, and that are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development in floodplains. The SSIA does not target a minimum level of flood protection for State investments in rural-agricultural areas outside of the small communities because conditions and local interests differ from one area to another, and additional regional planning efforts are needed to formulate solutions that meet community needs and State investment priorities. However, the SSIA includes various options for addressing flood risks in rural-agricultural areas, including the following:

- Projects to maintain levee crown elevations for existing rural SPFC levees and provide all-weather access roads for inspection and floodfighting

- Economically feasible projects to resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs

- System elements (such as new and expanded bypasses) that would lower water surface elevations within some rural and urban channels

All areas would benefit from State investments in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery.

T_RD1081-08

See response to comment T_RD1081-04, above.

T_RD1081-09

As stated in Master Response 9, three preliminary approaches were used to explore a range of potential physical changes to the existing flood management system and help highlight needed policies or other management actions: Achieve SPFC Design Flow Capacity, Protect High-

Risk Communities, and Enhance Flood System Capacity. Evaluating these preliminary approaches provided information on their costs, benefits, and overall effectiveness. None of the three preliminary approaches were found to fully satisfy the legislative requirements and CVFPP goals in a cost-effective manner. However, the most promising elements of each were combined to formulate the State's preferred approach—the SSIA. The CVFPP and accompanying attachments provide additional details about the formulation and screening of elements included in the SSIA. For additional details, see Master Response 9.

Additionally, as stated in Master Response 8, the State Legislature enacted comprehensive flood risk management legislation in 2007, including the Central Valley Flood Protection Act of 2008. This law set a clear directive for an integrated systemwide approach to Central Valley flood management, and provided detailed guidance for DWR to follow in formulating the CVFPP. The Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in CWC Sections 9600–9625. For additional details, see Master Response 8.

T_RD1081-10

As stated in Master Response 3, the State recognizes potential regional differences in the capacity to pay for flood system improvements and O&M. The CVFPP proposes working with rural interests to develop appropriate criteria for rural levee repairs to cost-effectively address known problems (see CVFPP Sections 3.4.1 and 4.1.4). Further, the plan proposes reviewing O&M roles and responsibilities for SPFC facilities and forming regional maintenance authorities, as appropriate, in the interest of improving maintenance efficiency and more equitably distributing system maintenance costs to beneficiaries. For example, DWR has developed cost-sharing guidelines to promote multiobjective projects and to provide additional financial support for economically disadvantaged areas (http://www.water.ca.gov/floodsafe/docs/Cost_Sharing_Formula_12-29-10_Final.pdf). For additional details, see Master Response 3.

As stated in Master Response 4, cost-sharing rules are governed by federal and State laws, regulations, and policies, which have continued to evolve over time. CWC Section 12585.7 identifies the State cost-share of nonfederal capital costs for flood management projects. The State normally pays 50 percent of the nonfederal cost-share, but will pay up to 20 percent more (for a maximum of 70 percent of the nonfederal cost-share) if the project makes significant contributions to other State interests and

objectives (e.g., the ecosystem, recreation, open space, protection for disadvantaged communities, and protection for transportation and water supply facilities).

The 2012 CVFPP includes an estimate of potential cost-sharing by State, federal, and local entities for the SSIA, developed to assist with CVFPP development and analysis. However, cost-sharing for implementation of the SSIA will be refined during feasibility studies and project implementation as additional project-level information is gathered and the interests of the partnering agencies in elements of the SSIA are identified. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, and development of a financing plan for the CVFPP) will address cost-sharing and local capacity to pay.

The CVFPP does not provide funding assurances for any specific project or improvement element, and current bond funding is not sufficient to fully implement the SSIA. A financing plan will be prepared as part of the post-adoption activities (CWC Section 9620(c)). For additional details, see Master Response 4.

As stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA “alternatives” for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

T_RD1081-11

As stated in Master Response 3, the State supports efforts to reform FEMA's NFIP to more equitably reflect corresponding flood risks, including establishing a flood zone for agriculturally based communities to allow replacement of existing structures or reinvestment development in the floodplain. The State also supports identifying a special, lower-premium rate structure that reflects actual flood risks for agricultural buildings in rural-agricultural areas located in Special Flood Hazard Areas. The State will work with local flood management interests to pursue reform of the FEMA NFIP. For additional details, see Master Response 3.

T_RD1081-12

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

Phase 1 of the public engagement planning process focused on identifying problems and needs and crafting specific goals for the CVFPP. A variety of regional and topic-based work groups formed during this phase. Phase 2 focused on identifying individual actions that could be taken to achieve the CVFPP goals, and engaged stakeholders through continued regional and topic-based work groups and public workshops.

After Phase 2, stakeholders indicated that they preferred to review more developed materials and information before continuing with intense working meetings. With that understanding, DWR focused its efforts on content development (considering previously provided input and ongoing analyses) and developed a cohesive working draft document for stakeholder review in fall 2011. Outreach efforts included e-mail communications and updates, workshops, webinar briefings, and meetings with individuals and agencies. Work group members were also given an opportunity to review and comment on a working draft of the CVFPP.

However, with a commitment to complete a public draft CVFPP within the legislated time frame, the degree of engagement provided in Phases 1 and 2 was not feasible for Phases 3 and 4.

The Board provided various opportunities for members of the public and agencies to comment on the public draft CVFPP, released in December 2011. Hearings were held in 2012 on April 5 (Sacramento), April 6 (Marysville), April 9 (Stockton), and April 11 (Woodland), and public comments were heard and discussed at both regular and special Board meetings. DWR also accepted comments on the DPEIR, which was released in early March 2012. More information on the Board's process for public review and plan adoption can be found on its Web site, http://www.cvfpb.ca.gov. For additional details, see Master Response 13.

T_RD1081-13

As stated in Master Response 1, the existing bypass system in the Sacramento River Basin (including the Sutter and Yolo bypasses and associated inflow weirs) forms the central backbone of the Sacramento River Flood Control Project and redirects damaging floodflows away from the main channels of the Sacramento and Feather rivers. The considerable capacity of the bypass system (up to 490,000 cfs) also slows the movement of floods, effectively attenuating flood peaks and flows into the Delta. The existing bypass system also supports a vibrant seasonal agricultural economy and provides important habitat for multiple terrestrial and aquatic species. In the San Joaquin River Basin, the bypass system includes the Chowchilla, Eastside, and Mariposa bypasses.

The Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management

system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public

engagement and input will become available. For additional details, see Master Response 1.

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental

documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_RD1081-14

See response to comment T_RD1081-04, above.

T_RD1081-15

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_RD10011-01

MS. FALES: -- President Edgar -- Hi, Bill -- Board, Mr. Punia. My name is Diane Fales and I'm the manager of Reclamation District 1001. And I'm here today representing our Board, and what appears to be a large

T_RD10011-02

portion of our landowners in the District. They have been streaming into my office now for days concerned about what's happening with their property. And with that in mind then, I'd like to make these comments.

First of all, the Reclamation District staff has reviewed the Central Valley Flood Protection Board Plan. We are appreciative that the plan is trying to put a framework in place. And we do support the concept of making systemwide improvements, but we are vehemently opposed to the inclusion of specific projects, namely the Feather, Bear River Setback Levee, which you can -- which I'm sure you viewed on Figure E8.

These projects do not appear to have been developed with consideration of the impacts on the rural areas and property owners, and we could have severe negative impacts to our district. I did some tallying and this represents six percent of our entire district. Our district is 45 miles of project levees, 15 miles of nonproject levees and represents 30,000 acres in south Sutter County.

We are disappointed that these projects were included in the plan without coordination with our local agencies that are responsible for the operation and maintenance of these areas. We could, however, I believe, support in place fixes of the levees. We encourage the

Central Valley Flood Protection Board to prioritize development of a rural levee repair standard to ensure that levee improvements provide cost effective protection of rural areas.

T_RD10011-03

We also ask that you advocate to FEMA the need for changes that would ease the financial burden of flood insurance to our rural area landowners.

T_RD10011-04

Further, this conceptual project would remove prime agricultural land and residential structures in our district. I hope that you will be mindful in consideration of this plan that this represents generations of family farms. Generations. They have worked hard since the mid-1850's, 1860's. We urge you to not take away the future of these families in our, what you term and we are now terming, our legacy communities.

Please don't use our small legacy community as a scapegoat for the large urban areas. Some of us are now working on our seventh generation of family farmers there. Thank you for your time.

PRESIDENT EDGAR: Thank you.

(Applause.)

Reclamation District No. 1001, Diane Fales (Public Hearing, April 6, 2012)

Response

T_RD10011-01

The comment is introductory, identifying the commenter's affiliation and providing background information. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_RD10011-02

As stated in Master Response 1, the existing bypass system in the Sacramento River Basin (including the Sutter and Yolo bypasses and associated inflow weirs) forms the central backbone of the Sacramento River Flood Control Project and redirects damaging floodflows away from the main channels of the Sacramento and Feather rivers. The considerable capacity of the bypass system (up to 490,000 cfs) also slows the movement of floods, effectively attenuating flood peaks and flows into the Delta. The existing bypass system also supports a vibrant seasonal agricultural economy and provides important habitat for multiple terrestrial and aquatic species. In the San Joaquin River Basin, the bypass system includes the Chowchilla, Eastside, and Mariposa bypasses.

The Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could

be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward at this time until future project-level evaluation under CEQA is completed, as necessary. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

In regard to the reference to Figure E8, it is assumed that the comment refers to figures in DPEIR Appendix A, "Central Valley Flood Protection Plan," Attachment 8J. Master Response 20 addresses Attachment 8J, focusing on a map on page E-12, although the response can be applied to all content in Attachment 8J. As stated in Master Response 20, multiple comments were received during the public review processes for the draft CVFPP and DPEIR expressing concern about the conceptual levee setback element depicted on a map in DPEIR Appendix A, "Central Valley Flood Protection Plan," Attachment 8J. The comments generally expressed concern that the conceptual setback would require conversion of the particular agricultural lands indicated on the map, among other issues.

These concerns reflect several apparent misunderstandings regarding the map and its intended purpose. First, the levee setback element of concern was included in the preliminary approach entitled "Enhance Flood System Capacity Approach," but not in the recommended SSIA. The referenced map is from page E-12 in Appendix E to Attachment 8J, "Cost Estimates," found in Volume IV of DPEIR Appendix A, "Central Valley Flood Protection Plan." However, as explained in the DPEIR, development of the SSIA is the State's proposal for balanced, sustainable flood management in the Central Valley. The Enhance Flood System Capacity approach is not being proposed by DWR.

Other documents support the conclusion that the levee setback element of concern to the commenters was not included in the recommended SSIA. For example, Figure 7-25 in Attachment 7, "Plan Formulation Report," found in Volume II of DPEIR Appendix A, "Central Valley Flood Protection Plan," illustrates all the elements included in the Enhance Flood System Capacity approach. It shows a setback levee area in the lower Feather River under this approach. However, this setback element is not carried forward in the SSIA, as depicted in Figure 8-1 in Attachment 7 and in Figure 3-1 of the Public Draft CVFPP (these are the same figure).

This particular conceptual setback was developed primarily for cost evaluation and comparison purposes. Specifically, Tables 6-11 and 6-15 in Attachment 8J, "Cost Estimates," found in Volume IV of DPEIR Appendix A, "Central Valley Flood Protection Plan," summarize the cost items assumed for the Enhance Flood System Capacity approach and for the SSIA, respectively. The cost of any rural setback levees (including the conceptual setback of concern to the commenters) is reflected in Column 15, "Rural Setback Levees," of each table. When comparing these two tables (regarding the SSIA and Enhance Flood System Capacity approach, respectively), the costs of conceptual rural setback levees were included in the Enhance Flood System Capacity approach (Table 6-11), but the corresponding value in Table 6-15 is zero, further confirming that the

conceptual levee of concern to the commenters is not included in the recommended SSIA.

In addition, all of the conceptual setback evaluations (even those evaluated under the SSIA) are conceptual only. Additional improvements would be evaluated on a case-by-case basis to address known performance problems and to incorporate additional environmental and other benefits. No specific alignments are being proposed at this time, and the development of more specific setback project proposals (if any) will involve substantial additional analysis and public participation. For additional details, see Master Response 20.

Regarding public participation and outreach, as stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

Anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed

project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13. RD 1001 and local landowners are encouraged to participate in future public involvement efforts.

Regarding program effects on rural areas and landowners, as stated in Master Response 3, the SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. Implementing the SSIA would increase the percentage of the population receiving at least 100-year (1 percent annual chance) flood protection from the current 21 percent to more than 90 percent (CVFPP, page 3-40). The remaining 10 percent of the population would receive benefits through residual risk management actions. Based on initial planning-level cost estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to provide flood stage reduction benefits to

many of the areas in the system, including small communities and rural-agricultural areas.

In addition, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) in Section 3.3, "Agriculture and Forestry Resources," of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed.

The State supports the continued viability of small communities to preserve cultural and historical continuity and provide important social, economic, and public services to rural populations and agricultural enterprises. The SSIA describes State investment priorities in small community flood protection while avoiding the inducement of imprudent growth within SPFC floodplains. Under the SSIA, many small communities would receive increased flood protection benefits as a result of system improvements focused on protecting nearby urban areas. For example, levee improvements may be constructed upstream from an urban area to prevent a scenario in which floodwaters from an upstream levee breach would flow down gradient into the urban area. The upstream levee improvement that may extend into rural locations would therefore also reduce flood risks for the rural area immediately adjacent to the improved levee segment. Conditions in small communities would also be evaluated on a case-by-case basis to identify appropriate State investments in additional structural and/or nonstructural actions (e.g., levees, flood walls, floodproofing, or relocations).

The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas outside small communities. These actions are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development or increasing flood risks within lands protected by the SPFC. No target minimum level of flood protection has been established for prioritizing State investments in rural-agricultural areas (see CWC Section 9603). However, the SSIA proposes (1) projects that maintain levee crown elevations for rural SPFC levees and provide all-weather access roads for inspection and floodfighting; (2) economically feasible projects that resolve

known SPFC performance problems, in conjunction with development of criteria for rural levee repairs; (3) system elements (e.g., bypass expansion) that lower peak flood stages within some rural channels; and (4) actions to manage residual flood risks.

All areas protected by the SPFC would benefit from State investments included in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery. The SSIA also proposes State investments to preserve agriculture and discourage urban development in rural floodplains (e.g., purchasing agricultural easements from willing landowners, when consistent with local land use planning). For additional details, see Master Response 3.

The commenter's preference for "in place fixes" is noted. As described above, considerable future planning efforts will be conducted as part of CVFPP implementation, where RD 1001 and others can provide input on specific approaches to program implementation and individual projects.

As stated in Master Response 6, consideration of repairing/maintaining the existing flood system in place is addressed in Sections 2.3, 2.8, and 3.1 in Appendix A, "Central Valley Flood Protection Plan." DWR recognizes the importance of proper maintenance to protect State, local, and federal investments in the flood management system. However, maintenance activities alone do not meet current needs or legislative requirements for the CVFPP (e.g., urban level of protection, systemwide approach, and providing multiple benefits). This is highlighted in the evaluation conducted for the preliminary approach called "Achieve SPFC Design Flow Capacity." For additional details, see Master Response 6.

Regarding rural levee repair standards, as stated in Master Response 4, the CVFPP does not include levee design criteria for rural areas, but recognizes that the urban levee design criteria are not always practical or affordable for protecting rural areas. DWR supports future development and implementation of rural levee repair criteria in coordination with local and regional flood management agencies. For additional details, see Master Response 4.

T_RD10011-03

As stated in Master Response 3, the State supports efforts to reform FEMA's NFIP to more equitably reflect corresponding flood risks, including establishing a flood zone for agriculturally based communities to allow replacement of existing structures or reinvestment development in the floodplain. The State also supports identifying a special, lower-premium rate structure that reflects actual flood risks for agricultural buildings in rural-agricultural areas located in Special Flood Hazard Areas.

The State will work with local flood management interests to pursue reform of the FEMA NFIP. For additional details, see Master Response 3.

T_RD10011-04

As stated in Master Response 2, the PEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

Regarding effects on residential structures, this issue is addressed in DPEIR Section 3.16, “Population, Employment, and Housing”; see the discussions of Impact PEH-2 (NTMA and LTMA), “Displacement of Existing Housing or People through Changes in Land Use or Policy Changes.”

In addition, see response to comment T_RD10011-02, above, regarding the high-level nature of the CVFPP and the process for developing future project details, as well as the treatment of rural communities in the CVFPP.

T_RD10041

Mr. Patrick Porgans.

T_RD10041-01

MR. BABER: Yes. And thank you for the opportunity to speak today to the Board.

What I'm here for -- My name is Jack Baber. I'm Chairman of RD 1004. We're a reclamation district up in Colusa County. We're about 23,000 acres up there.

What I'm here for is that you're anticipating putting water down Cherokee Canal into our basin. And if that happens in the amount that you're talking about, it will just wipe us out. We'll go under. It'll break our levees and that will be it. So we want go on record to objecting to put water into Cherokee.

PRESIDENT EDGAR: Does that conclude your comments?

MR. BABER: That's it.

PRESIDENT EDGAR: Okay. Joe, would you mind commenting on that please.

(Laughter.)

PRESIDENT EDGAR: Because I think Joe has a lot of credibility in the RD communities; and as an engineer, has been doing this for a long time.

But have at it.

BOARD MEMBER COUNTRYMAN: Thanks for putting me on the spot here, Bill.

(Laughter.)

BOARD MEMBER COUNTRYMAN: Well, I did tell Bill confidentially --

(Laughter.)

BOARD MEMBER COUNTRYMAN: -- that I felt there was a very low probability that that bypass, Cherokee bypass, whatever penciled out or worked out, just from my basic knowledge of the flood system and when it would take water off of the Feather River, it just doesn't add up for me.

But, you know, I haven't done a detailed analysis and I'm not ready to pound DWR over the head yet about it. But that's just my gut reaction. I don't think it's going anywhere.

T_RD10041-02

MR. BABER: We hope not, because Cherokee comes right into our district, right in where the floodplain is there. And you can't get through there unless you do something. We don't know what you'll do, but you'd have to do something. And then you just build head against it and it would probably break the side of my levee.

PRESIDENT EDGAR: Jack, I think what I tried to do is emphasize, with Joe's underscoring, emphasize that

these are options to look at. Nobody's going to start the backhoes next week on any of these projects. It's going to be a long time before any of them are ready for design and construction. It has to go through an extensive feasibility process, a lot of engineering studies. And I believe Mr. Countryman has the right idea. I mean we just don't have a lot of the answers to the questions yet until those studies are performed.

But if we don't put something in place, a framework to begin to work together to solve these problems, we'll continue to be stalled, which we've been over a long period of time. And we just need to move the process forward so we can get some successful flood improvements done that everybody can agree upon. But it's a process more than it is approval or disapproval of some options that are on the table right now.

So please don't get the idea that we're going to -- you know, that the Cherokee Canal's going to be widened next week, because it's not going to happen. And it couldn't under the processes that we have.

So that's the only point I wanted to make here. And the former -- or another speaker is concerned about the same issue.

T_RD10041-03

MR. BABER: We understand that. We understand about the project. We think it's a great project if they

can move in the right direction. But put Cherokee in our back door would cause lots of problems, more than you think.

PRESIDENT EDGAR: Yeah, I understand that. But I'd just encourage you to stay the course and be a stakeholder and be a part of the process. That's --

T_RD10041-04

MR. BABER: We will. We're not knocking it out. But we're just saying that it's not in the cards today we're going to do this.

PRESIDENT EDGAR: Thank you.

Reclamation District No. 1004, Jack Baber (Public Hearing, April 5, 2012)

Response

T_RD10041-01

As stated in Master Response 1, the existing bypass system in the Sacramento River Basin (including the Sutter and Yolo bypasses and associated inflow weirs) forms the central backbone of the Sacramento River Flood Control Project and redirects damaging floodflows away from the main channels of the Sacramento and Feather rivers. The considerable capacity of the bypass system (up to 490,000 cfs) also slows the movement of floods, effectively attenuating flood peaks and flows into the Delta. The existing bypass system also supports a vibrant seasonal agricultural economy and provides important habitat for multiple terrestrial and aquatic species. In the San Joaquin River Basin, the bypass system includes the Chowchilla, Eastside, and Mariposa bypasses.

The Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

T_RD10041-02

See response to comment T_RD10041-01, above.

T_RD10041-03

See response to comment T_RD10041-01, above.

T_RD10041-04

See response to comment T_RD10041-01, above.

T_REXROAD1-01

YOLO COUNTY SUPERVISOR REXROAD: Good afternoon. My name is Matt Rexroad. I'm a Yolo County Supervisor. I live at 711 College Street here in Woodland. On behalf of the Board and the City of Woodland, welcome. And I'm very sincere in my thank you for coming here today.

I know that I have been bugging some of you in person and on the telephone. And I'm thankful for your indulging me with the telephone calls and everything else.

Flooding has been an issue that, in our community here in Woodland, actually has been very divisive. About 10 years ago, we, as a city, embarked on the idea of providing flood protection for our industrial area and our

city. And some of the wounds are still very deep for many of us. It's still a very raw issue. And the ramifications of it have lasted at least a decade.

And it's something that we've learned a lot of lessons from, in terms of the way we've dealt with flood protection and that flooding issue. And some of those are lessons I think that might be very applicable here.

Two issues that I would really like to bring up that are a technical nature in this regard, and there may be other people that bring this up, in regards to the plan.

And the first really is just the simple geography of the bottleneck that's created at I-5. As you're looking at the Yolo Bypass, you end up with an area there that runs right across the Causeway, and it's the narrowest portion of the area where you basically would transfer water from north to south through the bypass.

The reason that -- or one of the main reasons that I've been very active in this process is the maps that have been shown take -- show that big chunks of the Elkhorn Basin and Elkhorn area would be taken over and would become flood properties.

I don't think that actually gets you what you need, because of that hour glass shape, where we have -- where you have the I-5 landing as I-5 goes north and comes

into Yolo County. There's simply no part of the plan that indicates that that area would be expanded to allow the flow capacity I think you're looking for. So you get a volume capacity north and south of there, but you don't simply increase the flows because you have that bottleneck.

T_REXROAD1-02

The other issue I have, and it goes to -- a comment was just made at the very end of the staff presentation talks about how there was coordination with some of the other different policies and plans.

I know that you all are very focused on flood control, and I understand that you're looking at this plan largely in isolation in terms of a silo effect. But part of the plan, as we read it here in Yolo County, some of the environmental benefits you're taking credit for in this plan are actually attributed to the Bay-Delta plan. They're going to be there, not because of this, but because of the efforts of the Bay-Delta plan.

And so there's some confusion that those are being cross-referenced, where those environmental benefits would happen whether you did any project in Yolo County at all. So that immediately makes it suspect for me and for Yolo County, which really is a great segue way into some of the comments that I'd like to make that are probably a little bit unique from some of the other comments you'll

hear earlier today.

I found out about this process largely as a result of a constituent of mine calling in, Tom Cain. And calls up and he says, "Matt, you know, did you see the Sacramento Bee today? There are folks that want to take over and flood all of Elkhorn?" I said, "You know, I would know about that. That's impossible. I don't know anything about this. That's not possible, but okay whatever".

And sure enough, I went and I hung up the phone, and I went over and found a copy of the Sacramento Bee, and the yellow on the map showed that the water basically would be expanded all the way over to Road 22, which is the river road.

And I don't read every single piece of paper that crosses my desk, but surely I felt that I had missed something. But I don't feel that we were really very well notified of this process and the possible ramifications on Yolo County, impacting agricultural and a number of people standing behind me and their homes in other places. So I don't think the rollout was very effective.

T_REXROAD1-03

I also don't feel that the maps that were used actually -- potentially accurately deflect -- reflect what you're talking about here. They're painted with a very broad bush and could involve flooding an awful lot of not

T_REXROAD1-04

just farm land, but homes. People would lose their homes as a result of these plans. And Yolo County wants to try to prevent that.

The real issue though that really bugs me in this whole thing is all of these plans having to do with flooding and all of it having to do with the Bay-Delta process, it's the same Department, the Department of Water Resources with the same Director. We're talking about the same land in the Yolo Bypass, and we're largely talking about the same water and it's the same county.

And when we brought our concerns to the Director, he seemed to not know really much what was part of this. I find that very difficult to believe considering that the environmental document takes credit for some of the issues that are in the Bay-Delta plan and the fact, once again, we're talking about the same Director, the same Department. We have a representation that you all had a process to check the other documents, and that doesn't seem to be the case, if some of these environmental credits are being taken care of twice. And it's the same county, and it's not like we're difficult to find. We're in Director Cowin's office regularly with our subcommittee of Supervisor McGowan and Supervisor Provenza, we would have thought we would have found out about it long before and had the opportunity to be able to comment on that.

T_REXROAD1-05

And finally, I'd just like to say that while I have great concerns and you're going to hear from a lot of constituents in Yolo County who I think are justifiably upset in terms the way the rollout and the process has been, and I know that some of that is Department of Water Resources and some of it is the Flood Protection, the Board, but I can't separate these in my own mind.

For you to want to say, well, we're only dealing with the flood map, that's all we've got, I can't do that. Once again, same Department, same director, same staff, largely, all of these things. They are the same. If you want to -- if the Department of Water Resources would like to cobble together a deal or some sort of negotiation regarding the Delta with Yolo County, these things are together, in my mind. And I think the Board looks at it that way. I know I do.

And if we want to come to some resolution, once again, same Department, same director, same water, same land. They are linked in my mind, and I don't now how the Board would think otherwise in that respect.

But I want to thank you very much for coming today, and I would encourage you -- and so actually one of the things that was asked for earlier today is what is your solution for some of these issues?

T_REXROAD1-06

I don't know if you just simply look at the

Elkhorn area, all of the homes are right up against the river -- or right up against the Road 22 or at least most of them are. Look at other options. Look at going west actually. Moving the levee to the west actually could provide you with the capacity you're looking for, actual increase your flows, and increase the volume you're looking for without having the people behind me lose all of their homes. And so that would be one suggestion I have, and that's a personal one for me. But I do think there's a lot of different options you have to take into effect.

T_REXROAD1-07 The other thing I would say, in closing -- and think I've said that already once before but -- I'm not totally sure, based on the condition of the federal government with their -- financial issues of the federal government, and the requirement of a local match for some of these projects, I'm not sure that your project here won't collapse under its own weight. You're trying to tackle a big monster in this deal, and you deserve credit for that. It's an enormous problem.

But when you're talking about 15, 17 billion dollars in this process, with $2 billion of planning money, and without turning any dirt, you've got a long ways to go. And so, I'm not sure that -- I'm not sure this can actually be completed in terms of the size of the

project you're talking about, and being able actually to fund these things.

So I don't know whether it's going to happen in 10 or 15 years, as the Chairman talks about, or whether it will every happen at all, but I really do hope that you allow Yolo County to be at the table, because we're going to insist in this process that we're at the table, and I don't think we were allowed that process early on as this was rolled out, and I think that's unfortunate.

So thank you very much for your time and than you for letting me speak.

PRESIDENT EDGAR: Thank you very much Matt.

Yolo County Supervisor, Max Rexroad (Public Hearing, April 11, 2012)

Response

T_REXROAD1-01

As stated in Master Response 1, the Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

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The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis

for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1. The commenter's points regarding the role of Interstate 5 in bypass expansion would be a project-level detail, to be addressed as appropriate as part of the future planning and study described above. The commenter is encouraged to participate in these CVFPP post-adoption activities.

T_REXROAD1-02

As stated in Master Response 18, the CVFPP will be integrated with other large plans within the context of its primary goal to improve flood management in the SPFC planning area by considering an urban level of flood protection against a 200-year (0.5 percent annual chance) flood for urban and urbanizing areas; structural and nonstructural options for protecting small communities from a 100-year (1 percent annual chance) flood; and flood protection options for rural-agricultural areas, with a focus on integrated projects that achieve multiple benefits and help preserve rural-agricultural lands from urban development. Additional project-level study and coordination with local, State, and federal governments and agencies, and with local major programs and projects, is necessary to implement many of the elements proposed in the CVFPP. For example, the Yolo Bypass expansion would need to be implemented in coordination with the CVP and SWP Long-term Operations Criteria and Plan Biological Opinion and BDCP, in consultation with Yolo County's Natural Heritage Program and other programs that focus on the region.

The CVFPP focuses on the areas that currently receive protection from SPFC facilities. Although flood management is not the primary purpose of the BDCP, at least two proposed conservation measures directly relate to flood management:

1 Yolo Bypass Fisheries Enhancement seeks to improve upstream and downstream fish passage through the bypass.

2 Seasonally Inundated Floodplain Restoration calls for a greater duration of flows in the Yolo Bypass.

The Yolo Bypass is a major SPFC facility for alleviating potential flood risk in the Sacramento River Basin and is within the CVFPP's SPFC planning area. The CVFPP's SSIA proposes expanding the Yolo Bypass to increase its ability to handle peak flows during large flood events. This proposed expansion could be accomplished by setting back bypass levees and widening the Fremont Weir. This expansion presents opportunities to improve fish passage at SPFC facilities, improve fish access to upstream aquatic habitat, and facilitate natural flow attenuation. For additional details, see Master Response 18.

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

Anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and

needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional information, see Master Response 13.

T_REXROAD1-03

See response to comment T_REXROAD1-01, above, regarding the high-level nature of the CVFPP and the general manner in which individual project proposals are described.

As stated in Master Response 2, the PEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family

ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

The issue of potential loss of homes resulting from SSIA implementation is addressed in the PEIR. See the discussion of Impact PEH-2 (NTMA and LTMA), "Displacement of Existing Housing or People through Changes in Land Use or Policy Changes," in Section 3.16, "Population, Employment, and Housing."

T_REXROAD1-04

See response to comment T_REXROAD1-02, above, regarding coordination between the CVFPP and the BDCP and CVFPP outreach and engagement opportunities, both past and future. The comment goes on to describe interactions with Director Cowin and provides an opinion regarding DWR operations. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_REXROAD1-05

See responses to comments T_REXROAD1-2 and T_REXROAD1-04, above. In addition, as stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect

the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13. DWR and the Board look forward to Yolo County's participation in these post-adoption activities.

T_REXROAD1-06

See response to comment T_REXROAD1-01, above. The commenter's suggestions regarding levee locations and configurations would be a project-level detail addressed as appropriate as part of the future planning and study described above. The commenter is encouraged to participate in these CVFPP post-adoption activities.

T_REXROAD1-07

As stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the

SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA "alternatives" for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and

relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

See response to comment T_REXROAD1-02, above regarding past and future public outreach and engagement efforts associated with development of the CVFPP. See response to comment T_REXROAD1-05, above, regarding opportunities for further public and agency participation in CVFPP post-adoption activities.

T_RP1

T_RP1-01

MR. CARLON: Good morning, Chairman, members of the Board. My name is John Carlon. I'm president of River Partners.

And I just want to start by stating that River Partners' top priority in this flood plan is public

safety. We have employees who live in this community whose families, farms, and homes would be in harm's way if these levees fail. And we believe the best way to protect public safety is through expanding bypasses and moving levees back. And we think there is some excellent examples of that right here in this community with TRLIA's Bear River setback and the Feather River setback. So I think just right here in this community, there's excellent examples of how this can work and work well.

In addition to the benefits of improved public safety and flood protection, moving levees back and expanding bypasses has several other benefits. And some of those other previous speakers have touched on. We need to improve water supply reliability for agriculture. And I think that can be done with levee setbacks. They also improve water quality.

There is an increase in wildlife populations, decreased needs for mitigation in the future. We have increased opportunities for hunting, fishing, recreation. And those are all important to the local economies.

And I think another really critical factor is reduced operation and maintenance, because if we can expand the capacity of the floodway, our annual operating costs have the opportunity to go down.

And another critical factor is leveraging State

and federal funding to get more dollars into flood control. There's an example of a project we're working on that's going to protect about 1,600 -- there's going to be a flood easement over 1,600 acres down in the San Joaquin, and flood control dollars is roughly 10 percent of the total budget cost.

So if we can follow the example of what's been done up here in this community with TRLIA with Bear River and Feather River setbacks, where everybody can work together, elected officials, State and federal agencies, levee districts, farmers and conservationists, then I think we have the benefit of leveraging those fundings and bringing those resources to bear and getting more work done.

T_RP1-02

And in terms of the flood plan, I just want to make sure that the Board is aware that there are many viable multi-benefit projects ready to go. Many of those have not been captured in the plan. And I would be encourage you to consider those and make those a priority in the first five years of this effort.

Thank you.

River Partners, John Carlon, President (Public Hearing, April 6, 2012)

Response

T_RP1-01

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction for the CVFPP to "…include a description of both structural and nonstructural means for improving the performance and elimination of deficiencies of levees, weirs, bypasses, and facilities, including facilities of the State Plan of Flood Control, and, wherever feasible, meet multiple objectives…" (CWC Section 9616(a)). The legislation further identifies 14 objectives, two of which address water supply and groundwater recharge (CWC Sections 9616(a)(3) and 9616(a)(14)).

The CVFPP includes a high-level discussion on integrating water supply benefits with flood management improvements. The SSIA elements focus on public safety and improvement of flood management, consistent with the legislative direction and CVFPP primary goal; however, implementing these elements could improve water management because expanding floodways and the bypass system could improve the flexibility of reservoir operations and increase in-channel groundwater recharge. The SSIA describes potential opportunities for integrating water supply benefits with proposed flood management actions, but it does not include specific project recommendations related to water supply because of the need for future site-specific proposals and analyses. During post-adoption activities (regional flood management planning and development of basin-wide feasibility studies), additional details will be developed, including specific water management features as part of multi-benefit projects, in collaboration with interested local and regional agencies and organizations.

The Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements,

including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important shaded riverine aquatic habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework.

The Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to include multiple objectives, where feasible, when proposing improvements to flood management facilities, including opportunities and incentives for expanding or increasing the use of floodway corridors (CWC Section 9616(a)(12)). The potential for recreational use of the flood control system has long been recognized. The SSIA involves floodplain reconnection and floodway expansion, which would improve ecosystem functions, fish passage, and the quantity, quality, and diversity of natural habitats, all of which would contribute to an increase in recreation opportunities and augment the aesthetic values of those areas. Expanding habitat areas would increase opportunities for fishing, hunting, and wildlife viewing. Recreation-related spending associated with increased use by visitors can be an important contributor to local and regional economies. During post-adoption activities (regional flood management planning and development of basin-wide feasibility studies), DWR will work with local and regional implementing agencies and partners to refine CVFPP elements, including developing additional details on site-specific recreation features as part of multi-benefit projects. For additional details, see Master Response 7.

As stated in Master Response 9, three preliminary approaches were used to explore a range of potential physical changes to the existing flood management system and help highlight needed policies or other management actions: Achieve SPFC Design Flow Capacity, Protect High-Risk Communities, and Enhance Flood System Capacity. Evaluating these preliminary approaches provided information on their costs, benefits, and overall effectiveness. None of the three preliminary approaches were found

to fully satisfy the legislative requirements and CVFPP goals in a cost-effective manner. However, the most promising elements of each were combined to formulate the State's preferred approach—the SSIA. The CVFPP and accompanying attachments provide additional details about the formulation and screening of elements included in the SSIA. For additional details, see Master Response 9.

In regard to funding, as stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA "alternatives" for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

T_RP1-02

See response to comment T_RP1-01.

T_RP2-01

MS. RENTNER: Hi. Thank you for taking my comments today.

I'm Julie Rentner. I'm the Central Valley Regional Director for River Partners. I work out of Modesto.

I live in the floodplain. I'm protected by a

levee. I pay my flood insurance. I think that public safety is the most -- the top priority for this flood plan effort. And I'm very excited about this planning effort and that the State has taken such a strong investment in improving a system that needs so much improvement.

River Partners, and I as well, agree that the best way to protect the public from flooding is to expand bypasses and setback levees. And we have great examples of this working in the Sacramento Valley and here in the San Joaquin Valley.

I have the great pleasure of working on the San Joaquin River National Wildlife Refuge where there's been a large nonstructural flood control project and habitat restoration project underway for over ten years.

The flood benefits of the investments from DWR that have gone into that project cover all of the acreage. Although the percentage of the investment in that project coming from DWR and from the Flood Division of DWR is less than 20 percent.

I'm disheartened to hear -- well, to see in the agenda and then to hear in presentations today a linking of more expensive and multiple benefit projects. I feel that it's important for the Board to realize and for DWR to acknowledge that being able to share the costs of multi-benefit projects across many programs is a huge

benefit to all of the taxpayers of California.

Many, many opportunities still exist to develop more of these multi-benefit projects that leverage resources across many programs throughout the Central Valley. I encourage the Board to embrace some of these existing projects in the flood plan and to look forward to implementing leveraging -- cost leveraging multi-benefit projects in the flood plan.

Thank you.

River Partners, Julie Rentner, Central Valley Regional Director (Public Hearing, April 9, 2012)

Response

T_RP2-01

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction for the CVFPP to "…include a description of both structural and nonstructural means for improving the performance and elimination of deficiencies of levees, weirs, bypasses, and facilities, including facilities of the State Plan of Flood Control, and, wherever feasible, meet multiple objectives…" (CWC Section 9616(a)). The legislation further identifies 14 objectives, two of which address water supply and groundwater recharge (CWC Sections 9616(a)(3) and 9616(a)(14)).

The CVFPP includes a high-level discussion on integrating water supply benefits with flood management improvements. The SSIA elements focus on public safety and improvement of flood management, consistent with the legislative direction and CVFPP primary goal; however, implementing these elements could improve water management because expanding floodways and the bypass system could improve the flexibility of reservoir operations and increase in-channel groundwater recharge. The SSIA describes potential opportunities for integrating water supply benefits with proposed flood management actions, but it does not include specific project recommendations related to water supply because of the need for future site-specific proposals and analyses. During post-adoption activities (regional flood management planning and development of basin-wide feasibility studies), additional details will be developed, including specific water management features as part of multi-benefit projects, in collaboration with interested local and regional agencies and organizations.

The Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements,

including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework.

The Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to include multiple objectives, where feasible, when proposing improvements to flood management facilities, including opportunities and incentives for expanding or increasing the use of floodway corridors (CWC Section 9616(a)(12)). The potential for recreational use of the flood control system has long been recognized. The SSIA involves floodplain reconnection and floodway expansion, which would improve ecosystem functions, fish passage, and the quantity, quality, and diversity of natural habitats, all of which would contribute to an increase in recreation opportunities and augment the aesthetic values of those areas. Expanding habitat areas would increase opportunities for fishing, hunting, and wildlife viewing. Recreation-related spending associated with increased use by visitors can be an important contributor to local and regional economies. During post-adoption activities (regional flood management planning and development of basin-wide feasibility studies), DWR will work with local and regional implementing agencies and partners to refine CVFPP elements, including developing additional details on site-specific recreation features as part of multi-benefit projects. For additional details, see Master Response 7.

T_SAFCA1-01 MR. JOHNSON: Mr. Carter -- President Carter, Mr. Punia, and members of the Board, Rick Johnson, Executive Director of the Sacramento Area Flood Control Agency. Thank you for the opportunity to speak today.

I noticed a number of you taking notes with all the speakers. You can rest your hand for a moment. I don't have any specific comments you need to write down.

I wanted to take a moment just to express SAFCA's support for the plan and congratulate Department of Water Resources for getting the plan completed on time and out. We recognize that was a difficult task. It was the first really comprehensive update of the State Plan of Flood Control in over 50 years, very controversial, and I know it was very difficult.

On March of 2010, the SAFCA Board passed a policy framework that served as guidance for SAFCA as we participated in the processes. And the plan is very consistent with that guidance that we have. In addition, SAFCA was formed under State law giving certain principles. And as we have moved forward with our flood protection projects, many of the principles that we adhere to are also in the plan. And so we find the plan is very consistent with how we've been proceeding with our process.

I know you've heard many issues and concerns, and SAFCA will be submitting comments of its own. We hope that we look at those comments as opportunities to improve the plan as it's further formulated, and not as reasons for delaying proceeding on those. Again, SAFCA supports the plan. We look forward to working with DWR, the Board, and all of our partners in the system to finding equitable solutions to many of these issues and concerns, so that we

can reach a very implementable plan.

Thank you very much.

PRESIDENT CARTER: Thank you, Mr. Johnson

Sacramento Area Flood Control Agency, Rick Johnson, Executive Director (Public Hearing, February 24, 2012)

Response

T_SAFCA1-01

DWR and the Board appreciate SAFCA's support of the CVFPP and acknowledgement of the effort required to complete the plan. Any further comments from SAFCA will receive a response. The State Legislature required DWR to prepare the first public draft CVFPP by January 1, 2012, for adoption by the Board by July 1, 2012, or as such other date as may be provided by the Legislature. DWR and the Board plan to meet the legislative schedule. The comment does not raise specific questions or information regarding the content of the CVFPP or the adequacy of the environmental analysis provided in the DPEIR. The comment is noted.

T_SAFCA2-01

MR. JOHNSON: Good morning. How are you doing? Good.

Mr. President, members of the Board. Rick Johnson. I'm the Executive Director for SAFCA, Sacramento Area Flood Control Agency.

Welcome to the new Board. And I don't envy your first major task that you're undertaking here.

Take a moment to give a little kudos to your Board. They don't get it often enough. Your Board staff, they're very hard working and very good to work with. So I just wanted to say that.

Thank you for the opportunity to comment on the Plan. I have some written comments here which I'll submit. I'll just highlight a couple. A lot of hard work has gone into this by DWR, the Board and others to get it this far.

SAFCA recognizes and feels that the Plan is a comprehensive framework for minimizing loss of life and economic damages due to flooding, for reducing and limiting state and local liability due to flooding, and for enhancing habitat and recreational values consistent with flood risk reduction.

The Plan recognizes that the system needs to provide a very high level of protection for urban and urbanizing areas, while maintaining the protection historically afforded to the agricultural areas. And it also offers a variety of structural and nonstructural options for the small rural communities.

Now, we recognize that no plan is ever perfect. And SAFCA is working with its partners at the Central Valley Flood Control Association. We'll be providing some additional comments that hopefully will help strengthen the Plan. We know you're going to be receiving a lot of issues and concerns, already have and will get more. But SAFCA supports the Board's plan of keeping the adoption process moving forward on the mandated schedule and recognizing that there's a lot of issues and concerns that will need to be addressed as part of the process in the future.

Thank you for the opportunity to comment.

PRESIDENT EDGAR: Thank you very much, Rick. And

we'll certainly welcome your comments -- written comments and we'll certainly take those into consideration. Appreciate it.

Sacramento Area Flood Control Agency, Rick Johnson, Executive Director (Public Hearing, April 5, 2012)

Response

T_SAFCA2-01

The comment's acknowledgement of the hard work that has gone into the CVFPP plan by DWR, the Board, and others is appreciated. Similarly, the statements regarding the importance of comprehensive flood planning generally pertain to the merits of the project and are noted. The written comments provided by commenter were received and are responded to separately in this FPEIR as L_SAFCA1. The State Legislature required DWR to prepare the first public draft CVFPP by January 1, 2012, for adoption by the Board by July 1, 2012, or as such other date as may be provided by the Legislature. DWR and the Board plan to meet the legislative schedule.

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction. For additional details, see Master Response 13. DWR and the Board look forward to SAFCA's participation in these efforts.

T_SBFCA1-01

MR. SHAPIRO: Thank you again, President Carter, members of the Board. My name is Scott Shapiro, and I am also general counsel for the Sutter Butte Flood Control Agency. I have just a few comments for you in regard to this client. If you're not familiar with the Sutter Butte Flood Control Agency, it is a joint powers agency. It's about three and a half years old, and it's bounded on the east by the Feather River, on the southwest by the Sutter Bypass, on the west side by the Sutter Buttes and the Butte Sink, and at the north end touches Thermalito Afterbay. The often maligned Cherokee Canal, you keep hearing about today, flows right through the northern portion of our agencies.

Our member agencies are Levee District 1, Levee District 9, Sutter and Butte Counties, and the Cities of Yuba City, Live Oak, Gridley, and Biggs. And in addition to general counsel, Mike Inamine is our Acting Executive Director who recently took over the position from your own Bill Edgar who resigned from our agency to be able to sit on your board.

Our views on the plan are developing. We have not yet had a chance to talk with our Board about the plan and get guidance from our Board as to what those views

would be, but we still thought it was worth putting a few things on the table. As you might expect, our plan -- our view of the plan is significantly shaped by our project that we're pursuing right now.

We have an EIP, early implementation project, which your Executive Officer spoke about during the Executive Officer's report this morning. We're going to be coming back to you in April or May and giving you an introduction to that. And we've been working with your staff and appreciated that.

But our view is going to be, obviously, very much influenced by our project, which will improve levees along the Feather River to provide urban levels of protection to the four cities in our area. Our schedule is to try to get under construction next year and be done by 2015.

So, as I indicated, our views are preliminary, but we do have a few things we wanted to put on the table. T_SBFCA1-02 One is, is we have a proposed bypass potentially in our area, and we're adjacent to another bypass, which may be expanded. So clearly bypasses and setback levees are issues that are going to be important to us. We have not taken a position on any of these, but we do think it's an appropriate topic for you to have a work group to take testimony. We'll come back and speak with you about the agency's views on it, and how we'll be affected by it once

we have that position.

T_SBFCA1-03 We do strongly support the remarks made earlier today by members of the community who spoke about rural levee improvement programs, as well as changes that might be made to the Federal Emergency Management Act program in rural areas. The southern half of our basin is not going to receive benefits that will take it out of a flood zone from our EIP. It will receive benefits, but it will not receive remapping benefits.

And so that area, which is part of our assessment district, a district that passed with 70 percent success rate is very much at risk, and would receive tremendous benefits from any sort of rural program you offered.

T_SBFCA1-04 Finally, funding is obviously going to be key to us as we are embarking upon an EIP. And to the extent that the plan can provide a framework for how funding should occur, and can make a commitment to finish those projects already underway, we think that would be excellent.

We do look forward to working with you and attending your future workshops and providing testimony. And thank you again.

PRESIDENT CARTER: Thank you Mr. Shapiro.

Sutter Butte Flood Control Agency, Scott Shapiro, General Counsel (Public Hearing, February 24, 2012)

Response

T_SBFCA1-01

The commenter provides background information on its early implementation project to improve levees along the Feather River. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_SBFCA1-02

As stated in Master Response 14, regional flood management planning, to be conducted in each of nine regions identified in the 2012 CVFPP, is an important next step in identifying specific improvements to rural-agricultural areas, small communities, and urban areas consistent with the SSIA. Upon CVFPP adoption, DWR will work closely with local entities to collect on-the-ground information regarding flood risks and needs, identify potential local and regional improvement projects, assess the performance and feasibility of these projects, and develop proposals that reflect the priorities of local entities in reducing flood risks. Each regional plan will present an assessment of proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. DWR intends to provide guidance as well as technical and financial assistance to local agencies to prepare the regional flood management plans, subject to availability of funds.

Regional flood management plans are anticipated to:

- Assess regional flood risks and management actions (projects) to reduce these risks
- Discuss regional priorities, including criteria used to prioritize individual projects
- Describe specific projects, including their potential costs, regional and systemwide benefits, and beneficiaries
- Provide a financial plan describing how the proposed projects would be funded, including cost sharing and financing for local shares
- Describe regional governance of flood management

Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts. Information and outcomes from the regional planning process will inform the State-led basin-wide feasibility studies, preparation of a financing plan for the CVFPP, and the first update of the CVFPP (scheduled for completion by 2017). This regional effort is scheduled to be launched publicly in June 2012 and is anticipated to continue through 2013.

DWR will engage regional flood planning partners to develop and implement communication strategies with broad interest groups to brief them on flood management planning in their regions. Regional implementing and operating agencies, land use agencies, and interest groups will be invited to participate in the planning process. Each regional planning process will seek input, as appropriate, from agricultural interests, environmental interests, permitting agencies/resource agencies, local emergency responders, tribes, and other stakeholders. DWR anticipates that a regional flood working group will be formed in each region.

Basin-Wide Feasibility Studies *(see Section 4.4 in Appendix A, "Central Valley Flood Protection Plan")*

Post-adoption activities will include development of two State-led basin-wide feasibility studies—one in the Sacramento River Basin and one in the San Joaquin River Basin—that will refine the broad description of the SSIA contained in the 2012 CVFPP. The basin-wide feasibility studies will (1) identify State interest in and articulate refinements to system elements and regional elements, (2) inform development of the CVFPP Financing Plan and the 2017 CVFPP update, and (3) help define the State's locally preferred plan for consideration in ongoing and planned USACE federal feasibility studies. The basin-wide feasibility studies will focus on system elements, which may take longer to study and implement than other regional plan elements because of their scale and complexity.

State-led feasibility studies are intended to support State decision making, regardless of the corresponding level of federal participation. They do not necessarily cover the scope of a federal feasibility study; however, these State-led studies will be conducted to minimize, to the extent possible, additional federal study needed to determine federal participation and facilitate subsequent authorization by Congress, if appropriate.

The basin-wide feasibility studies will be conducted in two primary phases. The first phase will be conducted concurrently with regional planning, and will focus on developing specific objectives and analyzing physical options

for system elements (such as bypass expansion and new bypasses). The second phase will combine the most promising options for system elements with the prioritized list of regional elements identified in the regional flood management plans. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale, representing refined alternatives for implementing the SSIA.

Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. The studies will be conducted in coordination with USACE (and ongoing cost-share feasibility studies) and local implementing agencies. It is anticipated that working groups will form to help evaluate and refine bypass expansion options, identify implementation challenges, and provide input in the planning process.

T_SBFCA1-03

As stated in Master Response 3, these impacts generally are social and economic in nature, and CEQA does not require addressing them except to the extent that they relate to potentially significant adverse effects on the physical environment. Nonetheless, the responses shown below have been prepared to maximize responsiveness to public participation in the CVFPP.

The SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. Implementing the SSIA would increase the percentage of the population receiving at least 100-year (1 percent annual chance) flood protection from the current 21 percent to more than 90 percent (CVFPP, page 3-40). The remaining 10 percent of the population would receive benefits through residual risk management actions. Based on initial planning-level cost estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to provide flood stage reduction benefits to many of the areas in the system, including small communities and rural-agricultural areas.

The State supports the continued viability of small communities to preserve cultural and historical continuity and provide important social, economic, and public services to rural populations and agricultural enterprises. The SSIA describes State investment priorities in small community flood protection while avoiding the inducement of imprudent growth within SPFC floodplains. Under the SSIA, many small communities would receive increased flood protection benefits as a result of system

improvements focused on protecting nearby urban areas. For example, levee improvements may be constructed upstream from an urban area to prevent a scenario in which floodwaters from an upstream levee breach would flow down gradient into the urban area. The upstream levee improvement that may extend into rural locations would therefore also reduce flood risks for the rural area immediately adjacent to the improved levee segment. Conditions in small communities would also be evaluated on a case-by-case basis to identify appropriate State investments in additional structural and/or nonstructural actions (e.g., levees, flood walls, floodproofing, or relocations).

The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas outside small communities. These actions are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development or increasing flood risks within lands protected by the SPFC. No target minimum level of flood protection has been established for prioritizing State investments in rural-agricultural areas (see CWC Section 9603). However, the SSIA proposes (1) projects that maintain levee crown elevations for rural SPFC levees and provide all-weather access roads for inspection and floodfighting; (2) economically feasible projects that resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs; (3) system elements (e.g., bypass expansion) that lower peak flood stages within some rural channels; and (4) actions to manage residual flood risks.

All areas protected by the SPFC would benefit from State investments included in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery. The SSIA also proposes State investments to preserve agriculture and discourage urban development in rural floodplains (e.g., purchasing agricultural easements from willing landowners, when consistent with local land use planning). In addition, the SSIA proposes FEMA flood insurance reforms to support the sustainability of rural-agricultural enterprises.

The State supports efforts to reform FEMA's NFIP to more equitably reflect corresponding flood risks, including establishing a flood zone for agriculturally based communities to allow replacement of existing structures or reinvestment development in the floodplain. The State also supports identifying a special, lower-premium rate structure that reflects actual flood risks for agricultural buildings in rural-agricultural areas located in Special Flood Hazard Areas. The State will work with local flood management interests to pursue reform of the NFIP. For additional details, see Master Response 3.

As stated in Master Response 4, State law (SB 5) requires an urban level of flood protection for urban and urbanizing areas within the Sacramento–San Joaquin Valley so that these areas will withstand a 1-in-200-year flood event (CGC Sections 65865.5, 65962, and 66474.5). Under the terms of SB 5, adoption of the 2012 CVFPP by the Board would trigger the schedule of compliance actions required for cities and counties to make findings related to an urban level of flood protection.

However, the CVFPP does not create any new requirements or assurances for levels of flood protection in the Central Valley; the local findings requirements regarding the required levels of protection were established by the State Legislature with the passage of SB 5. Similarly, the plan does not change existing State requirements related to new development in nonurbanized areas, including small communities, which must continue to meet the national FEMA standard of flood protection (per CGC Sections 65865.5, 65962, and 66474.5). This national standard corresponds to the minimum level of flood protection (100-year flood) required for participation in the NFIP, and is consistent with the existing Building Code. The Central Valley Flood Protection Act of 2008 further clarifies that the CVFPP is a descriptive document, and neither the development nor the adoption of the CVFPP constitutes a commitment by the State to provide any particular level of flood protection (CWC Sections 9603(a) and 9603(b)).

The Central Valley Flood Protection Act of 2008 establishes legislative requirements for the CVFPP. For example, the legislation directs DWR to consider structural and nonstructural methods for providing an urban level of flood protection (200-year or 0.5 percent chance) to current urban areas (CWC Sections 9614(i) and 9616(a)(6)), and encourages wise use of floodplains through a better connection between State flood protection decisions and local land use decisions (CWC Section 9616(a)(5)). The SSIA proposes flood protection investments for rural-agricultural areas, small communities, and urban areas consistent with legislative direction and commensurate with flood risk to people and property.

The SSIA identifies minimum flood protection targets when State investments are made to protect public safety in urban areas and small communities (protection from 200- and 100-year flood events, respectively). However, the plan acknowledges that State investments alone cannot achieve these targets in all communities without leveraging federal and local funds, and encourages higher levels of flood protection whenever feasible. The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas, and that are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development in floodplains.

The SSIA does not target a minimum level of flood protection for State investments in rural-agricultural areas outside of the small communities because conditions and local interests differ from one area to another, and additional regional planning efforts are needed to formulate solutions that meet community needs and State investment priorities. However, the SSIA includes various options for addressing flood risks in rural-agricultural areas, including the following:

- Projects to maintain levee crown elevations for existing rural SPFC levees and provide all-weather access roads for inspection and floodfighting
- Economically feasible projects to resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs
- System elements (such as new and expanded bypasses) that would lower water surface elevations within some rural and urban channels

All areas would benefit from State investments in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery.

In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments would vary from region to region depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, all areas protected by the SPFC would receive flood risk management benefits from fully implementing the SSIA. Further, the State places a priority on flood management improvement projects that provide multiple benefits to support broad State interests and expand cost-sharing opportunities. For additional details, see Master Response 4.

T_SBFCA1-04

As stated in Master Response 4, cost-sharing rules are governed by federal and State laws, regulations, and policies, which have continued to evolve over time. CWC Section 12585.7 identifies the State cost-share of nonfederal capital costs for flood management projects. The State normally pays 50 percent of the nonfederal cost-share, but will pay up to 20 percent more (for a maximum of 70 percent of the nonfederal cost-share) if the project makes significant contributions to other State interests and objectives (e.g., the ecosystem, recreation, open space, protection for

disadvantaged communities, and protection for transportation and water supply facilities).

The 2012 CVFPP includes an estimate of potential cost-sharing by State, federal, and local entities for the SSIA, developed to assist with CVFPP development and analysis. However, cost-sharing for implementation of the SSIA will be refined during feasibility studies and project implementation as additional project-level information is gathered and the interests of the partnering agencies in elements of the SSIA are identified. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, and development of a financing plan for the CVFPP) will address cost-sharing and local capacity to pay.

The CVFPP does not provide funding assurances for any specific project or improvement element, and current bond funding is not sufficient to fully implement the SSIA. A financing plan will be prepared as part of the post-adoption activities (CWC Section 9620(c)). For additional details, see Master Response 4.

As stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA “alternatives” for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

T_SCHOHR1-01 MS. SCHOHR: Good morning, Board. This is not the first time I've addressed this Board. I have in the past as well.

I have lived in the big squiggly area of the Cherokee Canal all of my life and so has my husband. In fact, our family has been there farming rice on the same ground, in the same area - this is our 101st rice crop.

The Cherokee Canal runs right through our

property. It was put there in 1962, much later than the levees that you were talking about. I would hope that the engineers at that time did something better. I was not privy to watching it be built, but my husband and his family most certainly were.

We farm about 2500 acres in this area. We farm inside the levees. We farm outside the levees. And we pay a massive amount of taxes on that ground to protect it.

There's also habitat in that area. The State also owns ground in that area.

The problems in the past are continuing and will only continue if something is not done about the maintenance. Very little maintenance happens in that area. In fact, it's almost disgusting.

T_SCHOHR1-02 Earlier this week I had someone call me from the flood control agency, an engineer, and tried to talk about the Cherokee Canal. He had no idea where it was, but he was trying to talk to me about it. I would hope that wouldn't happen with the rest of the things in here.

I listened to a presentation by three of your members last week in Richvale. Today only frustrates me even further. I see how much really hasn't been addressed.

If you plan on passing this, which Mr. Edgar

pretty much says you are, you have less than 50 days to get this information gathered up - 50 working days, not the 100 in lifetime years that the rest of us invested in our family farms.

Right now the Cherokee project, which I'm going to mainly speak to, is nothing, but looks like somebody took a yellow marker to the page. I would hope our lives are more than that.

We asked about how it's going to be paid for in the future, who's going to pay for it, who's going to take care of it, who's going to pay the taxes on it, the maintenance, easements or ownership, financing.

T_SCHOHR1-03 Right now, I have been told in the past 15 years, that there are 13 miles below the Gridley-Colusa Highway on Butte Creek that are non-maintenance areas by Department of Water Resources. That came out in a federal court case. My family was part of that. Reclamation District 833 also has a large area that is non-maintenance. This is where you were talking about taking the Cherokee Canal through, through the Butte Sink, and into the Sacramento River or wherever the bypass is you plan to take it.

T_SCHOHR1-04 I heard nothing today about the Shasta Dam or the Sacramento River when it goes backwards in the Moulton Weir, and then it goes backwards into the Butte Sink, and

then it goes backwards across Gridley-Colusa Highway and back into the towns of Gridley and Biggs. Our flooding will come more from the acts of this than what is already there.

T_SCHOHR1-05 I want to know if anyone has included in the part of this -- the Bureau of Reclamation district project for the Biggs/West Gridley Water District that's going to add something like 15,000 acre-feet of winter water to that area. There's a 1997 agreement with Department of Water Resources that got Biggs Water District for a management study. Was that ever finished? Was that ever included in this?

T_SCHOHR1-06 There's a 1922 agreement for the east side of Butte Creek in the sink area. Has that been addressed?

T_SCHOHR1-07 Does this include the State Reclamation Board Butte Basin Master Plan and Flood Control impacts and benefits?

T_SCHOHR1-08 In 1993, the State was 1.5 million acre-feet short of water for personal use. We need more dams. We don't need ways to get rid of the water. We need more ways to keep it.

T_SCHOHR1-09 And, finally - I have already presented this to two of your Board members, but I will present it to the rest of you Board members - my family and I will gladly take any one of you at any time, in an airplane which we

have access to or in a car, and show you these areas that aren't being maintained and where they end up and what happens.

And we'll also show you the benefits of the way things are being run currently, as well as others.

Thank you for your time.

T_SCHOHR1-10 PRESIDENT EDGAR: Ms. Schohr, you're aware that no one's going to start constructing a widening of the Cherokee Canal next week?

MS. SCHOHR: I understand that. But I have a grandson, he'll be the sixth generation. I'm trying to protect this for him in the future. In the '60s my family and my husband's family was told that's what the Cherokee Canal was for at that time. I was told the other day it's a bad design project. I don't want somebody to come back in 50 years and tell us this is a bad design project.

PRESIDENT EDGAR: Yeah. But --

MS. SCHOHR: We talked about history with Mr. MacDonald a little bit ago. This is history.

PRESIDENT EDGAR: Yeah. No, I understand what you're saying. I just want you to remember what Jeremy Arrich said. There's certain things that this Plan is, which is a framework with some options to look at. And, you know, we can talk to Joe Countryman, who knows quite a bit about this area. He says probably the Cherokee Canal,

is -- you know, that project's probably pretty marginal at this point because it would be very costly and it doesn't provide that much benefit.

But that has to be vetted out. All the questions you've asked, we don't have answers for - the cost, the actual design of the project and so on. What we're trying to do is put a framework in place so that we can get answers to your questions and move forward. That's all we're trying to do.

The problem that I'm having is that at the end of the day we don't want people to have spent all this money on this planning and this hydrology and this analysis and then walk away, and we'll start the same thing over again 20 years from now. You don't want to do that.

So how can we put a framework in place to start the process to engage the stakeholders, like yourself, and others in the area that know quite a bit about the system up there, and come to some sort of an agreement on how we move the ball down the field? That's what we've got to do. This system is an old system. It's a hundred years old. It's in dire need of repair. The question is, what exactly -- how do we do that? How do we move the ball forward? That's what we're trying to do here. We're trying to put in place flood improvements that will -- that will improve the public safety for everybody

in the Central Valley. That's what we're trying to do. And it's all integrated. But there's a lot more work to do than what we have before us.

So what we're trying to do is get everybody to understand that. And your description of the Cherokee Canal being a crayon on a map, that probably is. I mean we haven't had a design on it. We haven't had any engineering on it. We haven't moved through a feasibility study. It's an option that they're -- that we would be vetting with the stakeholders.

But please don't think that we're -- these kinds of systemwide improvements, to be honest, will not even come to construction probably for 10 to 15 years.

MS. SCHOHR: I would hope that it'd be a lifetime before they came and long after that.

PRESIDENT EDGAR: Well, that's fine. And it may be.

T_SCHOHR1-11 MS. SCHOHR: Because what you're saying to me is that there's no place for a storage in there. There's already been hundreds of thousands of dollars, millions of dollars spent on this study so far. And the maintenance could have had the money spent on it. And would we be in much better shape at that point? And I understand that's part of the process.

PRESIDENT EDGAR: Well, that's part of the

process. The maintenance is a big issue. The maintenance is a big issue.

MS. SCHOHR: It's been a big issue. As I said, I've been to this Board before concerning maintenance. And I know 833 and other reclamation districts have as well.

PRESIDENT EDGAR: Yeah.

MS. SCHOHR: Thank you.

PRESIDENT EDGAR: Thank you for your testimony.

Oh, Ms. Schohr, you asked for this.

(Laughter.)

T_SCHOHR1-12 PRESIDENT EDGAR: Mr. Countryman.

BOARD MEMBER COUNTRYMAN: You know, as a flood control engineer I can't resist asking. Did you have some specific storage project in mind that -- or is this just a general statement?

MS. SCHOHR: Well, Sites, for sure, which would help on the other side of the valley. That doesn't necessarily help ours. Improving some of the situations that we have now either on Oroville or Amador. I know one of the engineers working on raising Shasta Dam. I am actually really good friends and partners with the lady whose dad was the major engineer on Shasta Dam. So I have a lot of historical reference to all of these things.

We built those things in a short amount of time

and -- take the Western Canal Water District. That was overtaken and changed with the process in less than 18 months to benefit all of us as landowners. And it seems like some of these things take a lot of big projects to get done and cost a lot of money and don't go anywhere in the end. And I'd like to see some of this stuff come to fruition, put particularly some storage issues someplace.

BOARD MEMBER COUNTRYMAN: Thank you.

Susan Schohr, Landowner in Maintenance Area 14 (Public Hearing, April 5, 2012)

Response

T_SCHOHR1-01

The comment is an introductory statement that provides information on the commenter and their experience with farming and flood control in the area, and it expresses an opinion about the importance of flood system maintenance. As stated in Master Response 6, DWR recognizes the importance of proper maintenance to protect State, local, and federal investments in the flood management system. However, maintenance activities alone do not meet current needs or legislative requirements for the CVFPP (e.g., urban level of protection, systemwide approach, and providing multiple benefits). This is highlighted in the evaluation conducted for the preliminary approach called "Achieve SPFC Design Flow Capacity." For additional details, see Master Response 6.

The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_SCHOHR1-02

As stated in Master Response 1, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the

dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

Anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and

formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

As stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012

CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA "alternatives" for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the

SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

T_SCHOHR1-03

See response to comment T_SCHORHR1-02, above, regarding the nature of the CVFPP as a high-level document and the process for evaluation, planning, and design of future projects. In addition, as stated in Master Response 6, improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures).

The SSIA promotes efficient and sustainable long-term O&M practices through the following:

- Reforming and consolidating State and local agencies' roles and responsibilities for O&M
- Standardizing criteria by which maintenance practices, procedures, and inspections are performed and reported
- Implementing strategies to adequately and reliably fund routine activities and streamline permitting

Some of the proposed activities may involve legislative action, new institutional arrangements involving local maintaining agencies, modifications to existing State programs, and additional or redirected funding. For additional details, see Master Response 6.

T_SCHOHR1-04

As stated in Master Response 12, the State is sensitive to the potential effects of repairs or improvements to SPFC facilities that may result in redirected hydraulic impacts upstream or downstream from these facilities, and is developing more detailed policies to minimize and mitigate potential impacts. Based on current evaluations (see Section 3.13; Attachment 8C, "Riverine Channel Evaluations"; and Attachment 8D, "Estuary Channel Evaluations," in Appendix A, "Central Valley Flood Protection Plan"), implementing the SSIA as a whole would not result in adverse systemwide hydraulic effects, including any in the Delta. Peak floodflows may increase slightly (over current conditions) in certain reaches, but the expansion of

conveyance capacity proposed in the SSIA would attenuate flood peaks and result generally in reduced peak flood stages throughout the system.

Future feasibility studies are needed to refine the proposed elements of the SSIA, and the ultimate configuration of facilities may vary from those presented in the 2012 CVFPP. Only at that time will the State have project-specific modeling results that indicate the specific magnitude and extent of hydraulic impacts, if any, from planned improvements within the system. Cost estimates for the SSIA in the 2012 CVFPP include an allowance for features to mitigate potential significant hydraulic impacts caused by project implementation.

The issue of potentially redirecting hydraulic impacts is also addressed in Section 3.13, "Hydrology," in the DPEIR under Impact HYD-2 (NTMA), Impact HYD-4 (NTMA), Impact HYD-2 (LTMA), and Impact HYD-4 (LTMA). As indicated in these impact discussions, any project proponent implementing a project consistent with the SSIA that would affect flood stage elevations would need to obtain various applicable permits before project implementation (such as Section 408 and 208.10 authorization from USACE and encroachment permits from the Board). The project proponent would need to analyze the potential for the project to locally impede flow or transfer flood risk by causing changes in river velocity, stage, or cross section. Projects would not be authorized if changes in water surface elevation, and thus flooding potential, would increase above the maximum allowable rise set by these agencies. If the design of a project would result in an unacceptable increase in flooding potential, a project redesign or other mitigation would be required to meet agency standards before the project could be authorized and implemented. For additional details, see Master Response 12.

T_SCHOHR1-05

The Biggs West Gridley project is an infrastructure improvement project to provide more reliable water deliveries to a wildlife refuge. This is not a flood control project. As stated in Master Response 8, in the CVFPP, DWR describes the SSIA, which is a proposal for achieving the State's vision for flood management. The SSIA helps achieve the State's vision for flood management in a balanced manner by promoting responsible investment of public funds, commensurate with flood risks, in projects that integrate multiple benefits, in proactive maintenance of SFPC facilities and residual risk management, and in wise management of floodplains protected by the SPFC.

The State Legislature enacted comprehensive flood risk management legislation in 2007, including the Central Valley Flood Protection Act of 2008). This law set a clear directive for an integrated systemwide approach

to Central Valley flood management, and provided detailed guidance for DWR to follow in formulating the CVFPP. The Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in CWC Sections 9600–9625.

DWR, in coordination with USACE, the Board, and multiple stakeholders, used this legislative direction to formulate the CVFPP's primary and supporting goals, listed below.

CVFPP Primary Goal:

- *Improve Flood Risk Management*—Reduce the chance of flooding and damages, once flooding occurs, and improve public safety, preparedness, and emergency response through the following:
  - Identifying, recommending, and implementing structural and nonstructural projects and actions that benefit lands currently receiving protection from facilities of the SPFC
  - Formulating standards, criteria, and guidelines to facilitate implementation of structural and nonstructural actions for protecting urban areas and other lands of the Sacramento and San Joaquin river basins and the Delta

CVFPP Supporting Goals:

- *Improve Operations and Maintenance*—Reduce systemwide maintenance and repair requirements by modifying the flood management systems in ways that are compatible with natural processes, and adjust, coordinate, and streamline regulatory and institutional standards, funding, and practices for operations and maintenance, including significant repairs.
- *Promote Ecosystem Functions*—Integrate the recovery and restoration of key physical processes, self-sustaining ecological functions, native habitats, and species into flood management system improvements.
- *Improve Institutional Support*—Develop stable institutional structures, coordination protocols, and financial frameworks that enable effective and adaptive integrated flood management (designs, operations and maintenance, permitting, preparedness, response, recovery, and land use and development planning).

- *Promote Multi-Benefit Projects*—Describe flood management projects and actions that also contribute to broader integrated water management objectives identified through other programs.

In addition, the DPEIR includes the following specific statutory objectives:

- *Maximize Flood Risk Reduction Benefits within the Practical Constraints of Available Funds*—Ensure that technically feasible and cost-effective solutions are implemented to maximize the flood-risk reduction benefits given the practical limitations of available funding, and provide a feasible, comprehensive, and long-term financing plan for implementing the plan.

- *Adopt the CVFPP by July 1, 2012*—Complete all steps necessary to develop and adopt the CVFPP by July 1, 2012, or such other date as may be provided by the Legislature.

- *Meet Multiple Objectives Established in Section 9616 of the California Water Code, as Feasible.*

In accordance with legislative direction and reflecting stakeholder input, DWR prepared the 2012 CVFPP to describe the State's vision for flood management in the Central Valley. This vision for flood management in the Central Valley is for a sustainable flood management system that provides a high degree of public safety, promotes long-term economic stability, and supports restoration of compatible riverine and floodplain ecosystems.

T_SCHOHR1-06

The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted. The DPEIR is a program-level document. As stated in Master Response 23, CEQA does not mandate that a first-tier PEIR identify with certainty the characteristics and impacts of second-tier projects that will be further analyzed before implementation during later stages of the program. Rather, identification of specific impacts is required only at the second-tier stage when specific projects are considered. Similarly, at the first-tier program stage, the environmental effects of potential future projects may be analyzed in general terms, without the level of detail appropriate for second-tier, site-specific review (CEQA Guidelines Sections 15146 and 15152). The CVFPP PEIR satisfies these requirements.

T_SCHOHR1-07

In December 1986, the Reclamation Board (now the Central Valley Flood Protection Board) certified the EIR for the *Plan of Flood Control for the Board Butte Basin Overflow Area*, and concurrently approved a State construction project to define and establish the M&T and Goose Lake Flood Relief Structures. Subsequently, the State implemented the "Overbank Flow Element" of the 1986 plan. USACE implemented many features of the "Channel Stabilization Element" of the *Plan of Flood Control for the Board Butte Basin Overflow Area* by constructing several bank protection sites during the late 1980s. Since 1987, the State has been responsible for maintenance of the State-constructed overbank flow features and USACE-constructed channel stabilization features of the 1986 *Plan of Flood Control for the Board Butte Basin Overflow Area*.

T_SCHOHR1-08

As stated in Master Response 10, in developing the CVFPP and formulating the SSIA, DWR considered various forms of storage for flood management, including operational changes to existing reservoirs with flood storage, new or expanded flood storage in reservoirs, and storage in floodplains. Specifically, one of the preliminary approaches—Enhance Flood System Capacity—included enlarging the flood storage allocation of several multipurpose reservoirs to improve management of flood risks on lands protected by the SPFC. This evaluation found potential benefits from and opportunities for reservoir flood storage and operational changes, such as improving flexibility in managing hydrologic changes (such as climate change) and potentially offsetting the hydraulic effects of certain system improvements on downstream reaches. At the same time, these analyses addressed both the physical limitations of these opportunities and the potential negative effects of increasing flood-storage allocations on water supply and other beneficial uses. The analyses of reservoir storage and flood operations that were conducted in support of the 2012 CVFPP are described in Attachment 8B in Appendix A, "Central Valley Flood Protection Plan."

Storage elements ultimately retained in the SSIA are based on preliminary systemwide analyses conducted for the 2012 CVFPP, legislative direction for the CVFPP, and the findings of prior and ongoing studies. Among those studies are ongoing surface storage investigations and prior local, State, and federal studies such as the Shasta Lake Water Resources Investigation, North-of-the-Delta Offstream Storage (Sites Reservoir), In-Delta Storage Program, Los Vaqueros Reservoir Expansion, and Upper San Joaquin River Basin Storage Investigation (Temperance Flat Reservoir). However, no new site-specific investigations of surface storage were included in the systemwide analyses conducted to support the 2012 CVFPP.

In the 2012 CVFPP, the SSIA includes coordinated reservoir operations aimed at making the most efficient and effective use of current flood storage allocations in existing reservoirs, and implementation of the authorized Folsom Dam Raise (see Section 3.5.4 of the CVFPP). These SSIA storage elements appropriately reflect the conceptual level of detail and systemwide focus of the 2012 CVFPP, without precluding future consideration of new or expanded storage by the State or local agencies. At this time, the SSIA does not include new reservoirs or expansion of storage (other than at Folsom Dam) solely for the purpose of flood management; however, DWR will continue to consider flood management in the context of, and as an objective of, its ongoing multi-benefit surface storage investigations and systemwide reoperation studies. Should these State investigations or other related efforts by local or federal agencies identify flood management as a component of a feasible reservoir storage project, this may be reflected in future updates to the CVFPP.

Ongoing investigations are being conducted to determine the feasibility of surface storage and consider potential environmental effects. The analyses included in these surface-storage studies are more detailed than those conducted at a systemwide scale for the 2012 CVFPP. Consequently, these studies are developing more comprehensive information about the potential costs and benefits of site-specific increases in flood storage.

For additional details, see Master Response 10.

T_SCHOHR1-09

See response to comment T_SCHOHR1-03 above regarding the treatment of O&M in the CVFPP. In addition, as stated in Master Response 6, DWR recognizes the importance of proper maintenance to protect State, local, and federal investments in the flood management system. However, maintenance activities alone do not meet current needs or legislative requirements for the CVFPP (e.g., urban level of protection, systemwide approach, and providing multiple benefits). This is highlighted in the evaluation conducted for the preliminary approach called “Achieve SPFC Design Flow Capacity.”

The Achieve SPFC Design Flow Capacity preliminary approach focuses on reconstructing SPFC facilities to meet current engineering criteria without making major changes to facility footprints or operations. To achieve the design flow capacity, reconstruction is required because the original specifications focused primarily on levee prism geometry, and current evaluations have shown them to be insufficient in passing design flows if geotechnical and other engineering conditions (e.g., underseepage) are not improved. This approach was formulated to address legislation that required DWR to consider structural actions necessary to reconstruct SPFC

facilities to their design standard (CWC Section 9614(g)). It also addresses requests from stakeholders to consider reconstructing the existing flood management system in place, or without major modification to facility locations.

Based on an initial assessment, this preliminary approach is estimated to cost approximately $19 billion to $23 billion and take 30–35 years to implement. This approach would improve the reliability of SPFC facilities compared to existing conditions. However, in many locations, upstream levee reconstruction would increase peak flows and stages downstream because upstream levee failures would be reduced compared to existing conditions. Further, the level of protection would be highly variable throughout the system and would not be linked to the current public safety needs and legislated requirements, and to assets at risk within the floodplain. Consequently, this approach would only partially address the primary CVFPP goal of improving flood risk management.

Investments in SPFC reconstruction would initially reduce SPFC O&M costs, but long-term costs to maintain the system would remain high. Thus, this approach would only partially contribute to the goal of improving O&M. Opportunities to integrate ecosystem restoration and enhancement would be limited and would not contribute to improved ecosystem functions on a systemwide scale. There would also be few opportunities to promote multipurpose benefits including incorporating new groundwater recharge or other water-related benefits, and promoting ecosystem functions, recreation, or agricultural sustainability. Consequently, an approach focusing on maintenance, repair, and reconstruction of existing facilities would contribute in only a minor way to the supporting goals of multi-benefit projects. For additional details, see Master Response 6.

T_SCHOHR1-10

The comment provides a response from Board President Edgar. President Edgar states information similar to response to comment T_SCHOHR1-02 above. This conversation between President Edgar and the commenter does not require further response. The comment is noted.

T_SCHOHR1-11

See responses to comments T_SCHOHR1-03 and T_SCHOHR1-09 above regarding system maintenance. See response to comment T_SCHOHR1-08 above regarding water storage.

T_SCHOHR1-12

See response to comment T_SCHOHR1-08 above regarding reservoir storage and the CVFPP.

T_SCHOHR2-01

MS. SCHOHR: Hi, Chairman Edgar. My name is Susan Schohr, for those who didn't hear me yesterday. I sat through this whole hearing yesterday. Chairman Edgar, would you please do a couple of things that you promised yesterday. The first would be that you told us at the beginning that -- or yesterday at the end you suggested that your staff would tell those in the audience that their comments would be included in the DPEIR later today, even if they didn't make them later today. Did I hear that correctly, yesterday?

PRESIDENT EDGAR: Yes. And I said that --

MS. SCHOHR: I fear a lot of these people are going to leave and not realize that at noon.

PRESIDENT EDGAR: No, I said that earlier today too also.

MS. SCHOHR: Okay. I did not hear that and I don't think other people in the audience did either.

The second thing is Emma went through a little presentation of dates and requirements and when things were done. Would you please go through those quickly before this group leaves? It should only take you a couple of minutes. The meetings and the dates like you

had May 27th -- the April 27th meeting, the May 27th meeting, and the June meeting. Jane is nodding yes.

SECRETARY DOLAN: We're going to do that.

MS. SCHOHR: Okay. Thank you.

Susan Schohr, Landowner in Maintenance Area 14 (Public Hearing, April 6, 2012)

Response

T_SCHOHR2-01

All comments received during the four public hearings on the CVFPP and the DPEIR are responded to in this FPEIR. The remainder of the comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_SFCWA1-01

MR. BUCK: Good morning. I'm Byron Buck. I'm the executive director for the State and Federal Contractors Water Agency. We're a joint powers authority that comprise the export water contractors of California, serving two-thirds of our population and over three million acres of agriculture.

T_SFCWA1-02

And just a brief statement to tell you. We're pleased to be here. We plan to engage on this plan. We plan to work with folks in the NGO community and other stakeholders to coordinate our input, as we see a lot of integration possibilities between flood management, water supply, and ecosystem restoration, and in particular great potential ties to the Bay-Delta Conservation Plan, which has very similar objectives.

Thank you.

PRESIDENT CARTER: Thank you, Mr. Buck.

State and Federal Contractors Water Agency, Byron Buck, Executive Director (Public Hearing, January 27, 2012)

Response

T_SFCWA1-01

The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_SFCWA1-02

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form “alternatives” for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will

form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_SFCWA2

T_SFCWA2-01

MR. ZLOTNICK: Thank you, Mr. Chairman, Board members. My name is Greg Zlotnick. I represent the State and Federal Contractors Water Agency, which is basically the State Water Project contractors and federal Central Valley Project contractors that receive their water south of the Delta from the export projects.

T_SFCWA2-02

I'm here today to both commend DWR on the report. It was an excellent start. And we are very interested in engaging with you and with DWR as this moves forward. The issues we're particularly interested in are the bypasses within both north and the southern Delta, and the issue of multipurpose projects related to that.

T_SFCWA2-03

And sort of involved in all that is coordination and potential collaboration on the Bay Delta Conservation Plan, which is also looking at those areas. And then, of course, the Delta plan that the Delta Stewardship Council is working on. While your jurisdiction does not go into the Central Delta as theirs does, they also overlap with you though in the northern and southern parts of the Delta

T_SFCWA2-04

where your jurisdiction does extend. And I know they're looking at these issues as well.

And so coordination on that and consistency with the co-equal goals of State policy are the areas that we'd be most interested in having you be sure to cover as you go forward. And, of course, particularly is as the conservation framework, which is now in place, moves into the conservation strategy over the course of, I guess, the next year or so, we'll also be engaged in that and to think how that moves forward with your plan is going to be very important as well.

And with that, I thank you for your consideration.

PRESIDENT CARTER: Thank you, Mr. Zlotnick.

State and Federal Contractors Water Agency, Greg Zlotnick (Public Hearing, February 24, 2012)

Response

T_SFCWA2-01

The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_SFCWA2-02

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form “alternatives” for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will

form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

As stated in Master Response 1, the existing bypass system in the Sacramento River Basin (including the Sutter and Yolo bypasses and associated inflow weirs) forms the central backbone of the Sacramento River Flood Control Project and redirects damaging floodflows away from the main channels of the Sacramento and Feather rivers. The considerable capacity of the bypass system (up to 490,000 cfs) also slows the movement of floods, effectively attenuating flood peaks and flows into the Delta. The existing bypass system also supports a vibrant seasonal agricultural economy and provides important habitat for multiple terrestrial and aquatic species. In the San Joaquin River Basin, the bypass system includes the Chowchilla, Eastside, and Mariposa bypasses.

The Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its

tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass. For additional details, see Master Response 1.

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction for the CVFPP to "…include a description of both structural and nonstructural means for improving the performance and elimination of deficiencies of levees, weirs, bypasses, and facilities, including facilities of the State Plan of Flood Control, and, wherever feasible, meet multiple objectives…" (CWC Section 9616(a)). The legislation further identifies 14 objectives, two of which address water supply and groundwater recharge (CWC Sections 9616(a)(3) and 9616(a)(14)).

The CVFPP includes a high-level discussion on integrating water supply benefits with flood management improvements. The SSIA elements focus on public safety and improvement of flood management, consistent with the legislative direction and CVFPP primary goal; however, implementing these elements could improve water management because expanding floodways and the bypass system could improve the flexibility of reservoir operations and increase in-channel groundwater recharge. The SSIA describes potential opportunities for integrating water supply benefits with proposed flood management actions, but it does not include specific project recommendations related to water supply because of the need for future site-specific proposals and analyses. During post-adoption activities (regional flood management planning and development of basin-wide feasibility studies), additional details will be developed, including specific water management features as part of multi-benefit projects, in collaboration with interested local and regional agencies and organizations. For additional details, see Master Response 7.

T_SFCWA2-03

As stated in Master Response 14, as part of post-adoption activities, the Board and DWR will continue to work collaboratively with local, State,

and federal agencies, environmental interests, and other parties to develop regional flood management plans and further refine the proposed elements of the SSIA.

The State has a strong interest in coordinating and implementing integrated projects that achieve multiple benefits. Effective integration across planning efforts means that all programs and projects, when implemented, work together to achieve key goals in a cost-effective manner; are sequenced and prioritized appropriately; and do not adversely affect or interfere with intended benefits. Although effectively integrating planning across programs while considering multiple benefits can be challenging, doing so can also provide opportunities to share knowledge and identify mutually beneficial solutions that might not have been considered otherwise, thus minimizing duplication and reducing costs.

DWR will continue to coordinate with other flood management and ecosystem enhancement efforts during implementation of the CVFPP. Key examples include the Delta Stewardship Council's Delta Plan and the BDCP. These are described in more detail below.

Delta Plan *(see "Central Valley Flood Protection Plan and the Delta Plan" (fact sheet dated March 23, 2012))*

The Delta Stewardship Council is developing a comprehensive, long-term management plan for the Delta and the Suisun Marsh—the Delta Plan—to achieve the goals of improving water supply reliability and restoring the ecosystem, as described in CWC Section 85054. The CVFPP is one of many management plans that could contribute to achievement of the goals of the Delta Plan.

The primary goal of the CVFPP is to improve flood risk management, with a focus on lands protected by facilities of the SPFC, including those lands located in the Delta. However, SPFC facilities protect only portions of the Delta; other programs address flood management needs outside areas protected by the SPFC (outside the CVFPP study area). The major elements of the CVFPP's recommended approach—the SSIA—are consistent with the policies and recommendations in the draft Delta Plan (Delta Stewardship Council 2012), which address the following topics:

- **Improve emergency preparedness and response**—Both plans discuss preparing for and responding to flood emergencies, including preparing emergency response plans and protocols.

- **Finance and implement flood management activities**—Both plans acknowledge the challenges associated with financing O&M and

repairs, and contain similar recommendations to pursue formation of regional levee districts.

- **Prioritize flood management investment**—Both plans emphasize the need to prioritize future investments in flood management and leverage funding to achieve multiple objectives and benefits.

- **Improve residential flood protection**—Both plans acknowledge the need to associate levels of flood protection with assets at risk; the CVFPP incorporates the *Urban Levee Design Criteria* document by reference and supports the development of criteria for repairing levees in rural areas (criteria appropriate to the lands and uses being protected).

- **Protect and expand floodways floodplains and bypasses**—Both the Delta Plan and the CVFPP recommend further evaluation of Paradise Cut.

- **Integrate Delta levees and ecosystem function**—The Delta Plan recommends development of a criterion to define locations of future setback levees and the CVFPP recommends the use of setback levees to provide local and regional benefits.

- **Limit of liability**—Both plans acknowledge the need to address increasing exposure of the State and other public agencies to liability associated with failure of flood management facilities; both plans also include recommendations related to flood insurance reform.

Under the SSIA, when making flood management investments in areas of the Delta protected by the SPFC, the State will consider structural and nonstructural actions to help achieve the following objectives:

- 200-year level of flood protection, minimum, for urban areas (e.g., Stockton metropolitan area)

- 100-year level of flood protection for small communities in the Delta that are not already protected by urban improvements (e.g., Clarksburg, Hood, Courtland, Walnut Grove, Isleton, and Rio Vista)

- Improved flood management in rural-agricultural areas, through integrated projects that achieve multiple benefits and help preserve rural-agricultural land uses, including projects to restore levee crown elevations and provide all-weather access for inspection and floodfighting; economically feasible projects to resolve known levee performance problems; and agricultural conservation easements, when

consistent with local land use plans and in cooperation with willing landowners)

In addition, the SSIA includes system elements, such as a potential expansion of the Yolo Bypass, to increase the capacity of the flood management system, attenuate peak floodflows, and increase opportunities for ecosystem restoration compatible with the BDCP (another major management plan contributing to the Delta Plan). The SSIA also includes a potential new Lower San Joaquin Bypass to alleviate flood risk to the Stockton metropolitan area and to provide opportunities for environmental restoration and agricultural preservation.

As discussed in the draft Delta Plan, many upstream actions could affect the State's ability to meet the Delta Plan's coequal goals. The State is sensitive to the effects that upstream SPFC improvements may have on the Delta and is developing more detailed policies to minimize and mitigate potential redirected hydraulic impacts or other adverse impacts. The results of preliminary systemwide evaluations indicate that implementing the SSIA as a whole would not result in significant adverse effects on the Delta. However, post-adoption implementation actions and studies to refine the SSIA will involve evaluating any potential temporary downstream impacts caused by the sequencing of CVFPP implementation and providing mitigation.

Bay-Delta Conservation Plan *(see "Central Valley Flood Protection Plan and Bay Delta Conservation Plan" (fact sheet dated March 23, 2012))*

The BDCP is a long-term multipurpose plan, developed pursuant to the federal ESA and the California Natural Community Conservation Planning Act, to help meet California's goal for Delta management to restore and protect water supply, water quality, and ecosystem health. The public draft BDCP and its EIR/EIS are scheduled for release in mid-2012.

The BDCP Plan Area includes the legal Delta, the Suisun Marsh, and the Yolo Bypass. The CVFPP focuses on areas currently receiving protection from SPFC facilities. Portions of the Delta, as well as the Yolo Bypass (a major SPFC facility instrumental in managing flood risks in the Sacramento River Basin), are within both the BDCP Plan Area and the CVFPP's SPFC Planning Area. The Suisun Marsh, part of the BDCP Plan Area, is included in the Extended SPA as described in the DPEIR.

Although flood management is not within the scope of the BDCP, at least two proposed conservation measures directly relate to flood management: (1) the Yolo Bypass Fisheries Enhancement seeks to improve upstream and downstream fish passage through the bypass, and (2) Seasonally Inundated

Floodplain Restoration calls for greater duration of flows along the Yolo Bypass.

The CVFPP recommended approach—the SSIA—proposes expanding the Yolo Bypass to increase its ability to accommodate large floodflows. The proposed expansion also presents opportunities to improve fish passage at SPFC facilities, improve fish access to upstream aquatic habitat, and facilitate natural flow attenuation, consistent with BDCP conservation measures. Under the SSIA, the State will also consider a new bypass in the south Delta. This could be accomplished by expanding Paradise Cut or other routes in the vicinity, and may include levee construction, gate structures and/or weirs, habitat components, and agricultural easements.

Implementation of the CVFPP, and of many management components of the BDCP, will require further studies to refine physical features. These studies provide additional opportunities for coordination and to help achieve mutual goals and objectives. For additional details, see Master Response 14.

T_SFCWA2-04

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major

system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

In regard to coordination with other flood management and ecosystem enhancement efforts, see response to comment T_SFCWA2-03, above.

T_SHANNON1-01

MR. SHANNON: Good afternoon. I'm sorry, I didn't get my comments in earlier, but I didn't have anything written down, so I hope I don't stumble too much.

But a couple things that bother me. One thing when I first read about this project, I got it through the California Farm Bureau Magazine. And they had a map that I've seen two or three times, but it's very general. And I farm right next to the Sutter Bypass and I can't get any information on the exact distances you're going to widen the bypass. And that's --

PRESIDENT EDGAR: Yeah. Mr. Shannon, we talked a little bit about that today. With those large system -- proposed system project, such as the Sutter, Cherokee

Canal and so on, they -- those -- I think the way I think about them is that they are in the plan. They're designated as possible options that would be looked at in detailed engineering analysis and studies that would take place after this framework be put in place.

So we couldn't, at this time, without doing that detailed work and involving you and other local people, would not know how it was going to be designed, what the stake lines are and so on. It's just not that -- we can't answer those questions.

SECRETARY DOLAN: We don't know.

MR. SHANNON: So it makes it kind of difficult to come up and make comments on a project that is this big, this large, and this expensive that can be awfully terribly effective to a lot of growers without knowing exactly what we're commenting on. And so that statement being made, I hope that in the future as we go on, the decisions that are made on this project are made very clearly and make it very easily so the public can get ahold of them.

PRESIDENT EDGAR: Yeah. What we're trying to do is, and as we talked about this morning, is put in place a framework that has a number of priorities, one of which is that the system needs to be repaired. It's a hundred years hold, and there are problems with it, and we need to

make some systemwide improvements. And we're putting in place a framework that we'll get us started on the detailed designs of individual projects in these regional areas that might make sense from a systemwide standpoint and from a local standpoint. That's all we're trying to do.

MR. SHANNON: So I don't mean to reiterate or to repeat what was said earlier this morning, but I think it needs to be said, again, kind of in a different way, is that my family -- I'm a fourth generation -- third generation farmer. My son is a fourth. My dad is 91 years old. He helped build -- he worked on the levee built at Star Bend. That's where my original family is from.

And I've heard it for many years from him that there was one big mistake when they built the levee at Star Bend, which is south of Yuba City, that they put a 95 -- a 45 degree bend in the river, which backed the river up and that's why it flooded at Shanghai Bend in 1955. That's the only flood that's been in Yuba City since then.

So that being said, they straightened out the levee, which it needed to do. And that went right through my grandfather's original ranch. That needed to be done. That got straightened out. But there was two other things

T_SHANNON1-02

that were very important when they built that levee for flood protection and that was to keep the river dredged and keep the bypass clean.

And I know dredging the river is a very bad opinion. You don't dare say that, because the environmentalists don't like it. And what I've read about dredging the rivers out is they said it causes too much silt for the Steelhead and the Salmon.

Well, Mr. Munger said paddle boats came up the river. Well, until I got into high school, barges came up the Feather River to 2nd Street, right by our property. I saw them every day -- every week, I should say. These barges drew a lot of water, and when the river went down, there was a 20-foot swath -- or a channel that was 20 feet deep, went up the entire length of the Feather River. The river is up right now, and if you go to those same exact spots, there's five feet of water. I was out there Tuesday.

So my grandfather's old property now has trees and brush so thick, that's it 20 feet high. You can't walk through it. So before you start making a new project and saying that our own project is a hundred years old and is not feasible and not going to work, maybe all the individuals, including you, should get in a boat and go down the rivers and see what's happened in the last 40

years.

I was born and raised at Star Bend. I know what it used to look like, and it was a sand dune. And now it is cluttered with 20 feet tall trees and willows. Water can't pass through.

And the other thing that bothers me that no one has ever talked about in these meetings about what happened in '97. We flooded in '97, but I think there was some mismanagement by the dams. There was 80 percent -- each reservoir was 80 percent full in January, and there was 15 feet of snow at the 4,500 foot level, and we got 32 inches of rain in the month of December, and they didn't -- they refused to release water early.

So instead of going backward and trying to decide what went wrong and why we're flooding, and fix what we have, we've decided to come up with this huge expensive project, and disregard what's been done in the past. There has been nothing wrong with what we have here before. It's mismanagement and not taking care of what we have.

And I know the environmentalists do not like to dredge out the rivers, because they said it's too much silt. But if you go back to the history in the sixties and seventies, and before, when they did dredge out every year, there were record runs of Steelhead and Salmon

T_SHANNON1-03

coming up those same rivers that got dredged every year.

So I think the argument is kind of moot also. But if it's a give and take program that we're going to put this big project in, but then we're going to take -- and take 10,000 acres from agriculture and put it into natural habitat, but then we're going to destroy 60 miles of levee and move it over, what have we gained? We haven't -- we're still doing the same amount of damage. We're not replacing anything. We're doing more damage.

When you want to say that a friend of mine put a well in, he put four telephone poles in. They had to carry the telephone poles down a dirt road. If they drug, they were destroying garter snake habitat. Had two people employed sit there for two days to make sure a telephone pole would not hit the dirt when it got moved 30 feet or 40 yards down a road to be put in a hole.

But we're going to destroy how many feet of levee and move it over? How much habitat are we going to destroy there?

So I think that the Endangered Species Act can just be manipulated anyway it wants. They put a Calpine plant out by my place and they found 11 garter snakes in 14 days in two traps. They disregarded that. That got thrown out the window, because they wanted the cogeneration plant in.

You see my point, it seems like we're going to take 10,000 acres out of agricultural to mitigate what we're going to do to two levees. We don't need to do it. It's just like, well, we can handle Endangered Species Act. All we've got to do is move it over here.

PRESIDENT EDGAR: Okay. I think we understand what you're talking about.

T_SHANNON1-04 MR. SHANNON: I would really think that instead of making a plan first, maybe we should look at what we have already and make a in-depth study there and then decide whether it's going to work or not.

But I'm almost sure that anybody, including your panel, has been up and down that river, you'll know what I'm talking about. Spend the time to go do that. Investigate what we have. To spend 200 billion or 14 billion or whatever this project is going to cost, just because we're going to spend the money, doesn't fix the problem, and it takes people out of their homes.

And you can't -- if you're going to take a person's ranch away from them, they're not going to be able to go down the road and build another house and buy more farm ground. They're done. It's over. It's not like you can move a car lot and start selling cars down the road. And to buy a person's ground on eminent domain and give them a one-time payment, doesn't make it either.

That's not how they make their living.

So this is pretty important to the people that farm and live by the bypass. And for the cost we're getting for a project that's not guaranteed, I don't understand. We should be looking at we already have.

All right. Thank you very much.

PRESIDENT EDGAR: Thank you.

(Applause.)

Mike Shannon (Public Hearing, April 6, 2012)

Response

T_SHANNON1-01

As stated in Master Response 1, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward at this time until future project-level evaluation under CEQA is completed, as necessary. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

T_SHANNON1-02

As stated in Master Response 6, DWR recognizes the importance of proper maintenance to protect State, local, and federal investments in the flood management system. However, maintenance activities alone do not meet current needs or legislative requirements for the CVFPP (e.g., urban level of protection, systemwide approach, and providing multiple benefits). This

is highlighted in the evaluation conducted for the preliminary approach called "Achieve SPFC Design Flow Capacity."

The Achieve SPFC Design Flow Capacity preliminary approach focuses on reconstructing SPFC facilities to meet current engineering criteria without making major changes to facility footprints or operations. To achieve the design flow capacity, reconstruction is required because the original specifications focused primarily on levee prism geometry, and current evaluations have shown them to be insufficient in passing design flows if geotechnical and other engineering conditions (e.g., underseepage) are not improved. This approach was formulated to address legislation that required DWR to consider structural actions necessary to reconstruct SPFC facilities to their design standard (CWC Section 9614(g)). It also addresses requests from stakeholders to consider reconstructing the existing flood management system in place, or without major modification to facility locations.

Based on an initial assessment, this preliminary approach is estimated to cost approximately $19 billion to $23 billion and take 30–35 years to implement. This approach would improve the reliability of SPFC facilities compared to existing conditions. However, in many locations, upstream levee reconstruction would increase peak flows and stages downstream because upstream levee failures would be reduced compared to existing conditions. Further, the level of protection would be highly variable throughout the system and would not be linked to the current public safety needs and legislated requirements, and to assets at risk within the floodplain. Consequently, this approach would only partially address the primary CVFPP goal of improving flood risk management.

Investments in SPFC reconstruction would initially reduce SPFC O&M costs, but long-term costs to maintain the system would remain high. Thus, this approach would only partially contribute to the goal of improving O&M. Opportunities to integrate ecosystem restoration and enhancement would be limited and would not contribute to improved ecosystem functions on a systemwide scale. There would also be few opportunities to promote multipurpose benefits including incorporating new groundwater recharge or other water-related benefits, and promoting ecosystem functions, recreation, or agricultural sustainability. Consequently, an approach focusing on maintenance, repair, and reconstruction of existing facilities would contribute in only a minor way to the supporting goals of multi-benefit projects.

Improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing

after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures).

The SSIA promotes efficient and sustainable long-term O&M practices through the following:

- Reforming and consolidating State and local agencies' roles and responsibilities for O&M
- Standardizing criteria by which maintenance practices, procedures, and inspections are performed and reported
- Implementing strategies to adequately and reliably fund routine activities and streamline permitting

Some of the proposed activities may involve legislative action, new institutional arrangements involving local maintaining agencies, modifications to existing State programs, and additional or redirected funding. For additional details, see Master Response 6.

The SSIA includes an F-CO Program that seeks to coordinate flood releases from existing reservoirs located on tributaries to major Central Valley rivers. Considering the timing and magnitude of flood releases from reservoirs, the F-CO Program seeks to optimize the use of downstream channel capacity in balance with total available flood storage space in the system to reduce overall downstream peak floodflows. The F-CO Program also can modify operation of reservoirs in a way that will improve flood management and provide opportunities for more aggressive refilling of reservoirs during dry years. For more information, see Master Response 7.

T_SHANNON1-03

As stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward at this time until future project-level evaluation under CEQA is completed, as necessary. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

A portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of levees in rural areas. For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements.

The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed

land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable. For additional details, see Master Response 2.

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework.

Appendix E, “2012 Central Valley Flood Protection Plan Conservation Framework,” provides a preview of a long-term Conservation Strategy that DWR is developing to support the 2017 CVFPP Update. The Conservation Framework focuses on promoting ecosystem functions and multi-benefit projects in the context of integrated flood management for near-term implementation actions and projects. The Conservation Framework provides an overview of the floodway ecosystem conditions and trends and key conservation goals that further clarify the CVFPP’s ecosystem goal. For additional details, see Master Response 7.

T_SHANNON1-04

See response to comment T_SHANNON1-02. Additionally, as stated in Master Response 2, the conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable.

In addition to expansion of the bypass system, levee reconstruction, and other elements, the SSIA includes State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans. These easements would be used to preserve agriculture and prevent urban development in current agricultural areas, discouraging conversion to land uses that would increase flood risks within floodplains protected by SPFC facilities. Agricultural conservation easements could be purchased through various DWR programs; an example is DWR's Flood Corridor Program, which focuses on nonstructural flood risk reduction integrated with protection of natural resources and agricultural lands.

The PEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has

adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form “alternatives” for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide

input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_SJAFCA1

T_SJAFCA1-01

T_SJAFCA1-02

MR. GIOTTONINI: Jim Giottonini with the San Joaquin Area Flood Control Agency, SJAFCA in other words. I'm going to give you a little bit of background.

In the mid-1990s FEMA was going to place the Stockton metropolitan area, most of it, into a hundred

year floodplain, because of freeboard of deficiencies on the project levees, basically east of I-5

I just over three years, we formed the SJAFCA agency. We successfully passed a property assessment, sold bonds, designed and constructed the project. And it precluded FEMA from mapping us into the floodplain. We were basically on hold since then, until the passage of SB 5.

And then we had a new mission, we had to upgrade to 200-year flood protection. As a result, in 2009, you may recall, we partnered with the Corps, this Board, DWR, about 11 local reclamation districts, the cities of our county, basically Lathrop, Manteca, Stockton, and Lodi, and San Joaquin County on the Lower San Joaquin River Feasibility Study.

This feasibility study is necessary for us to achieve 200-year flood protection. I'll talk a little bit about it later.

T_SJAFCA1-03

But for the upcoming meetings, the Board's going to have in order to focus the public comment, we have four items we think you should focus on.

The first one, I think the highest priority should be flood protection. Our concern is that there's going to be limited funding in the future, and it could be exhausted on maybe some non-life safety improvements,

leaving significant populations still at risk. The plan should prioritize flood protection. And then once this is achieved, then do the other improvements included in the plan.

T_SJAFCA1-04

The second item we think you should focus on is the plan lacks specific information for SB 5 compliance. It's going to be very difficult for the cities and the counties in the Central Valley to abide by the requirements of SB 5 with this plan. It lacks a lot of detail.

T_SJAFCA1-05

The third thing is the Sacramento, I said, versus the San Joaquin. We just want to make sure the Board pays particular attention that both basins are treated equitably and the same level of flood protections are provided for both basins. We feel down in our area, maybe it's like a stepchild sometimes.

T_SJAFCA1-06

The fourth issue we'd like you to look at is the completion of our feasibility study. We've been using the work product from the Central Valley Flood Protection Plan, the hydrology and the hydraulic models, the LiDAR, the geotechnical work. It's been excellent. But we're doing that to make sure that our feasibility plan is consistent with the Central Valley Flood Protection Plan.

The plan should prioritize the completion of this feasibility study, as well as other feasibility studies.

T_SJAFCA1-07

We can't get to 200-year flood protection without it.

I'd also like to conclude by commending DWR staff. We said it should be a systemwide approach. The original working draft only included project levees, and you'll hear from other speakers today probably. But they added in our area 65 miles of nonproject levees. That was a major change. And it was very favorable to the locals.

In our area, we cannot get 200-year flood protection with just project levees. Our western front is primarily nonproject levees. So that was a very good move and we applaud DWR staff for doing that.

That concludes my comments.

PRESIDENT CARTER: Thank you, Mr. Giottonini.

Dr. Henery followed by Ms. Tatavon.

San Joaquin Area Flood Control Agency, James Giottonini (Public Hearing, February 24, 2012)

Response

T_SJAFCA1-01

The comment introduces the commenter, his professional affiliation, and background regarding SJAFCA. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_SJAFCA1-02

The comment provides historical information about the formation and activities of SJAFCA. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_SJAFCA1-03

As stated in Master Response 8, flood risks in the Central Valley are among the highest in the nation, putting many people in California and their economic livelihoods at unacceptable risk.

Beginning in the 1850s, flood facilities were built in increments over many decades through the individual and combined efforts of local, State, and federal agencies. The facilities were constructed with the materials at hand over many decades, following evolving design standards and construction techniques. As a result, these flood facilities provide varying levels of protection, depending on when and how they were constructed and upgraded. Constructing these facilities has also resulted in the loss of natural floodplain habitats, including wetlands.

Construction of the Central Valley's flood facilities was originally driven by the need to defend the developing valley floor against periodic floods while maintaining navigable channels for commerce. Over time, some facilities have become obsolete or have nearly exceeded their expected service lives, and they are in need of major modification or repair. Further, facilities originally constructed primarily for navigation, sediment transport, and flood management are now also recognized as important for

water supply conveyance, ecosystem functions, recreation, and other beneficial uses.

Today, the SPFC must contend with a lack of stable funding and with concerns like deferred maintenance, changes to regulations and societal priorities, dated construction techniques, and imprudent development in deep floodplains, leaving almost a million people at risk.

In response to these realities, the State Legislature enacted comprehensive flood risk management legislation in 2007, including the Central Valley Flood Protection Act of 2008. This law set a clear directive for an integrated systemwide approach to Central Valley flood management, and provided detailed guidance for DWR to follow in formulating the CVFPP. The Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in CWC Sections 9600–9625.

DWR, in coordination with USACE, the Board, and multiple stakeholders, used this legislative direction to formulate the CVFPP's primary and supporting goals, listed below.

CVFPP Primary Goal:

- *Improve Flood Risk Management*—Reduce the chance of flooding and damages, once flooding occurs, and improve public safety, preparedness, and emergency response through the following:
  - Identifying, recommending, and implementing structural and nonstructural projects and actions that benefit lands currently receiving protection from facilities of the SPFC
  - Formulating standards, criteria, and guidelines to facilitate implementation of structural and nonstructural actions for protecting urban areas and other lands of the Sacramento and San Joaquin river basins and the Delta

CVFPP Supporting Goals:

- *Improve Operations and Maintenance*—Reduce systemwide maintenance and repair requirements by modifying the flood management systems in ways that are compatible with natural processes, and adjust, coordinate, and streamline regulatory and institutional standards, funding, and practices for operations and maintenance, including significant repairs.

- *Promote Ecosystem Functions*—Integrate the recovery and restoration of key physical processes, self-sustaining ecological functions, native habitats, and species into flood management system improvements.

- *Improve Institutional Support*—Develop stable institutional structures, coordination protocols, and financial frameworks that enable effective and adaptive integrated flood management (designs, operations and maintenance, permitting, preparedness, response, recovery, and land use and development planning).

- *Promote Multi-Benefit Projects*—Describe flood management projects and actions that also contribute to broader integrated water management objectives identified through other programs.

In addition, the DPEIR includes the following specific statutory objectives:

- *Maximize Flood Risk Reduction Benefits within the Practical Constraints of Available Funds*—Ensure that technically feasible and cost-effective solutions are implemented to maximize the flood-risk reduction benefits given the practical limitations of available funding, and provide a feasible, comprehensive, and long-term financing plan for implementing the plan.

- *Adopt the CVFPP by July 1, 2012*—Complete all steps necessary to develop and adopt the CVFPP by July 1, 2012, or such other date as may be provided by the Legislature.

- *Meet Multiple Objectives Established in Section 9616 of the California Water Code, as Feasible.*

In accordance with legislative direction and reflecting stakeholder input, DWR prepared the 2012 CVFPP to describe the State's vision for flood management in the Central Valley. This vision for flood management in the Central Valley is for a sustainable flood management system that provides a high degree of public safety, promotes long-term economic stability, and supports restoration of compatible riverine and floodplain ecosystems.

In the CVFPP, DWR describes the SSIA, which is a proposal for achieving the State's vision for flood management. The SSIA helps achieve the State's vision for flood management in a balanced manner by promoting responsible investment of public funds, commensurate with flood risks, in projects that integrate multiple benefits, in proactive maintenance of SFPC facilities and residual risk management, and in wise management of floodplains protected by the SPFC. For additional details, see Master Response 8.

Addressing the issue of funding, as stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA "alternatives" for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

T_SJAFCA1-04

As stated in Master Response 5, the flood legislation passed in 2007, including the Central Valley Flood Protection Act of 2008 (part of SB 5) and ABs 162, 70, 2140, and 156, strengthened the link between local land use decisions and regional flood management. The land use planning and related requirements specified in the 2007 flood legislation vary depending on location (State of California, Sacramento and San Joaquin Drainage District, and Sacramento–San Joaquin Valley). Some requirements apply to all areas within a flood hazard zone, whether or not they are protected by SPFC facilities or connected to the CVFPP.

The requirement for an urban (200-year) level of flood protection is included in SB 5, and through that law is triggered by adoption of the CVFPP. State law (SB 5) requires an urban level of flood protection for urban and urbanizing areas within the Sacramento–San Joaquin Valley (as defined in CGC Section 65007(g)) within a flood hazard zone. CGC Sections 65865.5, 65962, and 66474.5 require all cities and counties within the Sacramento–San Joaquin Valley to make findings related to an urban level of flood protection before they may take any of the following actions:

- Enter into a development agreement for a property

- Approve a discretionary permit or entitlement for any property development or use, or approve a ministerial permit that would result in construction of a new residence

- Approve a tentative map/parcel map for a subdivision

Existing developments or remodels are not affected by these requirements unless they require one or more of the covered land use decisions listed above.

DWR developed the *Draft Urban Level of Flood Protection Criteria* (April 2012) to assist cities and counties in making findings related to the urban level of flood protection. DWR also developed the *Urban Levee Design Criteria* (May 2012), which contains the engineering criteria that apply when cities and counties use levees and floodwalls to provide an urban level of flood protection. Those criteria are incorporated by reference into the *Draft Urban Level of Flood Protection Criteria*.

State law (SB 5) requires each city and county in the Sacramento–San Joaquin Valley to amend its general plan within 24 months of the Board's adoption of the CVFPP (see CGC Sections 65302.9 and 65860.1) to include consistent information. These cities and counties must also amend their zoning ordinances accordingly within 36 months of the Board's adoption of the CVFPP. Cities and counties could consider incorporating the following information from the CVFPP into their general plan amendments:

- Data and analyses contained in the CVFPP, such as the locations of the SPFC and other flood management facilities, locations of property protected by those facilities, and locations of flood hazard zones

- Goals, policies, and objectives based on the CVFPP's data and analyses, for the protection of lives and property and reduction of the risks of flood damage

- Feasible implementation measures designed to carry out the goals, policies, and objectives

The 2012 CVFPP was prepared at a conceptual level. Consequently, the plan does not include detailed floodplain mapping, data on local flood stages, or specifics about future on-the-ground projects. This information will be developed during post-adoption implementation activities. However, a great deal of information and data on Central Valley flood risks and vulnerabilities were collected as part of 2012 CVFPP development. DWR has provided much of this information in the attachments to the CVFPP and will make further information available to assist local agencies.

The CVFPP focuses on SPFC facilities (including consideration of pertinent non-SPFC levee improvements in urban areas), which relate primarily to flooding of the mainstem Sacramento and San Joaquin rivers. DWR recognizes that in some circumstances, the information and planned improvements included in the SSIA may not be sufficient for cities and counties to make findings regarding an urban level of flood protection without additional analysis. Cities and counties should consider the criteria in the *Draft Urban Level of Flood Protection Criteria* for more detail. Further, cities and counties outside the SPFC planning area may not find pertinent geographic information in the CVFPP for their land use planning purposes, but could consider the goals, policies, and objectives for their actions.

DWR has made the following efforts to provide technical assistance to local jurisdictions related to implementation of the CVFPP:

- DWR completed its legislative responsibility by developing urban level of flood protection criteria consistent with current legislation, and in collaboration with cities and counties.

- DWR completed the draft CVFPP for the Board's adoption:

  - The CVFPP describes the State's investment approach and interests in SPFC facilities and the associated protected areas.

  - The *Draft Urban Level of Flood Protection Criteria* is incorporated by reference.

  - The *Urban Levee Design Criteria*, which describes the engineering criteria for levees and floodwalls, is incorporated by reference in the *Draft Urban Level of Flood Protection Criteria* and the CVFPP.

- DWR has shared and will continue to share available data, tools, and other relevant information with cities and counties, including the following details:

  - CVFED Program (anticipated 2013)

    - Mapping of the 200-year floodplain for the mainstem Sacramento and San Joaquin rivers and major tributaries

    - Fine-scale topographic (LiDAR) data

    - System hydraulic models and data

  - Central Valley Hydrology Study (anticipated 2013)

    - System hydrology (including climate change considerations)
    - System hydrologic models and data
  - Levee Evaluation Program (ongoing, with currently available preliminary data)
    - Inspection and geotechnical data
    - Levee integrity assessments and data
  - Existing data and tools used to develop the 2012 CVFPP

- With potential legislative support and collaboration with other federal and State agencies (e.g., FEMA), DWR may consider providing additional assistance to cities and counties as they develop or acquire additional floodplain information to support their local planning and decision making.

- DWR has completed a guide titled *Implementing California Flood Legislation into Local Land Use Planning: A Handbook for Local Communities* (2010) (http://www.water.ca.gov/floodmgmt/lrafmo/fmb/docs/Oct2010_DWR_Handbook_web.pdf). This handbook covers more than the requirements of an urban level of flood protection. It describes how the 2007 flood risk management legislation affects cities' and counties' responsibilities to meet local planning requirements such as those for general plans, development agreements, zoning ordinances, and tentative maps.

State law (SB 5) requires cities and counties to make findings on certain land use decisions in relation to an urban level of flood protection (CGC Sections 65865.5, 65962, and 66474.5). Separately, the law required DWR to prepare preliminary 100-year and 200-year flood-frequency maps using available information and make them available to cities and counties in 2008 (CWC Sections 9610(a)(1), 9610(a)(2), and 9610(a)(3)). This requirement is not directly connected to the requirements for an urban level of flood protection or associated findings.

In August 2008, DWR provided preliminary maps (as map books in CDs) to 91 cities and 32 counties in the Sacramento–San Joaquin Valley for use as the "best available information" about current flood protection. DWR's Floodplain Risk Management Branch extended the best-available-mapping project and developed "statewide" preliminary best-available maps for the 100-, 200-, and 500- year floodplains. These maps can be accessed by the public via a GIS-based Web viewer at http://gis.bam.water.ca.gov/bam.

Pursuant to CWC Section 9121 (enacted through AB 156), DWR established the Flood Risk Notification Program to increase flood risk awareness by effectively communicating about flood risk to individual property owners, other members of the public, and local, State, and federal agencies.

DWR is attempting to provide as much useful information related to 200-year floodplains as possible given its current funding and authority to use available funding. DWR is developing 200-year floodplain maps through its CVFED Program for areas protected by the SPFC, based on potential flows in the Sacramento and San Joaquin rivers (mainstem and major tributaries). Depending on the source of flooding, these maps may or may not be sufficient to support cities and counties in making their findings related to an urban level of flood protection. The cities and counties are encouraged to consult the *Draft Urban Level of Flood Protection Criteria* for additional detail at http://www.water.ca.gov/floodsafe/leveedesign/.

State law (SB 5) did not provide any specific enforcement authority for requirements regarding the urban level of flood protection. The Board has review and comment authority in one situation related to the definition of "adequate progress": CGC Section 65007(a)(2)(B) grants the Board the ability to make a finding that an agency is making adequate progress even when it is not meeting the time frame set in CGC Section 65007(a)(2)(A), if the requirements are not being met because of an insufficient State appropriation based on a prior agreement.

Other provisions enacted by the 2007 flood legislation package require cities and counties to consult with the Board when amending certain general plan elements. For additional details, see *Implementing California Flood Legislation into Local Land Use Planning: A Handbook for Local Communities* and Master Response 5.

T_SJAFCA1-05

See the portion of response to comment T_SJAFCA1-03, above, regarding funding. Specific allocations of funding and resources will be determined during CVFPP post-adoption planning and implementation efforts.

T_SJAFCA1-06

See response to comment T_SJAFCA1-04, above, regarding implementation of SB 5 requirements, future tools and information to assist local jurisdiction with these requirements, and assistance to local agencies in this effort. In addition, as stated in Master Response 14, regional flood management planning, to be conducted in each of nine regions identified in the 2012 CVFPP, is an important next step in identifying specific

improvements to rural-agricultural areas, small communities, and urban areas consistent with the SSIA. Upon CVFPP adoption, DWR will work closely with local entities to collect on-the-ground information regarding flood risks and needs, identify potential local and regional improvement projects, assess the performance and feasibility of these projects, and develop proposals that reflect the priorities of local entities in reducing flood risks. Each regional plan will present an assessment of proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. DWR intends to provide guidance as well as technical and financial assistance to local agencies to prepare the regional flood management plans, subject to availability of funds.

Regional flood management plans are anticipated to:

- Assess regional flood risks and management actions (projects) to reduce these risks
- Discuss regional priorities, including criteria used to prioritize individual projects
- Describe specific projects, including their potential costs, regional and systemwide benefits, and beneficiaries
- Provide a financial plan describing how the proposed projects would be funded, including cost sharing and financing for local shares
- Describe regional governance of flood management

Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts. Information and outcomes from the regional planning process will inform the State-led basin-wide feasibility studies, preparation of a financing plan for the CVFPP, and the first update of the CVFPP (scheduled for completion by 2017). This regional effort is scheduled to be launched publicly in June 2012 and is anticipated to continue through 2013.

DWR will engage regional flood planning partners to develop and implement communication strategies with broad interest groups to brief them on flood management planning in their regions. Regional implementing and operating agencies, land use agencies, and interest groups will be invited to participate in the planning process. Each regional planning process will seek input, as appropriate, from agricultural interests, environmental interests, permitting agencies/resource agencies, local

emergency responders, tribes, and other stakeholders. DWR anticipates that a regional flood working group will be formed in each region.

Post-adoption activities will include development of two State-led basin-wide feasibility studies—one in the Sacramento River Basin and one in the San Joaquin River Basin—that will refine the broad description of the SSIA contained in the 2012 CVFPP. The basin-wide feasibility studies will (1) identify State interest in and articulate refinements to system elements and regional elements, (2) inform development of the CVFPP Financing Plan and the 2017 CVFPP update, and (3) help define the State's locally preferred plan for consideration in ongoing and planned USACE federal feasibility studies. The basin-wide feasibility studies will focus on system elements, which may take longer to study and implement than other regional plan elements because of their scale and complexity.

State-led feasibility studies are intended to support State decision making, regardless of the corresponding level of federal participation. They do not necessarily cover the scope of a federal feasibility study; however, these State-led studies will be conducted to minimize, to the extent possible, additional federal study needed to determine federal participation and facilitate subsequent authorization by Congress, if appropriate.

The basin-wide feasibility studies will be conducted in two primary phases. The first phase will be conducted concurrently with regional planning, and will focus on developing specific objectives and analyzing physical options for system elements (such as bypass expansion and new bypasses). The second phase will combine the most promising options for system elements with the prioritized list of regional elements identified in the regional flood management plans. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale, representing refined alternatives for implementing the SSIA.

Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. The studies will be conducted in coordination with USACE (and ongoing cost-share feasibility studies) and local implementing agencies. It is anticipated that working groups will form to help evaluate and refine bypass expansion options, identify implementation challenges, and provide input in the planning process.

The State intends to complete both studies by mid-2015 to provide time to incorporate information and findings into the 2017 CVFPP Update. Interactions with other key planning efforts, such as regional flood management planning, the CVFPP Financing Plan, and Central Valley

Floodplain Evaluation and Delineation, are important to meeting the anticipated schedule. For additional details, see Master Response 14.

T_SJAFCA1-07

DWR and the Board appreciate SJAFCA's support of element of the CVFPP. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_SJAFCA2-01

MR. GIOTTONINI: Good afternoon. Jim Giottonini with the San Joaquin Area Flood Control Agency.

We offer the following comments and suggested changes to the plan for your consideration:

We think the highest priority should be flood protection. Our concern is that there's going to be limited funding both at the state and federal level. And if we do these funds for non-life safety improvements, then we're not going to have enough for the population at risk.

The Board should amend the plan to prioritize flood protection. Once this is achieved, implementation of other improvements could be pursued.

T_SJAFCA2-02

The Sacramento versus the San Joaquin. We'd like

the Board -- I think you're not as familiar with the San Joaquin River system as the Sacramento. Probably most of you live on that system. Most of DWR staff lives on the other system. So you may not be familiar.

I know that there are different flows, different populations at risk. But we're concerned that both plans treat both areas equitably so we have the same levels of flood protection at the completion of the Plan for both basins.

T_SJAFCA2-03 Third point is the Plan lacks information on SB 5 compliance. DWR staff and their consultants, they should be commended for doing this by the deadline. Unfortunately on a rush to the deadline, the Plan lacks project specifics, which makes it difficult for cities and counties to meet the mandate of SB 5 to get the 200-year protection. It's a high level plan and it states in the plan that subsequent studies will be needed. That's good, because we're working on the subsequent plan, we're working on the feasibility study, as John discussed.

Our request is that the Plan not be used to evaluate local projects to determine whether or not that project are no regrets, warranting a denial of a Board permit, a 408 request, or State bond funding.

T_SJAFCA2-04 Back to the feasibility study. We've been working on the work products of our feasibility study

since 2009. We've been using the Department of Water Resources data on modeling, the LiDAR, the miles and miles of geotechnical work that they've done on project and nonproject levees in our plan.

The plan should be amended to prioritize the completion of this feasibility study and other feasibility studies so local communities can get the SB 5 compliance.

We're also concerned -- we're not sure how -- and whether DWR has figured it out yet. It talks about regional plans and then two big feasibility studies on the two basins, one to Sacramento and San Joaquin. We're not sure how our feasibility study will fit into that. We're concerned that the big -- the feasibility -- the large basin feasibility studies will suck, you know, resources from the Corps and DWR, and it will delay the completion of our feasibility study.

We're also concerned that we may have to rework our feasibility study. I mean we're using the most current information from DWR. We don't want to get to the end of that feasibility study and then have to redo it again. I think we study things sometimes to death. I think feasibility studies are a prime example of that.

That concludes my comments.

T_SJAFCA2-05 BOARD MEMBER COUNTRYMAN: I have a question.

Jim, I got a question about one of the statements

that you made of wanting to assure the San Joaquin and the Sacramento has the same level of protection. Could you elaborate on that, because the systems are so vastly different. And as you know, I think, the San Joaquin system was originally designed for only 50-year level of protection, which the Sacramento system has actually quite a bit more than that.

So what was your thinking on that?

MR. GIOTTONINI: Well, if you look in the draft plan, I think they noted 18 EIP projects. Seventeen were on the Sacramento Basin, one down here.

We're not -- we know that the flows are higher in the Sacramento. We know that there's greater population at risk on the Sacramento versus San Joaquin. We're just saying at the end of the day, a life in the San Joaquin Basin is as important as a life in the Sacramento Basin. And Stockton area should have 200-year flood protection just like Sacramento. And so we're just saying it should be -- just a caution. I don't think the Board is as familiar with the San Joaquin system as the Sacramento system. And just pay attention to us to make sure we're treated equitably in the future is my comment.

BOARD MEMBER COUNTRYMAN: Okay. So if I could paraphrase what you're saying, as far as the urban areas are concerned, Stockton and Sacramento, it should have the

same status and level of protection as what's in the Sacramento Basin, but you're not necessarily saying that the rural areas should have -- should be equalized with the Sacramento --

MR. GIOTTONINI: Well, a rural area on the San Joaquin probably should be treated the same as a rural area in the Sacramento system, I would think.

BOARD MEMBER COUNTRYMAN: It may be impossible.

MR. GIOTTONINI: It may be impossible.

Or a small community.

BOARD MEMBER COUNTRYMAN: A small community.

MR. GIOTTONINI: In our area we have not only to protect our urban area. We have project levees, which is the -- you know, there are streams that come in. But also on our backside, our western front, are not project. Originally the draft plan didn't have the nonproject levees. And through -- and we commend DWR staff for now including it's about 16 miles of nonproject levees in our area, because that's needed for a systemwide approach. So that was a good move. But before that, that was a real concern because the plan said -- you know, we're going to have 200-year flood protection. But clearly you can't have that without doing something on our western front.

BOARD MEMBER COUNTRYMAN: So that's helpful. Thank you.

T_SJAFCA2-06

MR. GIOTTONINI: You're welcome.

PRESIDENT EDGAR: Jim, on the issue of don't use the plan to judge no regrets projects.

MR. GIOTTONINI: Yes.

PRESIDENT EDGAR: The bottom line here is, I think if you step back and conceptualize it, the Plan is DWR's tool to make sure that these projects fit together. I mean that's really what it is about. Besides the fact that even if you're going for an EIP, they make a judgment on whether it's a no regrets project anyway and make those determinations. So I'm not sure.

But what I see is that this is more of a general plan to give DWR a tool to see if in fact there is systemwide benefits by the culmination of all of the implementation of all these local plans.

But I'm not sure -- and, you know, by definition they're probably going to judge each project as it comes in. It's kind of a general, okay, does this work or doesn't it or what? And I'm not sure we get away from that.

Plus the fact I'm not sure you would even without the Plan.

MR. GIOTTONINI: Well, we were hopeful that -- maybe everybody was hopeful that when the Plan would come out, it would have enough detail so you could do --

clearly that's not there.

PRESIDENT EDGAR: I don't think you'd want that, by the way. Because I think if you're looking at implementation from bottoms up, you don't want a plan that is promulgating --

MR. GIOTTONINI: -- a specific without -- yeah, I understand.

PRESIDENT EDGAR: Right.

T_SJAFCA2-07 MR. GIOTTONINI: But at least it would be good if we had 200-year flows in our streams. And we don't have that yet as part of this plan.

I'm concerned -- as an example of what may -- you know, supposedly with the Plan, the EIP goes away. You wouldn't have an early implementation, because you're implementing the Plan. So I'm not sure what the process would be after the Plan is adopted.

But we have the Smith Canal gate. I don't think it's called that in the Plan. We're proposing that locally. We have an EIP grant application in to do the design of the project. And we're going to do a 218 to fund, you know, the design and construction of that gate.

I would hope that the Plan isn't interpreted by DWR as, all of a sudden, no, this isn't part of the Plan. And I don't think that was the intent. So --

PRESIDENT EDGAR: No, I don't think that is the

intent.

And I think the implementation of this Plan, as we all know, is going to be a long process, especially if you're talking about, you know, the big ticket items, the widening of the Yolo or Sutter bypasses or something like that. That's not even going to be near construction for 10 or 15 years. I mean that's bottom line. You'll never do that.

So in the meantime you can't stop. So you're going to be processing plans under, you know, EIP 2 or whatever it ends up being. But there is going to be some -- it seems to me you've got to continue to make improvements. And I think what the Department is trying to say is that as we make improvements, we've got to keep moving the ball down the field so we begin to integrate all of these plans, which are, to be honest, a little bit disconnected. You know, we've got Delta plan and the conservation plan in the Delta, we've got the Corps's integrated water plan that's going to be coming out. We've got this plan.

And they've got to all line up at some point. And that's going to be a process of just incrementally getting it all to work. But in the meantime there's going to be these projects that keep coming up. And they're going to have to be judged and approved or modified or

whatever.

But I don't see any other way it's going to work.

MR. GIOTTONINI: At this point I agree with you, yeah.

T_SJAFCA2-08 PRESIDENT EDGAR: Okay. The other thing that, you know, a lot of speakers have mentioned, there's a lot of material here. I mean you go out -- you've got five volumes -- I think there's a lot of material here that people, you know, some of -- which I've only found one person who's read all of it.

MR. GIOTTONINI: Who?

PRESIDENT EDGAR: Or said he did.

But there's an awful lot of information here that -- you know, you're talking about five volumes, 29 appendices, all of this kind of stuff.

So I'm not sure all of those appendices necessarily ought to be adopted as part of the Plan, because they're really engineering studies, material, data, all of this stuff that's going to change. It's going to change as we go along, and that's okay. But I'm not sure we should be amending a policy plan every time we have to change a model or something like that.

What are your thoughts on that?

MR. GIOTTONINI: Yeah, I agree -- at least I agree with those two, the urban level designs and the

other one. I agree that those shouldn't be adopted at this point. They're not even finaled yet.

And I agree with you, there's too much for one agency or one person to undertake. And it's just not this. It's everything going on in the Delta with the Delta plan and the BDCP. You know, if we're in this area, we have to be engaged in all those issues. And it's mindboggling to try to put it all together. And everything is coming at one time. And It's a recent -- it's not like we didn't have something to do before these initiatives.

PRESIDENT EDGAR: Okay. Thanks, Jim.

MR. GIOTTONINI: You're welcome.

San Joaquin Area Flood Control Agency, James Giottonini (Public Hearing, April 9, 2012)

Response

T_SJAFCA2-01

As stated in Master Response 8, flood risks in the Central Valley are among the highest in the nation, putting many people in California and their economic livelihoods at unacceptable risk.

Beginning in the 1850s, flood facilities were built in increments over many decades through the individual and combined efforts of local, State, and federal agencies. The facilities were constructed with the materials at hand over many decades, following evolving design standards and construction techniques. As a result, these flood facilities provide varying levels of protection, depending on when and how they were constructed and upgraded. Constructing these facilities has also resulted in the loss of natural floodplain habitats, including wetlands.

Construction of the Central Valley's flood facilities was originally driven by the need to defend the developing valley floor against periodic floods while maintaining navigable channels for commerce. Over time, some facilities have become obsolete or have nearly exceeded their expected service lives, and they are in need of major modification or repair. Further, facilities originally constructed primarily for navigation, sediment transport, and flood management are now also recognized as important for water supply conveyance, ecosystem functions, recreation, and other beneficial uses.

Today, the SPFC must contend with a lack of stable funding and with concerns like deferred maintenance, changes to regulations and societal priorities, dated construction techniques, and imprudent development in deep floodplains, leaving almost a million people at risk.

In response to these realities, the State Legislature enacted comprehensive flood risk management legislation in 2007, including the Central Valley Flood Protection Act of 2008. This law set a clear directive for an integrated systemwide approach to Central Valley flood management, and provided detailed guidance for DWR to follow in formulating the CVFPP. The Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in CWC Sections 9600–9625.

DWR, in coordination with USACE, the Board, and multiple stakeholders, used this legislative direction to formulate the CVFPP's primary and supporting goals, listed below.

CVFPP Primary Goal:

- *Improve Flood Risk Management*—Reduce the chance of flooding and damages, once flooding occurs, and improve public safety, preparedness, and emergency response through the following:

  – Identifying, recommending, and implementing structural and nonstructural projects and actions that benefit lands currently receiving protection from facilities of the SPFC

  – Formulating standards, criteria, and guidelines to facilitate implementation of structural and nonstructural actions for protecting urban areas and other lands of the Sacramento and San Joaquin river basins and the Delta

CVFPP Supporting Goals:

- *Improve Operations and Maintenance*—Reduce systemwide maintenance and repair requirements by modifying the flood management systems in ways that are compatible with natural processes, and adjust, coordinate, and streamline regulatory and institutional standards, funding, and practices for operations and maintenance, including significant repairs.

- *Promote Ecosystem Functions*—Integrate the recovery and restoration of key physical processes, self-sustaining ecological functions, native habitats, and species into flood management system improvements.

- *Improve Institutional Support*—Develop stable institutional structures, coordination protocols, and financial frameworks that enable effective and adaptive integrated flood management (designs, operations and maintenance, permitting, preparedness, response, recovery, and land use and development planning).

- *Promote Multi-Benefit Projects*—Describe flood management projects and actions that also contribute to broader integrated water management objectives identified through other programs.

In addition, the DPEIR includes the following specific statutory objectives:

- *Maximize Flood Risk Reduction Benefits within the Practical Constraints of Available Funds*—Ensure that technically feasible and cost-effective solutions are implemented to maximize the flood-risk

reduction benefits given the practical limitations of available funding, and provide a feasible, comprehensive, and long-term financing plan for implementing the plan.

- *Adopt the CVFPP by July 1, 2012*—Complete all steps necessary to develop and adopt the CVFPP by July 1, 2012, or such other date as may be provided by the Legislature.

- *Meet Multiple Objectives Established in Section 9616 of the California Water Code, as Feasible.*

In accordance with legislative direction and reflecting stakeholder input, DWR prepared the 2012 CVFPP to describe the State's vision for flood management in the Central Valley. This vision for flood management in the Central Valley is for a sustainable flood management system that provides a high degree of public safety, promotes long-term economic stability, and supports restoration of compatible riverine and floodplain ecosystems.

In the CVFPP, DWR describes the SSIA, which is a proposal for achieving the State's vision for flood management. The SSIA helps achieve the State's vision for flood management in a balanced manner by promoting responsible investment of public funds, commensurate with flood risks, in projects that integrate multiple benefits, in proactive maintenance of SFPC facilities and residual risk management, and in wise management of floodplains protected by the SPFC. For additional details, see Master Response 8.

As stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific

objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA "alternatives" for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be

unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

T_SJAFCA2-02

As stated in Master Response 14, regional flood management planning, to be conducted in each of nine regions identified in the 2012 CVFPP, is an important next step in identifying specific improvements to rural-agricultural areas, small communities, and urban areas consistent with the SSIA. Upon CVFPP adoption, DWR will work closely with local entities to collect on-the-ground information regarding flood risks and needs, identify potential local and regional improvement projects, assess the performance and feasibility of these projects, and develop proposals that reflect the priorities of local entities in reducing flood risks. Each regional plan will present an assessment of proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. DWR intends to provide guidance as well as technical and financial assistance to local agencies to prepare the regional flood management plans, subject to availability of funds.

Regional flood management plans are anticipated to:

- Assess regional flood risks and management actions (projects) to reduce these risks
- Discuss regional priorities, including criteria used to prioritize individual projects
- Describe specific projects, including their potential costs, regional and systemwide benefits, and beneficiaries
- Provide a financial plan describing how the proposed projects would be funded, including cost sharing and financing for local shares
- Describe regional governance of flood management

Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts. Information and outcomes from the regional planning process will inform the State-led basin-wide feasibility studies, preparation of a financing plan for the CVFPP, and the first update of the CVFPP (scheduled for completion by 2017). This

regional effort is scheduled to be launched publicly in June 2012 and is anticipated to continue through 2013.

DWR will engage regional flood planning partners to develop and implement communication strategies with broad interest groups to brief them on flood management planning in their regions. Regional implementing and operating agencies, land use agencies, and interest groups will be invited to participate in the planning process. Each regional planning process will seek input, as appropriate, from agricultural interests, environmental interests, permitting agencies/resource agencies, local emergency responders, tribes, and other stakeholders. DWR anticipates that a regional flood working group will be formed in each region.

Post-adoption activities will include development of two State-led basin-wide feasibility studies—one in the Sacramento River Basin and one in the San Joaquin River Basin—that will refine the broad description of the SSIA contained in the 2012 CVFPP. The basin-wide feasibility studies will (1) identify State interest in and articulate refinements to system elements and regional elements, (2) inform development of the CVFPP Financing Plan and the 2017 CVFPP update, and (3) help define the State's locally preferred plan for consideration in ongoing and planned USACE federal feasibility studies. The basin-wide feasibility studies will focus on system elements, which may take longer to study and implement than other regional plan elements because of their scale and complexity.

State-led feasibility studies are intended to support State decision making, regardless of the corresponding level of federal participation. They do not necessarily cover the scope of a federal feasibility study; however, these State-led studies will be conducted to minimize, to the extent possible, additional federal study needed to determine federal participation and facilitate subsequent authorization by Congress, if appropriate.

The basin-wide feasibility studies will be conducted in two primary phases. The first phase will be conducted concurrently with regional planning, and will focus on developing specific objectives and analyzing physical options for system elements (such as bypass expansion and new bypasses). The second phase will combine the most promising options for system elements with the prioritized list of regional elements identified in the regional flood management plans. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale, representing refined alternatives for implementing the SSIA.

Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. The studies will be conducted in

coordination with USACE (and ongoing cost-share feasibility studies) and local implementing agencies. It is anticipated that working groups will form to help evaluate and refine bypass expansion options, identify implementation challenges, and provide input in the planning process.

The State intends to complete both studies by mid-2015 to provide time to incorporate information and findings into the 2017 CVFPP Update. Interactions with other key planning efforts, such as regional flood management planning, the CVFPP Financing Plan, and Central Valley Floodplain Evaluation and Delineation, are important to meeting the anticipated schedule. For additional details, see Master Response 14.

Addressing the issue of future funding, as stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA “alternatives” for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements.

Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

T_SJAFCA2-03

As stated in Master Response 5, the flood legislation passed in 2007, including the Central Valley Flood Protection Act of 2008 (part of SB 5) and ABs 162, 70, 2140, and 156, strengthened the link between local land use decisions and regional flood management. The land use planning and related requirements specified in the 2007 flood legislation vary depending on location (State of California, Sacramento and San Joaquin Drainage District, and Sacramento–San Joaquin Valley). Some requirements apply to

all areas within a flood hazard zone, whether or not they are protected by SPFC facilities or connected to the CVFPP.

The requirement for an urban (200-year) level of flood protection is included in SB 5, and through that law is triggered by adoption of the CVFPP. State law (SB 5) requires an urban level of flood protection for urban and urbanizing areas within the Sacramento–San Joaquin Valley (as defined in CGC Section 65007(g)) within a flood hazard zone. CGC Sections 65865.5, 65962, and 66474.5 require all cities and counties within the Sacramento–San Joaquin Valley to make findings related to an urban level of flood protection before they may take any of the following actions:

- Enter into a development agreement for a property
- Approve a discretionary permit or entitlement for any property development or use, or approve a ministerial permit that would result in construction of a new residence
- Approve a tentative map/parcel map for a subdivision

Existing developments or remodels are not affected by these requirements unless they require one or more of the covered land use decisions listed above.

DWR developed the *Draft Urban Level of Flood Protection Criteria* (April 2012) to assist cities and counties in making findings related to the urban level of flood protection. DWR also developed the *Urban Levee Design Criteria* (May 2012), which contains the engineering criteria that apply when cities and counties use levees and floodwalls to provide an urban level of flood protection. Those criteria are incorporated by reference into the *Draft Urban Level of Flood Protection Criteria*.

State law (SB 5) requires each city and county in the Sacramento–San Joaquin Valley to amend its general plan within 24 months of the Board's adoption of the CVFPP (see CGC Sections 65302.9 and 65860.1) to include consistent information. These cities and counties must also amend their zoning ordinances accordingly within 36 months of the Board's adoption of the CVFPP. Cities and counties could consider incorporating the following information from the CVFPP into their general plan amendments:

- Data and analyses contained in the CVFPP, such as the locations of the SPFC and other flood management facilities, locations of property protected by those facilities, and locations of flood hazard zones

- Goals, policies, and objectives based on the CVFPP's data and analyses, for the protection of lives and property and reduction of the risks of flood damage

- Feasible implementation measures designed to carry out the goals, policies, and objectives

The 2012 CVFPP was prepared at a conceptual level. Consequently, the plan does not include detailed floodplain mapping, data on local flood stages, or specifics about future on-the-ground projects. This information will be developed during post-adoption implementation activities. However, a great deal of information and data on Central Valley flood risks and vulnerabilities were collected as part of 2012 CVFPP development. DWR has provided much of this information in the attachments to the CVFPP and will make further information available to assist local agencies.

The CVFPP focuses on SPFC facilities (including consideration of pertinent non-SPFC levee improvements in urban areas), which relate primarily to flooding of the mainstem Sacramento and San Joaquin rivers. DWR recognizes that in some circumstances, the information and planned improvements included in the SSIA may not be sufficient for cities and counties to make findings regarding an urban level of flood protection without additional analysis. Cities and counties should consider the criteria in the *Draft Urban Level of Flood Protection Criteria* for more detail. Further, cities and counties outside the SPFC Planning Area may not find pertinent geographic information in the CVFPP for their land use planning purposes, but could consider the goals, policies, and objectives for their actions.

DWR has made the following efforts to provide technical assistance to local jurisdictions related to implementation of the CVFPP:

- DWR completed its legislative responsibility by developing urban level of flood protection criteria consistent with current legislation, and in collaboration with cities and counties.

- DWR completed the draft CVFPP for the Board's adoption:

  – The CVFPP describes the State's investment approach and interests in SPFC facilities and the associated protected areas.

  – The Draft Urban Level of Flood Protection Criteria is incorporated by reference.

  - The *Urban Levee Design Criteria*, which describes the engineering criteria for levees and floodwalls, is incorporated by reference in the *Draft Urban Level of Flood Protection Criteria* and the CVFPP.

- DWR has shared and will continue to share available data, tools, and other relevant information with cities and counties, including the following details:

  - CVFED Program (anticipated 2013)

    - Mapping of the 200-year floodplain for the mainstem Sacramento and San Joaquin rivers and major tributaries

    - Fine-scale topographic (LiDAR) data

    - System hydraulic models and data

  - Central Valley Hydrology Study (anticipated 2013)

    - System hydrology (including climate change considerations)

    - System hydrologic models and data

  - Levee Evaluation Program (ongoing, with currently available preliminary data)

    - Inspection and geotechnical data

    - Levee integrity assessments and data

  - Existing data and tools used to develop the 2012 CVFPP

- With potential legislative support and collaboration with other federal and State agencies (e.g., FEMA), DWR may consider providing additional assistance to cities and counties as they develop or acquire additional floodplain information to support their local planning and decision making.

- DWR has completed a guide titled *Implementing California Flood Legislation into Local Land Use Planning: A Handbook for Local Communities* (2010) (http://www.water.ca.gov/floodmgmt/lrafmo/fmb/docs/Oct2010_DWR_Handbook_web.pdf). This handbook covers more than the requirements of an urban level of flood protection. It describes how the 2007 flood risk management legislation affects cities' and counties' responsibilities to meet local planning

requirements such as those for general plans, development agreements, zoning ordinances, and tentative maps.

State law (SB 5) requires cities and counties to make findings on certain land use decisions in relation to an urban level of flood protection (CGC Sections 65865.5, 65962, and 66474.5). Separately, the law required DWR to prepare preliminary 100-year and 200-year flood-frequency maps using available information and make them available to cities and counties in 2008 (CWC Sections 9610(a)(1), 9610(a)(2), and 9610(a)(3)). This requirement is not directly connected to the requirements for an urban level of flood protection or associated findings.

In August 2008, DWR provided preliminary maps (as map books in CDs) to 91 cities and 32 counties in the Sacramento–San Joaquin Valley for use as the "best available information" about current flood protection. DWR's Floodplain Risk Management Branch extended the best-available-mapping project and developed "statewide" preliminary best-available maps for the 100-, 200-, and 500- year floodplains. These maps can be accessed by the public via a GIS-based Web viewer at http://gis.bam.water.ca.gov/bam.

Pursuant to CWC Section 9121 (enacted through AB 156), DWR established the Flood Risk Notification Program to increase flood risk awareness by effectively communicating about flood risk to individual property owners, other members of the public, and local, State, and federal agencies.

DWR is attempting to provide as much useful information related to 200-year floodplains as possible given its current funding and authority to use available funding. DWR is developing 200-year floodplain maps through its CVFED Program for areas protected by the SPFC, based on potential flows in the Sacramento and San Joaquin rivers (mainstem and major tributaries). Depending on the source of flooding, these maps may or may not be sufficient to support cities and counties in making their findings related to an urban level of flood protection. The cities and counties are encouraged to consult the *Draft Urban Level of Flood Protection Criteria* for additional detail at http://www.water.ca.gov/floodsafe/leveedesign/.

State law (SB 5) did not provide any specific enforcement authority for requirements regarding the urban level of flood protection. The Board has review and comment authority in one situation related to the definition of "adequate progress": CGC Section 65007(a)(2)(B) grants the Board the ability to make a finding that an agency is making adequate progress even when it is not meeting the time frame set in CGC Section 65007(a)(2)(A), if the requirements are not being met because of an insufficient State appropriation based on a prior agreement.

Other provisions enacted by the 2007 flood legislation package require cities and counties to consult with the Board when amending certain general plan elements. See *Implementing California Flood Legislation into Local Land Use Planning: A Handbook for Local Communities* and Master Response 5 for additional details.

The topic of future use of the CVFPP to assess projects was discussed in an exchange between the commenter and Board President Edgar, shown in the meeting transcript as comment T_SJAFCA2-06.

T_SJAFCA2-04

See response to comment T_SJAFCA2-02 above regarding future CVFPP implementation and planning, including regional plans and feasibility studies. As referenced in the response, multiple opportunities for stakeholder involvement will be possible during CVFPP post-adoption activities, where SFJAFCA can continue to coordinate with DWR and the Board to express its priorities and foster the integration of SJAFCA activities with CVFPP implementation.

T_SJAFCA2-05

The comment references an exchange between Board Member Countryman and the commenter, initiated by a question from Mr. Countryman. The topic discussed was the level of flood protection for the Sacramento and San Joaquin Valleys. This topic is addressed in response to comment T_SJAFCA2-02 above.

T_SJAFCA2-06

The comment references an exchange between Board President Edgar and the commenter, initiated by a question from Mr. Edgar. One topic discussed was the use of the CVFPP to evaluate future projects. This topic is addressed in response to comment T_SJAFCA2-03 above.

T_SJAFCA2-07

The comment continues referencing the exchange between the commenter and Board President Edgar, initiated in Comment T_SJAFCA2-06. The conversation was related to future CVFPP implementation and funding. See response to comment T_SJAFCA2-02 above regarding CVFPP post-adoption activities. See response to comment T_SJAFCA2-01 above regarding funding.

T_SJAFCA2-08

The comment continues referencing the exchange between Board President Edgar and the commenter. Mr. Edgar asked Mr. Giottonini's opinion regarding the Board adopting, or not adopting, various attachments to the

CVFPP. The comment regards the Board President's deliberation on possible future action and the commenter's response to the Board President's request for input. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_SJFB1-01 MS. PATTERSON: Yes, thank you.

Katie Patterson with the San Joaquin Farm Bureau. I represent San Joaquin County here, about 4200 members, a lot of them out in the Delta, a lot of them up in the tributaries.

We're also part of a coalition between the five Delta Farm Bureau counties. So there's a significant amount of coalition leverage that we have. And a number of the different counties have been paying attention to this, along with the California Farm Bureau Federation.

A lot of the points that I was going to bring up I wasn't hearing earlier on, and I'm glad to hear that the conversation has started to go that way.

First and foremost, I think, you know, the safety

aspect, number one. We're not even going to, you know, belabor that point. That's why we're here.

T_SJFB1-02 Two is if we could really get that coordination down between, you know, the local, state, and federal agencies to actually agree on common inspection implementation and oversight of these types of projects, that's paramount, you know. Good luck. I don't see that happening. Once you bring the Feds into the mix here, it's kind of their way or the highway on a lot of these things.

T_SJFB1-03 Beyond that, you know, it's hard to imagine. Am I at a BDCP meeting here on habitat restoration or not? And that was good to have that brought up, because, you know, it seems like there's a significant component of habitat in here. Is that mitigation or is it above and beyond, you know, to this project? Ten thousand acres was

T_SJFB1-04 thrown out earlier. And that was said it would -- in terms of the agricultural resources that would be impacted, that's significantly unavoidable. And we just kind of check off the list and we just kind of move on down the page.

Unfortunately, it feels like agriculture in a number of these statewide processes is kind of written off down that checklist. And we have a big problem with that, because that affects private landowners. Not to say that,

T_SJFB1-05 you know, the intent of these projects aren't good or the policies aren't beneficial out there. But we have to be very cognizant that we are now dealing with a private -- multiple private entities and a public service interface. So we need to be very careful in how we approach those relationships in terms of working and coordinating with them. And I saw that was one of the points in the earlier slide, is making that outreach with those landowners.

And to the extent possible, we will try to help with that. You know, we did, you know, send out some email alerts trying to get some folks out here. You know, asparagus harvest season, I mean you get it -- everybody's got something to do, just as you guys do.

T_SJFB1-06 I do want to take a step back and talk about the Delta Protection Commission's report on the Delta. And it was the economic sustainability plans. It basically came out and said that agricultural is King in Delta. That is what drives the Delta, that's what drives the communities. So it's really important that we understand that and we embrace that as we go on any of these different efforts, especially yours, that includes the Delta, but outside of the Delta as well. It reaches much further.

As part of that, that was a driven response by the Delta Protection Commission because the Delta Stewardship Council and the 2009 water package legislation

called for, you know, that to be done. And it also said that in these co-equal goals of the economic -- or with the ecosystem restoration and water supply reliability, we also have to protect and preserve agriculture in the Delta as a place. And so as we look at, you know, these mitigation efforts and we go significantly unavoidable, we need to start looking at other statutes that have developed as you have been working on this very long and extensive processes and make sure that we're meeting the goals of those statutes that are now in place. So I would also bring that up to your attention.

T_SJFB1-07 In terms of the refuge that was brought up by a number of folks, it's another barrage of things that we're dealing with. And so a couple of months ago we had this come up in our county. We participate in some of the scoping meetings. One of our feelings on this is there's too much going on right now, you know. And where is the federal government getting their money for this, you know, to do another expansion and a study and a -- you know?

T_SJFB1-08 So, our feeling was this is premature. You know, maybe down the road we could take another look at this as we start to, you know, feel out these other processes as they're starting to come through. Because everybody wants to do a little something with the Delta. And, again, we're trying to coordinate what's the impact and effect of

all of these things coming together? And there really isn't anybody that's coordinating all of those, although I think the Delta Stewardship Council is trying. So we're trying to look at those effects.

T_SJFB1-09 One of the things that we've asked to be researched - I don't know if that's being looked at right now by the refuge folks - is to look at the existing resources and to see how that can play into flood mitigation and coordination. Can the San Luis unit take on flood flow further upstream to help, you know, mitigate some of the issues and the need for, you know, Paradise Cut? Which I think a version of Paradise Cut will be needed for a floodplain in the San Joaquin. It's just going to depend on what does that look like. So can we accomplish that?

T_SJFB1-10 You know, we're in a South Delta Water Agency, and one of the members that lives off of the San Joaquin River was saying, you know, as we look at the flood benefits further down in the San Joaquin, the elevational pitch isn't very beneficial when you start looking at it. It's harder because that water's moving faster. And for it to come back into the system, you're going to get kind of a train wreck of everything coming in at the confluence where it gets entered in back to the system.

T_SJFB1-11 So, so many things that, you know, minds that are

greater than mine that are engineers are going to have to look at. But to make sure that we're not just saying we're going to carte blanche so many acres and this is what it's going to be.

You know, BDCP came out with some really broad acreage in advance with their proposals. And now they're learning through some subsequent studies maybe they weren't substantiated in making such grandiose acreage demands in this type of plan.

So we just want to make sure that what, you know, we're looking at on private landscape is truly, truly needed for the benefits of the State if we're going to approach that. We're not fans of eminent domain. You know, we're fans of working with individual landowners.

So to the extent possible, we can look at some of those policies and how they're affecting those landowners. We'd like to be engaged in that as we go down this path.

PRESIDENT EDGAR: Thank you.

MS. PATTERSON: All right. Thank you.

San Joaquin Farm Bureau, Katie Patterson (Public Hearing, April 9, 2012)

Response

T_SJFB1-01

The comment is introductory and provides information about the San Joaquin Farm Bureau and its role in a coalition of five Delta Farm Bureau counties. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_SJFB1-02

The comment expresses concern about the outcome of federal involvement in project inspection, implementation, and oversight. The comment expresses an opinion with no supporting documentation or evidence regarding the concern. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

The issue of federal coordination is addressed in Master Response 14. As stated in Master Response 14, both the Board and USACE have statutory roles for oversight of modifications to the State-federal flood management system (the SPFC), executed through their respective project review and permitting authorities. In addition to these continued roles, DWR will work closely with USACE and the Board in conducting post-adoption planning activities, including conducting the federal Central Valley Integrated Flood Management Study and State basin-wide feasibility studies to determine federal and State interests in implementation, respectively. The State will also partner with USACE on federal regional feasibility studies and post authorization scope-change investigations aimed at modifying the State-federal flood management system.

Various existing federal programs, policies, and permitting processes administered by USACE will affect CVFPP implementation. One example is Section 14 of the Rivers and Harbors Act of 1899 (33 USC 408), which stipulates that modifications to a federal project must not be injurious to the public interest. Another example is Section 104 of the WRDA of 1986, as amended (33 USC 2214), and Section 2003 of the WRDA of 2007, which amended Section 221 of the Flood Control Act of 1970 (33 USC 1962d–

1965b) to provide guidance for obtaining federal funding credit for early implementation of projects. For additional details, see Master Response 14.

T_SJFB1-03

As stated in Master Response 8, the Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in CWC Sections 9600–9625. For more information about how the CVFPP will integrate with other large plans, see Master Response 18.

DWR, in coordination with USACE, the Board, and multiple stakeholders, used this legislative direction to formulate the CVFPP's primary and supporting goals, listed below.

CVFPP Primary Goal:

- *Improve Flood Risk Management*—Reduce the chance of flooding and damages, once flooding occurs, and improve public safety, preparedness, and emergency response through the following:
  - Identifying, recommending, and implementing structural and nonstructural projects and actions that benefit lands currently receiving protection from facilities of the SPFC
  - Formulating standards, criteria, and guidelines to facilitate implementation of structural and nonstructural actions for protecting urban areas and other lands of the Sacramento and San Joaquin river basins and the Delta

CVFPP Supporting Goals:

- *Improve Operations and Maintenance*—Reduce systemwide maintenance and repair requirements by modifying the flood management systems in ways that are compatible with natural processes, and adjust, coordinate, and streamline regulatory and institutional standards, funding, and practices for operations and maintenance, including significant repairs.
- *Promote Ecosystem Functions*—Integrate the recovery and restoration of key physical processes, self-sustaining ecological functions, native habitats, and species into flood management system improvements.
- *Improve Institutional Support*—Develop stable institutional structures, coordination protocols, and financial frameworks that enable effective

and adaptive integrated flood management (designs, operations and maintenance, permitting, preparedness, response, recovery, and land use and development planning).

- *Promote Multi-Benefit Projects*—Describe flood management projects and actions that also contribute to broader integrated water management objectives identified through other programs.

In addition, the DPEIR includes the following specific statutory objectives:

- *Maximize Flood Risk Reduction Benefits within the Practical Constraints of Available Funds*—Ensure that technically feasible and cost-effective solutions are implemented to maximize the flood-risk reduction benefits given the practical limitations of available funding, and provide a feasible, comprehensive, and long-term financing plan for implementing the plan.

- *Adopt the CVFPP by July 1, 2012*—Complete all steps necessary to develop and adopt the CVFPP by July 1, 2012, or such other date as may be provided by the Legislature.

- *Meet Multiple Objectives Established in Section 9616 of the California Water Code, as Feasible.*

In accordance with legislative direction and reflecting stakeholder input, DWR prepared the 2012 CVFPP to describe the State's vision for flood management in the Central Valley. This vision for flood management in the Central Valley is for a sustainable flood management system that provides a high degree of public safety, promotes long-term economic stability, and supports restoration of compatible riverine and floodplain ecosystems.

In the CVFPP, DWR describes the SSIA, which is a proposal for achieving the State's vision for flood management. The SSIA helps achieve the State's vision for flood management in a balanced manner by promoting responsible investment of public funds, commensurate with flood risks, in projects that integrate multiple benefits, in proactive maintenance of SFPC facilities and residual risk management, and in wise management of floodplains protected by the SPFC. For additional details, see Master Response 8.

As stated above and in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework.

Appendix E, "2012 Central Valley Flood Protection Plan Conservation Framework," provides a preview of a long-term Conservation Strategy that DWR is developing to support the 2017 CVFPP Update. The Conservation Framework focuses on promoting ecosystem functions and multi-benefit projects in the context of integrated flood management for near-term implementation actions and projects. The Conservation Framework provides an overview of the floodway ecosystem conditions and trends and key conservation goals that further clarify the CVFPP's ecosystem goal.

T_SJFB1-04

As stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions

identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

A portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of levees in rural areas. For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements.

The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable.

In addition to expansion of the bypass system, levee reconstruction, and other elements, the SSIA includes State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans. These easements would be used to preserve agriculture and prevent urban development in current agricultural areas, discouraging conversion to land uses that would increase flood risks within floodplains protected by SPFC facilities. Agricultural conservation easements could be purchased through various DWR programs; an example is DWR's Flood Corridor Program, which focuses on nonstructural flood risk reduction integrated with protection of natural resources and agricultural lands.

The DPEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

T_SJFB1-05

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

Anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_SJFB1-06

As stated in Master Response 14, as part of post-adoption activities, the Board and DWR will continue to work collaboratively with local, State, and federal agencies, environmental interests, and other parties to develop regional flood management plans and further refine the proposed elements of the SSIA.

The State has a strong interest in coordinating and implementing integrated projects that achieve multiple benefits. Effective integration across planning efforts means that all programs and projects, when implemented, work together to achieve key goals in a cost-effective manner; are sequenced and prioritized appropriately; and do not adversely affect or interfere with intended benefits. Although effectively integrating planning across programs while considering multiple benefits can be challenging, doing so can also provide opportunities to share knowledge and identify mutually beneficial solutions that might not have been considered otherwise, thus minimizing duplication and reducing costs.

DWR will continue to coordinate with other flood management and ecosystem enhancement efforts during implementation of the CVFPP, including the Delta Stewardship Council's Delta Plan, which is described in more detail below.

The Delta Stewardship Council is developing a comprehensive, long-term management plan for the Delta and the Suisun Marsh—the Delta Plan—to achieve the goals of improving water supply reliability and restoring the ecosystem, as described in CWC Section 85054. The CVFPP is one of many management plans that could contribute to achievement of the goals of the Delta Plan.

The primary goal of the CVFPP is to improve flood risk management, with a focus on lands protected by facilities of the SPFC, including those lands located in the Delta. However, SPFC facilities protect only portions of the Delta; other programs address flood management needs outside areas protected by the SPFC (outside the CVFPP study area). The major elements of the CVFPP's recommended approach—the SSIA—are consistent with the policies and recommendations in the draft Delta Plan (Delta Stewardship Council 2012), which address the following topics:

- **Improve emergency preparedness and response**—Both plans discuss preparing for and responding to flood emergencies, including preparing emergency response plans and protocols.

- **Finance and implement flood management activities**—Both plans acknowledge the challenges associated with financing O&M and

repairs, and contain similar recommendations to pursue formation of regional levee districts.

- **Prioritize flood management investment**—Both plans emphasize the need to prioritize future investments in flood management and leverage funding to achieve multiple objectives and benefits.

- **Improve residential flood protection**—Both plans acknowledge the need to associate levels of flood protection with assets at risk; the CVFPP incorporates the *Urban Levee Design Criteria* document by reference and supports the development of criteria for repairing levees in rural areas (criteria appropriate to the lands and uses being protected).

- **Protect and expand floodways floodplains and bypasses**—Both the Delta Plan and the CVFPP recommend further evaluation of Paradise Cut.

- **Integrate Delta levees and ecosystem function**—The Delta Plan recommends development of a criteria to define locations of future setback levees and the CVFPP recommends the use of setback levees to provide local and regional benefits.

- **Limit of liability**—Both plans acknowledge the need to address increasing exposure of the State and other public agencies to liability associated with failure of flood management facilities; both plans also include recommendations related to flood insurance reform.

Under the SSIA, when making flood management investments in areas of the Delta protected by the SPFC, the State will consider structural and nonstructural actions to help achieve the following objectives:

- 200-year level of flood protection, minimum, for urban areas (e.g., Stockton metropolitan area)

- 100-year level of flood protection for small communities in the Delta that are not already protected by urban improvements (e.g., Clarksburg, Hood, Courtland, Walnut Grove, Isleton, and Rio Vista)

- Improved flood management in rural-agricultural areas, through integrated projects that achieve multiple benefits and help preserve rural-agricultural land uses, including projects to restore levee crown elevations and provide all-weather access for inspection and floodfighting; economically feasible projects to resolve known levee performance problems; and agricultural conservation easements, when

consistent with local land use plans and in cooperation with willing landowners)

In addition, the SSIA includes system elements, such as a potential expansion of the Yolo Bypass, to increase the capacity of the flood management system, attenuate peak floodflows, and increase opportunities for ecosystem restoration compatible with the BDCP (another major management plan contributing to the Delta Plan). The SSIA also includes a potential new Lower San Joaquin Bypass to alleviate flood risk to the Stockton metropolitan area and to provide opportunities for environmental restoration and agricultural preservation.

As discussed in the draft Delta Plan, many upstream actions could affect the State's ability to meet the Delta Plan's coequal goals. The State is sensitive to the effects that upstream SPFC improvements may have on the Delta and is developing more detailed policies to minimize and mitigate potential redirected hydraulic impacts or other adverse impacts. The results of preliminary systemwide evaluations indicate that implementing the SSIA as a whole would not result in significant adverse effects on the Delta. However, post-adoption implementation actions and studies to refine the SSIA will involve evaluating any potential temporary downstream impacts caused by the sequencing of CVFPP implementation and providing mitigation. For additional details, see Master Response 14.

As stated in Master Response 3, the SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. Implementing the SSIA would increase the percentage of the population receiving at least 100-year (1 percent annual chance) flood protection from the current 21 percent to more than 90 percent (CVFPP, page 3-40). The remaining 10 percent of the population would receive benefits through residual risk management actions. Based on initial planning-level cost estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to provide flood stage reduction benefits to many of the areas in the system, including small communities and rural-agricultural areas.

In addition, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and

3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed.

The State supports the continued viability of small communities to preserve cultural and historical continuity and provide important social, economic, and public services to rural populations and agricultural enterprises. The SSIA describes State investment priorities in small community flood protection while avoiding the inducement of imprudent growth within SPFC floodplains. Under the SSIA, many small communities would receive increased flood protection benefits as a result of system improvements focused on protecting nearby urban areas. For example, levee improvements may be constructed upstream from an urban area to prevent a scenario in which floodwaters from an upstream levee breach would flow down gradient into the urban area. The upstream levee improvement that may extend into rural locations would therefore also reduce flood risks for the rural area immediately adjacent to the improved levee segment. Conditions in small communities would also be evaluated on a case-by-case basis to identify appropriate State investments in additional structural and/or nonstructural actions (e.g., levees, flood walls, floodproofing, or relocations).

The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas outside small communities. These actions are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development or increasing flood risks within lands protected by the SPFC. No target minimum level of flood protection has been established for prioritizing State investments in rural-agricultural areas (see CWC Section 9603). However, the SSIA proposes (1) projects that maintain levee crown elevations for rural SPFC levees and provide all-weather access roads for inspection and floodfighting; (2) economically feasible projects that resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs; (3) system elements (e.g., bypass expansion) that lower peak flood stages within some rural channels; and (4) actions to manage residual flood risks.

All areas protected by the SPFC would benefit from State investments included in the SSIA to improve residual risk management, such as

enhanced flood emergency preparedness, response, and recovery. The SSIA also proposes State investments to preserve agriculture and discourage urban development in rural floodplains (e.g., purchasing agricultural easements from willing landowners, when consistent with local land use planning). In addition, the SSIA proposes FEMA flood insurance reforms to support the sustainability of rural-agricultural enterprises. For additional details, see Master Response 3.

T_SJFB1-07

The comment generally describes past and current conditions, setting the stage for comment T_SJFB1-08. See response to comment T_SJFB1-08, below. Comment T_SJFB1-07 does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted. See responses to comments T_SJFB1-06 and T_SJFB1-02.

T_SJFB1-08

See response to comment T_SJFB1-06.

T_SJFB1-09

As stated in Master Response 1, The Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would

benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

Also see response to comment T_SJFB1-05, above, regarding CVFPP post-adoption activities and related public involvement. Given the high-level nature of the CVFPP, suggestions regarding modified or alternative projects would be best presented as part of post-adoption project planning, evaluation, and design.

T_SJFB1-10

The comment generally describes the commenter's opinion on hydrologic conditions in a portion of the San Joaquin River. The 2012 CVFPP does not include new State policy or guidance for considering hydraulic effects of CVFPP actions such as repairing or reconstructing existing SPFC facilities; the Central Valley Flood Protection Act of 2008 (SB 5) did not require preparation of such a policy. However, the State will continue to develop policies and guidance to support SPFC repair and improvement projects through post-adoption activities, to complement existing State and federal permitting processes. The Board is authorized to review flood management improvement projects for compliance with policies on hydraulic impacts (CWC Sections 8710–8723; CCR Title 23, Chapter 1, Article 3(16)(o)). In addition, DWR and the Board review proposed State-federal flood management projects before they are authorized and determine whether the projects' individual and cumulative hydraulic impacts are mitigated (CWC Section 12585.9). The Board, in collaboration with USACE and DWR, is continuing to develop guidelines related to project-specific hydraulic impacts.

The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_SJFB1-11

See response to comment T_SJFB1-04.

T_SLIGAR1-01

MR. SLIGAR: Thank you, Board, for letting me speak. I'm Jim Sligar. I'm a landowner on the Cherokee Canal system. It runs directly through our property.

T_SLIGAR1-02

I want to talk a little bit about transparency. I didn't hear anything about this project as being a landowner that's going to be potentially directly impacted. It's going to be hard to talk intelligently about this project, because I have no information about its size, its scope, how it pertains to my property and what it will do.

And my first information that was given to me on the topic of transparency was from the California Farm Bureau in a letter dated January 17th. The only reason I got it is because I have a friend who's on Reclamation 833, who happened to give it to me a week after he'd received it.

So I thought it imperative that I talk to people that I knew it could have a direct impact. Although, we don't know the parameters of how big this canal system is going to be up there. So I contacted my State senator in my area. He knew nothing about it. I contacted the Farm Bureau president in my area. He knew nothing bit. I talked to numerous growers up and down the Cherokee Canal

system. None of them knew anything about it. I talked to the California Rice Experimental Station that borders the Cherokee Canal system. They hadn't been informed. I talked to no one who had been informed of it.

So now I finally know about this project, and that's why I came to this meeting. I hope in the future that we're brought into the discussion. I think that we're a major part of the discussion. We would like to know how it's going to impact us and what it's going to do or what you're proposing to do so that we can make impacts or voice our opinion on it.

T_SLIGAR1-03

So that's what brought me here. I will say that the Cherokee Canal system now that runs through our property is an easement that was granted. And it has no longer been maintained. In the past, it was maintained. It can't move water the way it should. Maybe some people -- maybe you should look at improvements to the system as it exists now, so it could function as it is.

I envision, if you do decide to build a bigger bypass that moves the levees out in which direction you have -- I can't get any information on. The map that I got off of your website just vaguely shows the yellow line on each side. It doesn't delineate the size of the property.

T_SLIGAR1-04

But is this project just going to be a bigger

T_SLIGAR1-05

T_SLIGAR1-06

system than what we have right now that's not well maintained, and that's overgrown with habitat?

I thought another thing that was interesting that I noted in this meeting is the different parties who have been able to speak somewhat intelligently on the topic that have been brought into the planning process, where the people that are being asked, I assume in the future, to give up their property and their farming livelihood, haven't been brought into the project. You talk about 40,000 acres of farm land. That could very well -- on an average rice farming size, that could be in the neighborhood of 50 to 60 rice farmers you're going to put of work.

You talk about 10,000 acres of habitat. Where is that habitat going to go. That's land that will never be in production. I think you need to include this. And I hope it's not too late for us to make our opinions, and to maybe have some influence on the scope of this project.

And I thank you for listening to me, and I would hope that we hear from you, and that we're included in the process in the future.

Thank you.

PRESIDENT CARTER: Thank you, Mr. Sligar.

James Sligar (Public Hearing, February 24, 2012)

Response

T_SLIGAR1-01

The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_SLIGAR1-02

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

Phase 1 of the public engagement planning process focused on identifying problems and needs and crafting specific goals for the CVFPP. A variety of regional and topic-based work groups formed during this phase. Phase 2 focused on identifying individual actions that could be taken to achieve the CVFPP goals, and engaged stakeholders through continued regional and topic-based work groups and public workshops.

After Phase 2, stakeholders indicated that they preferred to review more developed materials and information before continuing with intense working meetings. With that understanding, DWR focused its efforts on content development (considering previously provided input and ongoing analyses) and developed a cohesive working draft document for stakeholder review in fall 2011. Outreach efforts included e-mail communications and updates, workshops, webinar briefings, and meetings with individuals and agencies. Work group members were also given an opportunity to review and comment on a working draft of the CVFPP. However, with a commitment to complete a public draft CVFPP within the

legislated time frame, the degree of engagement provided in Phases 1 and 2 was not feasible for Phases 3 and 4.

The Board provided various opportunities for members of the public and agencies to comment on the public draft CVFPP, released in December 2011. Hearings were held in 2012 on April 5 (Sacramento), April 6 (Marysville), April 9 (Stockton), and April 11 (Woodland), and public comments were heard and discussed at both regular and special Board meetings. DWR also accepted comments on the DPEIR, which was released in early March 2012. More information on the Board's process for public review and plan adoption can be found on its Web site, http://www.cvfpb.ca.gov.

Anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will

form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_SLIGAR1-03

As stated in Master Response 6, DWR recognizes the importance of proper maintenance to protect State, local, and federal investments in the flood management system. However, maintenance activities alone do not meet current needs or legislative requirements for the CVFPP (e.g., urban level of protection, systemwide approach, and providing multiple benefits). This is highlighted in the evaluation conducted for the preliminary approach called "Achieve SPFC Design Flow Capacity."

The Achieve SPFC Design Flow Capacity preliminary approach focuses on reconstructing SPFC facilities to meet current engineering criteria without making major changes to facility footprints or operations. To achieve the design flow capacity, reconstruction is required because the original specifications focused primarily on levee prism geometry, and current evaluations have shown them to be insufficient in passing design flows if geotechnical and other engineering conditions (e.g., underseepage) are not improved. This approach was formulated to address legislation that required DWR to consider structural actions necessary to reconstruct SPFC facilities to their design standard (CWC Section 9614(g)). It also addresses requests from stakeholders to consider reconstructing the existing flood management system in place, or without major modification to facility locations.

Based on an initial assessment, this preliminary approach is estimated to cost approximately $19 billion to $23 billion and take 30–35 years to implement. This approach would improve the reliability of SPFC facilities compared to existing conditions. However, in many locations, upstream levee reconstruction would increase peak flows and stages downstream because upstream levee failures would be reduced compared to existing conditions. Further, the level of protection would be highly variable throughout the system and would not be linked to the current public safety needs and legislated requirements, and to assets at risk within the

floodplain. Consequently, this approach would only partially address the primary CVFPP goal of improving flood risk management.

Investments in SPFC reconstruction would initially reduce SPFC O&M costs, but long-term costs to maintain the system would remain high. Thus, this approach would only partially contribute to the goal of improving O&M. Opportunities to integrate ecosystem restoration and enhancement would be limited and would not contribute to improved ecosystem functions on a systemwide scale. There would also be few opportunities to promote multipurpose benefits including incorporating new groundwater recharge or other water-related benefits, and promoting ecosystem functions, recreation, or agricultural sustainability. Consequently, an approach focusing on maintenance, repair, and reconstruction of existing facilities would contribute in only a minor way to the supporting goals of multi-benefit projects.

Improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures).

The SSIA promotes efficient and sustainable long-term O&M practices through the following:

- Reforming and consolidating State and local agencies' roles and responsibilities for O&M
- Standardizing criteria by which maintenance practices, procedures, and inspections are performed and reported
- Implementing strategies to adequately and reliably fund routine activities and streamline permitting

Some of the proposed activities may involve legislative action, new institutional arrangements involving local maintaining agencies, modifications to existing State programs, and additional or redirected funding. For additional details, see Master Response 6.

T_SLIGAR1-04

As stated in Master Response 1, the existing bypass system in the Sacramento River Basin (including the Sutter and Yolo bypasses and

associated inflow weirs) forms the central backbone of the Sacramento River Flood Control Project and redirects damaging floodflows away from the main channels of the Sacramento and Feather rivers. The considerable capacity of the bypass system (up to 490,000 cfs) also slows the movement of floods, effectively attenuating flood peaks and flows into the Delta. The existing bypass system also supports a vibrant seasonal agricultural economy and provides important habitat for multiple terrestrial and aquatic species. In the San Joaquin River Basin, the bypass system includes the Chowchilla, Eastside, and Mariposa bypasses.

The Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

T_SLIGAR1-05

See response to comment T_Sligar1-03, above.

T_SLIGAR1-06

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of

engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

Phase 1 of the public engagement planning process focused on identifying problems and needs and crafting specific goals for the CVFPP. A variety of regional and topic-based work groups formed during this phase. Phase 2 focused on identifying individual actions that could be taken to achieve the CVFPP goals, and engaged stakeholders through continued regional and topic-based work groups and public workshops.

After Phase 2, stakeholders indicated that they preferred to review more developed materials and information before continuing with intense working meetings. With that understanding, DWR focused its efforts on content development (considering previously provided input and ongoing analyses) and developed a cohesive working draft document for stakeholder review in fall 2011. Outreach efforts included e-mail communications and updates, workshops, webinar briefings, and meetings with individuals and agencies. Work group members were also given an opportunity to review and comment on a working draft of the CVFPP. However, with a commitment to complete a public draft CVFPP within the legislated time frame, the degree of engagement provided in Phases 1 and 2 was not feasible for Phases 3 and 4.

The Board provided various opportunities for members of the public and agencies to comment on the public draft CVFPP, released in December 2011. Hearings were held in 2012 on April 5 (Sacramento), April 6 (Marysville), April 9 (Stockton), and April 11 (Woodland), and public comments were heard and discussed at both regular and special Board meetings. DWR also accepted comments on the DPEIR, which was released in early March 2012. More information on the Board's process for public review and plan adoption can be found on its Web site, http://www.cvfpb.ca.gov.

Anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

As stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

A portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of levees in rural areas. For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements.

The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed

land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable.

In addition to expansion of the bypass system, levee reconstruction, and other elements, the SSIA includes State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans. These easements would be used to preserve agriculture and prevent urban development in current agricultural areas, discouraging conversion to land uses that would increase flood risks within floodplains protected by SPFC facilities. Agricultural conservation easements could be purchased through various DWR programs; an example is DWR's Flood Corridor Program, which focuses on nonstructural flood risk reduction integrated with protection of natural resources and agricultural lands.

The PEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topic or information was raised in the comments. For additional details, see Master Response 2.

T_SLIGAR2-01 MR. SLIGAR: Thank you, Chairman, Board. I'm Jim Sligar. I farm in Butte County. And the proposed -- the Cherokee Canal, which I guess is being proposed to be the Cherokee Bypass runs through my property. I have just a short little letter here I wanted to read to you.

As I stated in both your Sacramento meeting in March and again in your Richvale town hall meeting, in which both Jane Dolan and Ben Carter were present, the process of involving the most affected, i.e. landowners, was completely lacking until the final phase of the discussion. And then only by notification by the California Farm Bureau.

T_SLIGAR2-02

Since the spinal -- final specifications of this Cherokee Canal Bypass are unknown, it is hard to intelligently discuss its impact. The Department of Water Resources disavowed the 32,000 cubic feet per second flow requirements stated in the draft proposal and would not clarify the exact design flows required for the Cherokee Bypass. Not knowing these design requirements, it is hard to propose alternative solutions, but here are a few that come to mind.

And the reason I gave you these alternative solutions is because Jane -- Mrs. Dolan asked us to not just state negative comments, but to state alternate proposals. So this is some that I cam up with.

T_SLIGAR2-03

First, I think increased water storage at Oroville proportionate to the quantities of additional water that were to be moved by the new Cherokee Canal system, or bypass system, or at least increase the flood protection storage requirements at Lake Oroville to compensate for not building the Cherokee Bypass.

T_SLIGARr2-04

Secondly or in combination with the first proposal, clean and maintain the Cherokee Canal to function as it was originally designed. It is currently filled with vegetation which does little to help with water flow.

T_SLIGAR2-05

Third, or in conjunction with the suggestions 1

and 2, work with the joint districts and western canal to secure an agreement to convey water -- flood waters through existing afterbay outlets and the sunset pumps at Live Oak. They have the capacity presently to move about 4,000 cubic feet per second without any additional modifications.

T_SLIGAR2-06

On the district lands. Landowners could be compensated by annually paid easements and participation would be voluntary. By graduating easement payments based on the number of acre feet per acre a farmer is willing to agree to pawn, the DWR could encourage landowners to make physical alterations to their properties in order to pawn more water.

Given the combined districts involvement -- involved include -- cover more than 100,000 acres, a considerable quantity of water could be pawned at a significantly reduced price and a lot better public relations.

Thank you.

PRESIDENT EDGAR: Thank you very much.

James Sligar (Public Hearing, April 6, 2012)

Response

T_SLIGAR2-01

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP. For additional details, see Master Response 13.

T_SLIGAR2-02

The analysis for the Cherokee Canal is described in Attachment 8C, "Riverine Channel Evaluations," to the CVFPP. As stated in Master Response 1, the Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could

be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1.

T_SLIGAR2-03

As stated in Master Response 10, in developing the CVFPP and formulating the SSIA, DWR considered various forms of storage for flood management, including operational changes to existing reservoirs with flood storage, new or expanded flood storage in reservoirs, and storage in floodplains. Specifically, one of the preliminary approaches—Enhance Flood System Capacity—included enlarging the flood storage allocation of several multipurpose reservoirs to improve management of flood risks on lands protected by the SPFC. This evaluation found potential benefits from and opportunities for reservoir flood storage and operational changes, such as improving flexibility in managing hydrologic changes (such as climate change) and potentially offsetting the hydraulic effects of certain system improvements on downstream reaches. At the same time, these analyses addressed both the physical limitations of these opportunities and the potential negative effects of increasing flood-storage allocations on water supply and other beneficial uses. The analyses of reservoir storage and flood operations that were conducted in support of the 2012 CVFPP are described in Attachment 8B in Appendix A, "Central Valley Flood Protection Plan."

Storage elements ultimately retained in the SSIA are based on preliminary systemwide analyses conducted for the 2012 CVFPP, legislative direction for the CVFPP, and the findings of prior and ongoing studies. Among those studies are ongoing surface storage investigations and prior local, State, and federal studies such as the Shasta Lake Water Resources Investigation, North-of-the-Delta Offstream Storage (Sites Reservoir), In-Delta Storage Program, Los Vaqueros Reservoir Expansion, and Upper San Joaquin River Basin Storage Investigation (Temperance Flat Reservoir). However, no new site-specific investigations of surface storage were included in the systemwide analyses conducted to support the 2012 CVFPP.

In the 2012 CVFPP, the SSIA includes coordinated reservoir operations aimed at making the most efficient and effective use of current flood storage allocations in existing reservoirs, and implementation of the authorized Folsom Dam Raise (see Section 3.5.4 of the CVFPP). These SSIA storage elements appropriately reflect the conceptual level of detail and systemwide focus of the 2012 CVFPP, without precluding future consideration of new or expanded storage by the State or local agencies. At this time, the SSIA does not include new reservoirs or expansion of storage (other than at Folsom Dam) solely for the purpose of flood management; however, DWR will continue to consider flood management in the context of, and as an objective of, its ongoing multi-benefit surface storage investigations and systemwide reoperation studies. Should these State investigations or other related efforts by local or federal agencies identify

flood management as a component of a feasible reservoir storage project, this may be reflected in future updates to the CVFPP.

Ongoing investigations are being conducted to determine the feasibility of surface storage and consider potential environmental effects. The analyses included in these surface-storage studies are more detailed than those conducted at a systemwide scale for the 2012 CVFPP. Consequently, these studies are developing more comprehensive information about the potential costs and benefits of site-specific increases in flood storage. Some specific examples of ongoing multipurpose surface-storage investigations and related investigations that are examining the feasibility of adding new flood storage are the Upper San Joaquin River Basin Storage Investigation, North-of-Delta Offstream Storage Investigation and the Shasta Lake Water Resources Investigation.

During the early and mid-20th century, most of the major rivers and tributaries draining into the Central Valley were dammed, providing both intentional and incidental flood management benefits. The aggregate benefit of these reservoirs to flood management has been substantial, and has contributed to the success of the existing flood system in reducing or avoiding damage from major flood events during the past century. However, California's topography and geology limit opportunities for reservoir construction, and most of the feasible locations have already been developed with the existing major dams (e.g., Shasta, Oroville, Folsom). The remaining opportunities are much more limited.

Specifically, unlike the situation that existed at the beginning of the 20th century, only a few remaining dam sites, spread throughout the Central Valley watersheds, offer the potential to provide large volumes of flood storage capacity. Other than for a few specifics, such as raising Shasta Dam or constructing Sites Reservoir, commenters on this topic did not provide a more detailed proposal or recommendation for implementing upstream storage projects. In particular, commenters provided no specific information regarding the feasibility of using an upstream-reservoir approach to meet the requirements of SB 5.

DWR recognizes the importance of developing additional water storage capacity in California to support an increasing population, to help compensate for the anticipated loss of snowpack storage as a result of climate change, and to maintain the important role of Central Valley agriculture for the nation and the world. For these reasons, multipurpose reservoir projects will likely continue to be proposed and, if successful, may help to meet needs for flood storage capacity.

However, these proposals face daunting challenges. Despite their benefits, new or expanded reservoirs generally face considerable opposition given their environmental effects, costs, perceived risks, and other factors. Also, environmental laws established mostly in the 1970s now apply to these proposals. Among these laws is the requirement under Section 404 of the CWA that any project affecting waters of the United States can be approved only if it is demonstrated to be the least environmentally damaging practicable alternative. Many other laws also present permitting challenges.

It is significant that no new major onstream reservoir has been constructed in the Central Valley watershed since New Melones Dam was completed in 1978. The Auburn Dam project, which commenced construction in 1968, was never completed because of several factors, including its cost, geologic problems with the site, and potential harm to recreational and ecological values. Recently, successful projects have consisted largely of projects to provide offstream storage (such as Los Vaqueros Reservoir), which can provide only limited flood control benefits outside their watersheds given the need for pumping, and projects to increase the capacity of existing reservoirs (which by their nature are only incremental).

Moreover, to serve as a substitute for floodway conveyance and storage, upstream reservoir capacity would have to be developed throughout the Central Valley watershed. The extreme weather events (i.e., atmospheric rivers) that create the greatest risk of a severe flood are often localized. Floodplain storage protects against floodwaters originating from all upstream areas, but by definition, upstream reservoirs can store only the floodwaters that originate from a particular area or tributary watershed. For example, an increase in the capacity of Shasta Lake would provide little or no benefit in the event of a major atmospheric rivers event focused on the central or southern Sierra Nevada. There is simply no reasonable scenario under which an array of new reservoir projects spread throughout the Central Valley watershed would be feasible and could serve as an effective substitute for floodplain storage. Suitable and feasible remaining sites do not exist, the costs would likely be prohibitive and the opposition substantial, and environmental permits would be difficult if not impossible to obtain. It would be both speculative and imprudent for the CVFPP to rely on such an approach. None of the comments on the topic have addressed, much less rebutted, the substantial evidence that such an alternative could not feasibly meet the objectives of the CVFPP as directed by SB 5.

Failing to reserve adequate floodway conveyance and storage capacity now would leave future generations with limited options for addressing their flood protection needs. The current generation has benefited from the

existing bypass system, and expanding that system would benefit both current and future residents.

It is recognized that in certain cases and to some degree, upstream floodway conveyance and storage could reduce the need for (or scale of) some types of downstream flood management actions associated with the SPFC. However, opportunities to reduce flood risks on lands protected by the SPFC by increasing floodway conveyance and storage are limited, and depend on a variety of factors:

- The location of a reservoir (or multiple reservoirs) with respect to the downstream actions or target area is important. Multipurpose reservoirs are present along many major tributaries to the Sacramento and San Joaquin rivers, but the hydrology (magnitude of rainfall and timing of peak flows from a watershed) and the operations of these reservoirs are very complex. Floodflows in downstream reaches of mainstem rivers are often influenced by the operation of multiple reservoirs, and peak flood stages may result from a combination of hydrologic events on different tributaries. Consequently, increasing flood storage in one reservoir may not reduce peak flood stage along a mainstem river reach because of the operations of other reservoirs, contributions from unregulated streams, or hydrology of the various tributary watersheds.

- The volume of floodway conveyance and storage that could be achieved is related to the size of the watershed and floodflows it generates, which can limit the effectiveness of expanding reservoirs or constructing new reservoirs. Expanding a reservoir is typically most effective when the existing reservoir has a small flood storage allocation compared with its tributary watershed. Similarly, it may not be effective to construct or expand a reservoir that controls a relatively small watershed.

- Opportunities to expand a reservoir are typically limited by the existing dam's location, size, and type of construction (concrete versus earthen, for example). A reservoir expansion sufficient to achieve the desired flood risk reduction benefits downstream may not be physically possible at all locations.

- The cost and potential impacts of enlarging a reservoir or constructing a new reservoir vary substantially from location to location. The CVFPP is a conceptual plan, and the PEIR is a program-level document; the site-specific analyses that would be needed to assess feasibility were not conducted as part of the CVFPP or PEIR, and will occur at the project level.

- Reservoir ownership varies, and studies of specific opportunities to expand reservoirs must be conducted in partnership with owners and operators.

The above factors indicate that a feasible and cost-effective surface-storage project could be developed only under specific circumstances, and that even if it is feasible, additional surface storage may not provide meaningful flood management benefits. These factors, combined with the conceptual systemwide focus of the 2012 CVFPP, precluded DWR from identifying specific reservoir storage elements to include in the SSIA at this time. These factors limited the ability to formulate an approach/alternative to include in the PEIR that focused primarily on increasing flood storage. Further, increasing storage alone would not achieve many of the CVFPP goals or fulfill legislative intent, such as improving ecosystem functions within the flood management system or achieving an urban level of flood protection for all urban areas.

Studies showed that combining bypass expansion, regional levee improvements, and coordinated operations in the SSIA did not result in systemwide hydraulic impacts that would be substantial enough to require including additional surface storage as a hydraulic mitigation measure. However, the plan does not preclude future consideration of new or additional flood storage by State, federal, or local agencies in the regional flood management planning or two basin feasibility studies, or as independent projects. (See Section 3.5.4 in Appendix A, “Central Valley Flood Protection Plan.”) For additional details, see Master Response 10.

T_SLIGAR2-04

As stated in Master Response 6, DWR recognizes the importance of proper maintenance to protect State, local, and federal investments in the flood management system. However, maintenance activities alone do not meet current needs or legislative requirements for the CVFPP (e.g., urban level of protection, systemwide approach, and providing multiple benefits). This is highlighted in the evaluation conducted for the preliminary approach called “Achieve SPFC Design Flow Capacity.”

The Achieve SPFC Design Flow Capacity preliminary approach focuses on reconstructing SPFC facilities to meet current engineering criteria without making major changes to facility footprints or operations. To achieve the design flow capacity, reconstruction is required because the original specifications focused primarily on levee prism geometry, and current evaluations have shown them to be insufficient in passing design flows if geotechnical and other engineering conditions (e.g., underseepage) are not improved. This approach was formulated to address legislation that required DWR to consider structural actions necessary to reconstruct SPFC

facilities to their design standard (CWC Section 9614(g)). It also addresses requests from stakeholders to consider reconstructing the existing flood management system in place, or without major modification to facility locations.

Improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures).

The SSIA promotes efficient and sustainable long-term O&M practices through the following:

- Reforming and consolidating State and local agencies' roles and responsibilities for O&M
- Standardizing criteria by which maintenance practices, procedures, and inspections are performed and reported
- Implementing strategies to adequately and reliably fund routine activities and streamline permitting

Some of the proposed activities may involve legislative action, new institutional arrangements involving local maintaining agencies, modifications to existing State programs, and additional or redirected funding. For additional details, see Master Response 6.

T_SLIGAR2-05

See response to comment T_SLIGAR2-02 regarding the high-level nature of the CVFPP. The detailed suggestion provided in the comment will be considered by DWR and the Board. The commenter is encouraged to participate in future CVFPP planning and implementation efforts where such detailed proposals could appropriate. As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_SLIGAR2-06

As stated in Master Response 2, in addition to expansion of the bypass system, levee reconstruction, and other elements, the SSIA includes State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans. These easements would be used to preserve agriculture and prevent urban development in current agricultural areas,

discouraging conversion to land uses that would increase flood risks within floodplains protected by SPFC facilities. Agricultural conservation easements could be purchased through various DWR programs; an example is DWR's Flood Corridor Program, which focuses on nonstructural flood risk reduction integrated with protection of natural resources and agricultural lands. For additional details, see Master Response 2.

T_SNR1-01

MR. TOPPENBERG: Thank you for the opportunity to speak with you today, President Carter and members of the Board, in particular member Bill Edgar.

BOARD MEMBER EDGAR: Good to see you, Val.

MR. TOPPENBERG: Good to see you.

I represent Sierra Northern Railway. Sierra Northern is a common carrier that operates short-line service in Yolo county as well as other parts of northern California.

T_SNR1-02

Sierra Northern owns the Fremont trestle. The Fremont trestle is a mile long railroad trestle that spans the Yolo Bypass at its narrowest point in the -- in that

area. In the event of flooding, the Yolo Bypass and the Fremont bypasses -- or Fremont Weir is opened and flood waters come down the bypass and provide pressure against the trestle. And the more water that comes down the trestle -- the bypass, the more damage there is to the trestle.

The State of California has declined to repair that damage. And so the railroad has to repair that damage every time there's a flood event.

T_SNR1-03

There is a plan -- or as part of your plan, your draft plan, the repairs to the UP trestle that parallels Interstate 80 is recognized, but the plan does not recognize the Fremont trestle, and the repairs that need to be done to that trestle. That trestle is a big obstacle.

T_SNR1-04

There was a report that was commissioned by the cities in Yolo County, West Sacramento, Davis, Woodland, the Port of West Sacramento, and the Yolo County. And in that report, MBK Engineering Company identified that the flood waters when they are created -- when they come up against the obstacle at the Yolo Bypass, there's almost a food differential between the northern -- the flood water on the north side of the trestle and the flood water on the south side of the trestle, because of all the debris that collects during the course of these events and piles

against the trestle.

That trestle was built in the early 1990s -- or there early 1900s. And as 100-year old trestle it has issues that are exacerbated by the flood waters.

T_SNR1-05

When the flood waters are creating pressure against the trestle, that means that we can't take trainings across the trestle. The trestle is instable and unsafe for trains to go across. And so during flood events, we can't deliver cargo and freight to our customers.

There is a solution to that, and it's to relocate the rail line that serves that as opposed to rebuilding the trestle, which is obviously another solution. There's a lot of benefits in relocating the rail service to minimize damage, plus it provides some other public safety. Those public safety advantages are detailed in a report that was done here, that I'm prepared to provide you a copy of.

T_SNR1-06

The railroad is ready to work with you all to provide that -- find that solution, to investigate that solution. I have two copies of materials including a map of the bypass showing where the trestle is, a letter dated a year ago, actually January 31st of 2011, offering to assist in solutions, a copy of the MBK engineering report, and a copy of a project description, which was prepared to

identify the alternative alignment for the rail lines.

So thank you very much for allowing me to speak today.

PRESIDENT CARTER: Thank you, Mr. Toppenberg.

Sierra Northern Railway, Val Toppenberg (Public Hearing, February 2, 2012)

Response

T_SNR1-01

The comment is introductory and identifies the commenter's name and affiliation. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_SNR1-02

The comment describes existing circumstances regarding a Sierra Northern Railway facility. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_SNR1-03

As stated in Master Response 1, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities

include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details see Master Response 1. The issue raised by the commenter would be appropriate for future post-adoption planning efforts and project-level evaluations.

T_SNR1-04

The comment describes existing circumstances regarding a particular railroad facility. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_SNR1-05

See response to comment T_SNR1-03. In addition, as stated in Master Response 14, as part of post-adoption activities, the Board and DWR will continue to work collaboratively with local, State, and federal agencies, environmental interests, and other parties to develop regional flood management plans and further refine the proposed elements of the SSIA.

The State has a strong interest in coordinating and implementing integrated projects that achieve multiple benefits. Effective integration across planning efforts means that all programs and projects, when implemented, work together to achieve key goals in a cost-effective manner; are sequenced and prioritized appropriately; and do not adversely affect or interfere with intended benefits. Although effectively integrating planning across programs while considering multiple benefits can be challenging, doing so can also provide opportunities to share knowledge and identify mutually beneficial solutions that might not have been considered otherwise, thus minimizing duplication and reducing costs. For additional details, see Master Response 14. The suggestion from the commenter would appear to provide joint benefits to transportation infrastructure and flood risk reduction.

T_SNR1-06

See response to comment T_SNR1-05. DWR and the Board appreciate receipt of the materials provided by the commenter.

T_SUARD1-01 MS. SUARD: Hi. My name is Nicky Suard. And I thank you very much for this opportunity to talk to you as a Board.

Hearing that the plan was coming out on December 30th, I sent a document to you guys dated the 27th, hoping it might be the first one you get, so that you would pay attention. So hopefully you got it. And if not, I will resend again.

I am from Steamboat Slough, a place called Snug Harbor. Steamboat Slough is middle of the Delta, north Delta region. It's the original waterway that the steamboats went up and down. That's where it got its name.

And I am requesting that -- I know that you're just going -- just starting to go through this, but I'm going to talk about a very specific area of the Delta, and as an effected party that we're being affected right now. This is not some plan down the road. I want to tell you what's going on right now, and -- but you have to understand where Steamboat Slough is. It's adjacent to Ryer Island.

When there is extra flow on Yolo Bypass, it backs up into Steamboat Slough, so we're right in that area where flow is really important.

The map and the flow calculations that are in this plan, the Central Valley flood control plan, those are -- those match the 1945 map for the plan from 1945. Only that plan talked about dredging and maintaining a

much deeper depth in the sloughs. And I can tell you that Steamboat Slough has not been dredged since the 1970s, and it is a lot more shallow or certain areas of it are a lot more shallow, and that is causing problems for us.

And so now I'm going to -- what I'd like to talk about, I'm going to -- if you look at what I sent you guys. Very specific, look at the conflicts between flood control and restoration, because it's impacting us right now. By us I mean Steamboat Slough has 29 residential parcels and a 10-acre resort. I represent the resort. I'm the owner of the resort, and so -- but I also have one of the residential parcels, so kind of covering both of those.

We are waterfront. And, you know, when you're waterfront and in the Delta, you know that approximately, well, about every 10 years, you know, there's going to be some flooding in the Delta, and we can get high water on Snug Harbor. Snug Harbor is above sea level, so only when the whole Delta maybe is flooding there's a lot of water in the Delta, we might experience it.

And over time, all the neighbors that have been there for so many years, it would happen about once every 10 years. And by -- we don't flood. We don't have this rushing water. We have this rising bathtub water. It's cold water, but it just rises and kind of covers the land

and makes a mess, and then when tide goes out, it goes away.

Well, in the last 10 years with restoration practice areas that are happening on Steamboat Slough just below us, there's one on Grand Island and now they did one a couple years ago on the Ryer Island side, that created a bottleneck on Steamboat Slough. And every time they put a lot of water down Steamboat Slough for the fish test or whatever, it just stops right at that bottleneck. That is probably at about river mile 16 or 17, and then it makes the water backup onto Snug Harbor.

So where it used to be there was high water at Snug Harbor once every 10 years, in the last 10 years, it's about once every two and a half years now. I mean, we have so increased the times we get high water just right on the road or on the properties. And that's a mess to clean up and it's, you know, kind of a pain to deal with. It definitely affects my business during that time, but, you know, you live on the river.

Well, the last two years we have seen it a couple times a year. And the excessive high and low, so now the State is going -- DWR and for the fish tests or whatever, they're making really high tide, really low tide, artificially high and low is what we're seeing. And I know it's a dry year, but it is our -- they appear to be

artificial high and lows. And that is making the banks corrode. And the lows are lower than even the rocks covering Steamboat Slough -- sorry, Grand Island and Ryer Island. There are areas where the low gets below the rocks that are supposed to protect those levees, and there corrosion -- erosion going on underneath those levees now.

You can -- so that's going to impact this area. If we get a whole bunch of water later on, there are certain areas of Steamboat Slough that are -- and both those islands that are at risk, because of this excessive high and low. So I guess I'm here complaining that Steamboat Slough does not have the capacity for a flood event that is written in this document the way it is right now, and it has to do with the depth of the waterway.

And, at the same time, the restoration action that's happening right now is impacting everybody on -- that has property on Steamboat Slough. And there's other properties besides ours, but -- so I'm just asking that you consider the people down there, and in the Delta and in these waterways. Creating excessive incidences of flooding is just -- you know, if you -- if there's funding to do the repairs, you know, to the roads and everything that are being damaged by this practicing up and down, that might be one mitigation, but consider us, please.

Thank you.

Steamboat Slough Resort, Nicky Suard (Public Hearing, February 24, 2012)

Response

T_SUARD1-01

The letter mentioned in the comment was received by the Board and is responded to in this FPEIR as G_SHR1.

As stated in Master Response 11, consistent with the Central Valley Flood Protection Act of 2008 (SB 5, CWC Section 9603(b)), the 2012 CVFPP focuses on reducing flood risks on lands protected by the SPFC, including those in the Delta. Approximately one-third of the Delta's levee system is part of the SPFC and thus is included in the CVFPP. Responsibilities for flood management in Delta areas outside the SPFC reside with a variety of local agencies and are supported by various State, federal, and local efforts (e.g., the State's Delta Special Flood Projects Program and Delta Levees Maintenance Subventions Program, Delta Plan development). For additional details, see Master Response 11.

Additional information on the relationship of the CVFPP to other major programs in the Delta, such as the Delta Plan and BDCP, can be found in Master Response 14. As stated in Master Response 14, the CVFPP is one of many programs that could contribute to achievement of the management goals included in the Delta Stewardship Council's Delta Plan. The goals of the CVFPP support the Delta Plan's goals of improving water supply reliability and restoring the Delta ecosystem. The Delta Plan is a management plan that will include policies and recommendations, but no specific projects. The current draft Delta Plan (Delta Stewardship Council 2012) includes policies and recommendations related to reducing flood risks in the Delta, which appear to be consistent with or supportive of the major elements of the SSIA and associated State policies described in the 2012 CVFPP.

All areas protected by the SPFC are given the same consideration in the CVFPP. When making flood management investments within areas of the Delta protected by the SPFC, the State will consider structural and nonstructural actions to help achieve the following objectives:

- A 200-year level of flood protection, minimum, for urban areas (e.g., Stockton, Sacramento, and West Sacramento metropolitan areas)
- A 100-year level of flood protection for small communities in the Delta that are not already protected by urban flood improvements (e.g., Clarksburg, Hood, Courtland, Walnut Grove, Isleton, and Rio Vista)

- Improved flood management in rural-agricultural areas, through integrated projects that achieve multiple benefits and help preserve rural-agricultural land uses, including projects to restore levee crown elevations and provide all-weather access for inspection and floodfighting; economically feasible projects to resolve known levee performance problems; and agricultural conservation easements (when consistent with local land use plans and in cooperation with willing landowners)

For additional details, see Master Response 14.

As stated in Master Response 12, the State is sensitive to the potential effects that upstream actions may have on the Delta and is developing more detailed policies to minimize and mitigate potential redirected hydraulic impacts. The results of preliminary systemwide evaluations indicate that implementing the SSIA as a whole would not result in significant adverse hydraulic impacts on the Delta (see Attachment 8c in Appendix A, "Central Valley Flood Protection Plan"). However, post-adoption implementation actions and studies to refine the SSIA will involve conducting more detailed reach- and site-specific studies, evaluating any potential temporary downstream impacts caused by the sequencing of SSIA implementation, and providing mitigation.

Future feasibility studies are needed to refine the proposed elements of the SSIA, and the ultimate configuration of facilities may vary from those presented in the 2012 CVFPP. Only at that time will the State have project-specific modeling results that indicate the specific magnitude and extent of hydraulic impacts, if any, from planned improvements within the system. Cost estimates for the SSIA in the 2012 CVFPP include an allowance for features to mitigate potential significant hydraulic impacts caused by project implementation.

The issue of potentially redirecting hydraulic impacts is also addressed in the DPEIR under Impact HYD-2 (NTMA), Impact HYD-4 (NTMA), Impact HYD-2 (LTMA), and Impact HYD-4 (LTMA) in Section 3.13, "Hydrology." As indicated in these impact discussions, any project proponent implementing a project consistent with the SSIA that would affect flood stage elevations would need to obtain various applicable permits before project implementation (such as Section 408 and 208.10 authorizations from USACE and encroachment permits from the Board). The project proponent would need to analyze the potential for the project to locally impede flow or transfer flood risk by causing changes in river velocity, stage, or cross section. Projects would not be authorized if changes in water surface elevation, and thus flooding potential, would increase above the maximum allowable rise set by these agencies. If the

design of a project would result in an unacceptable increase in flooding potential, a project redesign or other mitigation would be required to meet agency standards before the project could be authorized and implemented. For additional details, see Master Response 12.

Furthermore, Master Response 7 addresses the interrelationships between flood management and other benefits, including habitat restoration and conservation. As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework.

Appendix E, “2012 Central Valley Flood Protection Plan Conservation Framework,” provides a preview of a long-term Conservation Strategy that DWR is developing to support the 2017 CVFPP Update. The Conservation Framework focuses on promoting ecosystem functions and multi-benefit projects in the context of integrated flood management for near-term implementation actions and projects. The Conservation Framework provides an overview of the floodway ecosystem conditions and trends and

key conservation goals that further clarify the CVFPP's ecosystem goal.
For additional details, see Master Response 7.

T_TNC1-01

MR. TATAYON: Good morning. I won't take my full three minutes. I just wanted to stand up and say that --

PRESIDENT CARTER: Could you please introduce yourself for the record.

T_TNC1-02

MR. TATAYON: Susan Tatayon with The Nature Conservancy. I'll start by saying that -- and I don't want to steal the Department of Water Resources thunder, but I have to say that the process for developing the Central Valley Flood Protection Plan was an amazing process with a very well organized public outreach component.

They had several regional and topic work groups. Those work groups were given very specific deliverables. A number of us were on several of those work groups, and it was really heartening to see conservation organizations, reclamation districts, Army Corps of Engineers, the Department of Water Resources all discussing issues in a manner that led to some very useful deliverables, I think.

T_TNC1-03

So I hope you consult the deliverables from those working groups as you review the plan. And keep in mind that there are many of us who believe, actually think that the plan reflects much of what was discussed in those work groups, addresses the concepts, climate change, multi-benefit projects.

And I would just ask that the Board keep that in mind as you review this very well done comprehensive report.

Thank you.

The Nature Conservancy, Susan Tatayon (Public Hearing, January 27, 2012)

Response

T_TNC1-01

The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_TNC1-02

The comments acknowledging the public outreach component of the plan, the regional and topic work groups, and the deliverables that resulted from these work groups do not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor do the comments specify additional information needed or particular insufficiencies in the DPEIR. The comments are noted.

As stated in Master Response 13, Phase 1 of the public engagement planning process focused on identifying problems and needs and crafting specific goals for the CVFPP. A variety of regional and topic-based work groups formed during this phase. Phase 2 focused on identifying individual actions that could be taken to achieve the CVFPP goals, and engaged stakeholders through continued regional and topic-based work groups and public workshops.

After Phase 2, stakeholders indicated that they preferred to review more developed materials and information before continuing with intense working meetings. With that understanding, DWR focused its efforts on content development (considering previously provided input and ongoing analyses) and developed a cohesive working draft document for stakeholder review in fall 2011. Outreach efforts included e-mail communications and updates, workshops, webinar briefings, and meetings with individuals and agencies. Work group members were also given an opportunity to review and comment on a working draft of the CVFPP. However, with a commitment to complete a public draft CVFPP within the legislated time frame, the degree of engagement provided in Phases 1 and 2 was not feasible for Phases 3 and 4.

The Board provided various opportunities for members of the public and agencies to comment on the public draft CVFPP, released in December 2011. Hearings were held in 2012 on April 5 (Sacramento), April 6 (Marysville), April 9 (Stockton), and April 11 (Woodland), and public comments were heard and discussed at both regular and special Board

meetings. DWR also accepted comments on the DPEIR, which was released in early March 2012. More information on the Board's process for public review and plan adoption can be found on its Web site, http://www.cvfpb.ca.gov/. For additional details, see Master Response 13.

T_TNC1-03

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_TNC2-01

MS. TATAYON: Good afternoon. I'm Susan Tatayon. I am associate director with The Nature Conservancy's California Water Program. And the mission The Nature Conservancy is to conserve the lands and waters on which all life depends.

And thank you for the opportunity to offer some suggestions on where and how to focus your review of the

Central Valley -- the draft Central Valley Flood Protection Plan.

T_TNC2-02 Since Mr. Henry has done such a good job of summarizing the February 15 letter that a number of environmental NGOs sent to the Board, I won't go over those points again, other than to reiterate that we really do wish the Board would develop a very clear and compelling vision that tells all of us, the ag community, urban community, environmental community what the future Central Valley flood management system ought to and will look like.

T_TNC2-03 And in developing that vision, and also in reviewing the draft plan, I'd like to offer three criteria or guiding principles, if you will, for you to filter the review, as you review the actions and projects listed and described in the plan.

And those three criteria are integration, and resilience, and sustainability. And as you review the plan, I request that you consider does each action, does each project contribute to a systemwide approach that contributes to a very integrated flood management plan that will provide resilience and sustainability for the long term?

And I think that there are some projects and actions in the plan that meet that criteria. And others

may preclude such an integrated resilient flood management system.

T_TNC2-04 In Section 9616(a), there are a number of items -- the legislation -- the Water Code contains that -- that section states wherever feasible these items ought to be including multi-objective projects. And in Section 9616(a)(9) it refers to environmental, ecological values and agricultural lands.

T_TNC2-05 And I think if you use the filter of integration, and resilience, and sustainability in the context of both the ecosystem and ag lands, it will help in your review of the plan to filter out items that may preclude that long-term sustainability, and those that actually contribute to the resilience and sustainability.

T_TNC2-06 And if the -- in closing, I'd like to say that in that integration and in creating that resilience and sustainability, if the plan -- if your vision for Central Valley flood management in the future incorporates agriculture, I do agree that the agriculture -- the owners of ag lands ought to be compensated as they would be contributing to an integrated flood management system, and thereby contributing to the public safety and public good.

And again thank you for the opportunity to offer some suggestions for your review.

PRESIDENT CARTER: Thank you, Ms. Tatayon.

The Nature Conservancy, Susan Tatayon, Associate Director, California Water Program (Public Hearing, February 24, 2012)

Response

T_TNC2-01

The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_TNC2-02

As stated in Master Response 8, the State Legislature enacted comprehensive flood risk management legislation in 2007, including the Central Valley Flood Protection Act of 2008. This law set a clear directive for an integrated systemwide approach to Central Valley flood management, and provided detailed guidance for DWR to follow in formulating the CVFPP. The Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in CWC Sections 9600–9625.

In accordance with legislative direction and reflecting stakeholder input, DWR prepared the 2012 CVFPP to describe the State's vision for flood management in the Central Valley. This vision for flood management in the Central Valley is for a sustainable flood management system that provides a high degree of public safety, promotes long-term economic stability, and supports restoration of compatible riverine and floodplain ecosystems.

In the CVFPP, DWR describes the SSIA, which is a proposal for achieving the State's vision for flood management. The SSIA helps achieve the State's vision for flood management in a balanced manner by promoting responsible investment of public funds, commensurate with flood risks, in projects that integrate multiple benefits, in proactive maintenance of SFPC facilities and residual risk management, and in wise management of floodplains protected by the SPFC. For additional details, see Master Response 8.

T_TNC2-03

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction for the CVFPP to "…include a

description of both structural and nonstructural means for improving the performance and elimination of deficiencies of levees, weirs, bypasses, and facilities, including facilities of the State Plan of Flood Control, and, wherever feasible, meet multiple objectives…" (CWC Section 9616(a)). The legislation further identifies 14 objectives, two of which address water supply and groundwater recharge (CWC Sections 9616(a)(3) and 9616(a)(14)).

The CVFPP includes a high-level discussion on integrating water supply benefits with flood management improvements. The SSIA elements focus on public safety and improvement of flood management, consistent with the legislative direction and CVFPP primary goal; however, implementing these elements could improve water management because expanding floodways and the bypass system could improve the flexibility of reservoir operations and increase in-channel groundwater recharge. The SSIA describes potential opportunities for integrating water supply benefits with proposed flood management actions, but it does not include specific project recommendations related to water supply because of the need for future site-specific proposals and analyses. During post-adoption activities (regional flood management planning and development of basin-wide feasibility studies), additional details will be developed, including specific water management features as part of multi-benefit projects, in collaboration with interested local and regional agencies and organizations.

The Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during

post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework.

Appendix E, "2012 Central Valley Flood Protection Plan Conservation Framework," provides a preview of a long-term Conservation Strategy that DWR is developing to support the 2017 CVFPP Update. The Conservation Framework focuses on promoting ecosystem functions and multi-benefit projects in the context of integrated flood management for near-term implementation actions and projects. The Conservation Framework provides an overview of the floodway ecosystem conditions and trends and key conservation goals that further clarify the CVFPP's ecosystem goal.

The Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to include multiple objectives, where feasible, when proposing improvements to flood management facilities, including opportunities and incentives for expanding or increasing the use of floodway corridors (CWC Section 9616(a)(12)). The potential for recreational use of the flood control system has long been recognized. The SSIA involves floodplain reconnection and floodway expansion, which would improve ecosystem functions, fish passage, and the quantity, quality, and diversity of natural habitats, all of which would contribute to an increase in recreation opportunities and augment the aesthetic values of those areas. Expanding habitat areas would increase opportunities for fishing, hunting, and wildlife viewing. Recreation-related spending associated with increased use by visitors can be an important contributor to local and regional economies. During post-adoption activities (regional flood management planning and development of basin-wide feasibility studies), DWR will work with local and regional implementing agencies and partners to refine CVFPP elements, including developing additional details on site-specific recreation features as part of multi-benefit projects. For additional details, see Master Response 7.

T_TNC2-04

See response to comment T_TNC2-03.

T_TNC2-05

See response to comment T_TNC2-03.

Additionally, as stated in Master Response 9, three preliminary approaches were used to explore a range of potential physical changes to the existing flood management system and help highlight needed policies or other management actions: Achieve SPFC Design Flow Capacity, Protect High-Risk Communities, and Enhance Flood System Capacity. Evaluating these preliminary approaches provided information on their costs, benefits, and overall effectiveness. None of the three preliminary approaches were found to fully satisfy the legislative requirements and CVFPP goals in a cost-effective manner. However, the most promising elements of each were combined to formulate the State's preferred approach—the SSIA. The CVFPP and accompanying attachments provide additional details about the formulation and screening of elements included in the SSIA. For additional details, see Master Response 9.

T_TNC2-06

As stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

A portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of

levees in rural areas. For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements.

The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable.

In addition to expansion of the bypass system, levee reconstruction, and other elements, the SSIA includes State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans. These easements would be used to preserve agriculture and prevent urban development in current agricultural areas, discouraging conversion to land uses that would increase flood risks within floodplains protected by SPFC facilities. For additional details, see Master Response 2.

T_TNC3-01

MS. TATAYON: Hello, President Edgar.

PRESIDENT EDGAR: Good morning.

MS. TATAYON: And welcome to all the new Board members. Congratulations on your appointment.

I'm Susan Tatayon, Associate Director of the California Water Program for The Nature Conservancy. The Nature Conservancy's mission is to protect the lands and waters on which all life depends.

I'll start by reiterating something that John Cain said. And, that is, that many of us recognize that the agricultural community is unhappy with the draft plan, especially given the input from folks during Phases 1 and 2 of development of the Plan.

I learned -- I participated in the agricultural stewardship working group during Phase 1, and I learned a tremendous amount from that experience. And one of the things I learned is how critical agriculture is to not only California's economy but the nation's. You probably know that California is viewed as the breadbasket of the nation. In 2010 dollars, California was number 1 in cash receipts with $37 1/2 billion in revenue, according to the Department of Food and Ag. And we have nine of the top ten producing counties in the nation.

And so I just want to point out that these farmlands provide tremendous economic benefits, but they also provide very important wildlife habitat. And much of the land is, for example, important to migratory birds along the Pacific flyway. And from our work with the Rice Commission and several growers, I can say that working with agriculture is very important to The Nature Conservancy.

Growers and farmers are often our partners in conserving land. So I ask that you consider asking the farmers what is workable in terms of agriculture community -- you know, actually contributing to improvement of our flood management system. I know that they have some specific thoughts on what could be workable. I think that they can contribute to improving the flood management system. And by working with them, we can come up with refinements to the flood plan that benefit them as well as the entire system.

So I look forward to working with you and farmers and businesses and flood managers to do that.

As John said, a number of us are working with representatives of the Central Valley Flood Control Association. And I also hope that we can get a comprehensive package to you that has the support of many stakeholders.

T_TNC3-02

I'll focus my remaining comments on three of the issue areas that you specified, the vision, the multiple benefit, and regional planning.

So on the issue of the vision statement, I -- yes, I think that the proposed plan needs a clear vision statement that compels the political will and resources needed to implement the Plan. Such a statement would help obtain future funding and would also guide updates of the Plan.

Now, I looked for a vision statement in the Plan and there are elements of a vision statement. On page 226, the Plan states, quote, "As configured the State Systemwide Investment Approach is rooted in the vision for the Central Valley Flood Plan and is designed for efficient conveyance of flood flows from existing watershed reservoirs through the Delta." That's one reference to a vision.

On page 2-29, the plan shows a box that contains a sort of overarching vision and some goals. And there in that box it states, "The vision of an integrated systemwide and sustainable flood management plan for the Central Valley is to develop a flood management system that provides the following:" And rather than read the bullets to you, I'll just refer you to 2-29. And there is mention of one item in rural areas in terms of

improvements in that box.

Now, on page 4-40 there's a paragraph that states, "It is the intent of the State that all major flood management programs and projects in the Central Valley be planned and implemented consistent with the vision, overall goals, and provisions of the evolving Central Valley Flood Plan." However, that vision is not clearly stated up front.

Now, this is not to say that DWR has no vision for flood management in California. In fact, the Department published a vision for flood protection in California. And I'm a bit puzzled why that vision wasn't incorporated in the draft flood plan. In the 2008 the FloodSAFE initiative obtained public comments, did quite an outreach on their strategic plan. And in that strategic plan the stated vision is: "A sustainable integrated flood management and emergency response system throughout California that improves public safety, protects and enhances environmental and cultural resources, and supports economic growth by reducing the probability of destructive floods, promoting beneficial floodplain processes, and lowering damages caused by flooding."

And I think that's a pretty good vision. It's short. It would allow development of overarching goals as

something to aspire to. And from a vision statement such as that one, you could develop the specific measurable, attainable, relevant and time-bound objectives that John referred to.

T_TNC3-03 I'll move to the multiple benefits question now. I think that there are some good elements, some good concepts in there. The draft plan subscription of the enhanced system capacity approach in section 2-5 contains some good ideas.

However, I haven't had the time to delve into how the benefits and costs were calculated for that approach and I have not seen an analysis that includes linkages to water supply benefits, for example. So I think there is some improvement for a clearer explanation of the multiple benefits that would be expected from the State Systemwide Investment Approach.

T_TNC3-04 And I would also like to see the conservation framework integrated into the Plan rather than be viewed as an attachment. Flood projects can be designed in a manner that incorporates green infrastructure that augments gray infrastructure. And in some cases those projects can be self-mitigating. So rather than have the conversation framework be merely a mitigation strategy, I think that the Plan could integrated several of the actions named in the conservation framework into multiple

benefit projects.

T_TNC3-05 So, lastly, on the question of should the Board consider adopting all supporting documents and should the Board adopt a schedule relating to regional planning and implementation: I haven't been able to read all the attachments to the draft plan, so I can't answer the first part of this issue, other than to say that I really would like the conservation framework integrated into the Plan.

T_TNC3-06 Now, on the topic of regional plans, I'll refer back to the need for a clear and compelling vision from which you can develop specific goals and smart objectives. Without such a vision, it would be very difficult for local and regional entities to determine whether their flood management efforts are in line with a flood plan. And it would also be difficult for DWR to work with these regional entities in creating the vision that guides regional flood plans.

So in other words, without a clear vision, something that actually the regional entities can aspire to, I doubt that the regional plans will magically all come together and provide the intended systemwide benefits that the State intends.

So clarity on the vision and objectives can provide the guidelines that local and regional entities can use during the regional development phase. And I

think it would be a good idea to have a schedule.

PRESIDENT EDGAR: Thank you.

MS. TATAYON: Thank you for the opportunity to talk to you.

PRESIDENT EDGAR: Thank you, Susan.

The Nature Conservancy, Susan Tatayon (Public Hearing, April 5, 2012)

Response

T_TNC3-01

As stated in Master Response 3, these impacts generally are social and economic in nature, and CEQA does not require addressing them except to the extent that they relate to potentially significant adverse effects on the physical environment. Nonetheless, the responses shown below have been prepared to maximize responsiveness to public participation in the CVFPP.

The SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. Implementing the SSIA would increase the percentage of the population receiving at least 100-year (1 percent annual chance) flood protection from the current 21 percent to more than 90 percent (CVFPP, page 3-40). The remaining 10 percent of the population would receive benefits through residual risk management actions. Based on initial planning-level cost estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to provide flood stage reduction benefits to many of the areas in the system, including small communities and rural-agricultural areas.

In addition, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) in Section 3.3, “Agriculture and Forestry Resources,” of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed.

The State supports the continued viability of small communities to preserve cultural and historical continuity and provide important social, economic, and public services to rural populations and agricultural enterprises. The

SSIA describes State investment priorities in small community flood protection while avoiding the inducement of imprudent growth within SPFC floodplains. Under the SSIA, many small communities would receive increased flood protection benefits as a result of system improvements focused on protecting nearby urban areas. For example, levee improvements may be constructed upstream from an urban area to prevent a scenario in which floodwaters from an upstream levee breach would flow down gradient into the urban area. The upstream levee improvement that may extend into rural locations would therefore also reduce flood risks for the rural area immediately adjacent to the improved levee segment. Conditions in small communities would also be evaluated on a case-by-case basis to identify appropriate State investments in additional structural and/or nonstructural actions (e.g., levees, flood walls, floodproofing, or relocations).

The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas outside small communities. These actions are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development or increasing flood risks within lands protected by the SPFC. No target minimum level of flood protection has been established for prioritizing State investments in rural-agricultural areas (see CWC Section 9603). However, the SSIA proposes (1) projects that maintain levee crown elevations for rural SPFC levees and provide all-weather access roads for inspection and floodfighting; (2) economically feasible projects that resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs; (3) system elements (e.g., bypass expansion) that lower peak flood stages within some rural channels; and (4) actions to manage residual flood risks.

All areas protected by the SPFC would benefit from State investments included in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery. The SSIA also proposes State investments to preserve agriculture and discourage urban development in rural floodplains (e.g., purchasing agricultural easements from willing landowners, when consistent with local land use planning). In addition, the SSIA proposes FEMA flood insurance reforms to support the sustainability of rural-agricultural enterprises. For additional details, see Master Response 3.

T_TNC3-02

As stated in Master Response 8, the State Legislature enacted comprehensive flood risk management legislation in 2007, including the Central Valley Flood Protection Act of 2008. This law set a clear directive for an integrated systemwide approach to Central Valley flood

management, and provided detailed guidance for DWR to follow in formulating the CVFPP.

The Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in Sections 9600–9625 of the California Water Code.

DWR, in coordination with USACE, the Board, and multiple stakeholders, used this legislative direction to formulate the CVFPP's primary and supporting goals, listed below.

CVFPP Primary Goal:

- *Improve Flood Risk Management*—Reduce the chance of flooding and damages, once flooding occurs, and improve public safety, preparedness, and emergency response through the following:
  - Identifying, recommending, and implementing structural and nonstructural projects and actions that benefit lands currently receiving protection from facilities of the SPFC
  - Formulating standards, criteria, and guidelines to facilitate implementation of structural and nonstructural actions for protecting urban areas and other lands of the Sacramento and San Joaquin river basins and the Delta

CVFPP Supporting Goals:

- *Improve Operations and Maintenance*—Reduce systemwide maintenance and repair requirements by modifying the flood management systems in ways that are compatible with natural processes, and adjust, coordinate, and streamline regulatory and institutional standards, funding, and practices for operations and maintenance, including significant repairs.
- *Promote Ecosystem Functions*—Integrate the recovery and restoration of key physical processes, self-sustaining ecological functions, native habitats, and species into flood management system improvements.
- *Improve Institutional Support*—Develop stable institutional structures, coordination protocols, and financial frameworks that enable effective and adaptive integrated flood management (designs, operations and maintenance, permitting, preparedness, response, recovery, and land use and development planning).

- *Promote Multi-Benefit Projects*—Describe flood management projects and actions that also contribute to broader integrated water management objectives identified through other programs.

In addition, the DPEIR includes the following specific statutory objectives:

- *Maximize Flood Risk Reduction Benefits within the Practical Constraints of Available Funds*—Ensure that technically feasible and cost-effective solutions are implemented to maximize the flood-risk reduction benefits given the practical limitations of available funding, and provide a feasible, comprehensive, and long-term financing plan for implementing the plan.

- *Adopt the CVFPP by July 1, 2012*—Complete all steps necessary to develop and adopt the CVFPP by July 1, 2012, or such other date as may be provided by the Legislature.

- *Meet Multiple Objectives Established in Section 9616 of the California Water Code, as Feasible.*

In accordance with legislative direction and reflecting stakeholder input, DWR prepared the 2012 CVFPP to describe the State's vision for flood management in the Central Valley. This vision for flood management in the Central Valley is for a sustainable flood management system that provides a high degree of public safety, promotes long-term economic stability, and supports restoration of compatible riverine and floodplain ecosystems.

In the CVFPP, DWR describes the SSIA, which is a proposal for achieving the State's vision for flood management. The SSIA helps achieve the State's vision for flood management in a balanced manner by promoting responsible investment of public funds, commensurate with flood risks, in projects that integrate multiple benefits, in proactive maintenance of SFPC facilities and residual risk management, and in wise management of floodplains protected by the SPFC. For additional details, see Master Response 8.

T_TNC3-03

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction for the CVFPP to "…include a description of both structural and nonstructural means for improving the performance and elimination of deficiencies of levees, weirs, bypasses, and facilities, including facilities of the State Plan of Flood Control, and, wherever feasible, meet multiple objectives…" (CWC Section 9616(a)). The legislation further identifies 14 objectives, two of which address water

supply and groundwater recharge (CWC Sections 9616(a)(3) and 9616(a)(14)).

The CVFPP includes a high-level discussion on integrating water supply benefits with flood management improvements. The SSIA elements focus on public safety and improvement of flood management, consistent with the legislative direction and CVFPP primary goal; however, implementing these elements could improve water management because expanding floodways and the bypass system could improve the flexibility of reservoir operations and increase in-channel groundwater recharge. The SSIA describes potential opportunities for integrating water supply benefits with proposed flood management actions, but it does not include specific project recommendations related to water supply because of the need for future site-specific proposals and analyses. During post-adoption activities (regional flood management planning and development of basin-wide feasibility studies), additional details will be developed, including specific water management features as part of multi-benefit projects, in collaboration with interested local and regional agencies and organizations.

In addition, the DPEIR evaluates the potential effects of the proposed program on water supply; for example, see Section 3.11, "Groundwater Resources," and Section 3.13, "Hydrology." The impetus for including both the Southern California and coastal CVP and SWP service areas within the DPEIR (i.e., as the "SoCal/coastal CVP/SWP service areas") was to ensure that potential effects of the program on water deliveries outside the Extended SPA and Sacramento and San Joaquin Valley Watersheds were evaluated in the DPEIR.

The DPEIR analysis did not find any significant adverse effects on water supply resulting from the proposed program.

DWR believes that the approach of focusing the CVFPP on flood management issues is consistent with the Legislature's intent as expressed in the Central Valley Flood Protection Act of 2008, and that including elements that provide a greater focus on water supply is not necessary.

Capturing and using floodflows for groundwater recharge is a component of integrated flood and water management in the CVFPP. The State supports programs that use floodflows for groundwater recharge to improve water management throughout California. However, the State also recognizes the limitations of direct groundwater recharge in lowering flood stage and reducing flood risks, especially in the Sacramento River Basin. Considering these limitations, the SSIA identifies opportunities for groundwater recharge within the flood management system (in-channel recharge and in expanded bypass areas). Although no specific recharge

projects are recommended in the SSIA at this time, the State encourages further exploration of feasible recharge opportunities in the San Joaquin River Basin, in particular, to capture a portion of high flows from snowmelt.

DWR also recognizes that although expanding a floodway can assist in recharging groundwater by expanding the surface area of inundated ground during high-water events, a meaningful benefit cannot be assured. The inundated soils must be appropriate to allow groundwater infiltration. Depending on hydrologic conditions, an expanded floodway may be inundated only rarely, allowing only limited opportunities for increased groundwater infiltration. The local aquifer may be recharged from lands away from the river, with groundwater flowing toward and draining into the river. In this circumstance, increasing floodway inundation would have little benefit to local groundwater recharge. Therefore, potential groundwater recharge benefits from increasing floodplains, flood bypasses, and setback levees are very dependent on site-specific conditions.

The SSIA includes an F-CO Program that seeks to coordinate flood releases from existing reservoirs located on tributaries to major Central Valley rivers. Considering the timing and magnitude of flood releases from reservoirs, the F-CO Program seeks to optimize the use of downstream channel capacity in balance with total available flood storage space in the system to reduce overall downstream peak floodflows. The F-CO Program also can modify operation of reservoirs in a way that will improve flood management and provide opportunities for more aggressive refilling of reservoirs during dry years. Such operations could increase water supplies within reservoirs, especially in dry years when the water supply system is most stressed.

Water supply benefits from the F-CO Program would vary depending on current reservoir operations rules, watershed hydrology, flexibility in reservoir operation and physical outlet facilities (i.e., adequate release capacity), quality of reservoir inflow forecasts, and other factors. Therefore, a case-by-case study of flood management and multipurpose reservoirs will be needed to adequately define and quantify the potential benefits.

The Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important shaded riverine aquatic habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework.

Appendix E, "2012 Central Valley Flood Protection Plan Conservation Framework," provides a preview of a long-term Conservation Strategy that DWR is developing to support the 2017 CVFPP Update. The Conservation Framework focuses on promoting ecosystem functions and multi-benefit projects in the context of integrated flood management for near-term implementation actions and projects. The Conservation Framework provides an overview of the floodway ecosystem conditions and trends and key conservation goals that further clarify the CVFPP's ecosystem goal.

The Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to include multiple objectives, where feasible, when proposing improvements to flood management facilities, including opportunities and incentives for expanding or increasing the use of floodway corridors (CWC Section 9616(a)(12)). The potential for recreational use of the flood control system has long been recognized. The SSIA involves floodplain reconnection and floodway expansion, which would improve ecosystem functions, fish passage, and the quantity, quality, and diversity of natural habitats, all of which would contribute to an increase in recreation opportunities and augment the aesthetic values of those areas. Expanding habitat areas would increase opportunities for fishing, hunting, and wildlife

viewing. Recreation-related spending associated with increased use by visitors can be an important contributor to local and regional economies. During post-adoption activities (regional flood management planning and development of basin-wide feasibility studies), DWR will work with local and regional implementing agencies and partners to refine CVFPP elements, including developing additional details on site-specific recreation features as part of multi-benefit projects. For additional details, see Master Response 7.

T_TNC3-04

As stated in Master Response 7, the SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important shaded riverine aquatic habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework.

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The commenter requests that the Conservation Framework be integrated into the CVFPP. DWR believes that the Conservation Framework is shown to be a critical part of the CVFPP and is already integrated into the CVFPP, although as an appendix. The commenter's request is noted, but no changes to the CVFPP are deemed necessary.

T_TNC3-05

As stated in Master Response 14, regional flood management planning, to be conducted in each of nine regions identified in the 2012 CVFPP, is an important next step in identifying specific improvements to rural-agricultural areas, small communities, and urban areas consistent with the SSIA. Upon CVFPP adoption, DWR will work closely with local entities to collect on-the-ground information regarding flood risks and needs, identify potential local and regional improvement projects, assess the performance and feasibility of these projects, and develop proposals that reflect the priorities of local entities in reducing flood risks. Each regional plan will present an assessment of proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. DWR intends to provide guidance as well as technical and financial assistance to local agencies to prepare the regional flood management plans, subject to availability of funds.

Regional flood management plans are anticipated to:

- Assess regional flood risks and management actions (projects) to reduce these risks
- Discuss regional priorities, including criteria used to prioritize individual projects
- Describe specific projects, including their potential costs, regional and systemwide benefits, and beneficiaries
- Provide a financial plan describing how the proposed projects would be funded, including cost sharing and financing for local shares
- Describe regional governance of flood management

Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts. Information and outcomes from the regional planning process will inform the State-led basin-wide feasibility studies, preparation of a financing plan for the CVFPP, and the first update of the CVFPP (scheduled for completion by 2017). This

regional effort is scheduled to be launched publicly in June 2012 and is anticipated to continue through 2013.

DWR will engage regional flood planning partners to develop and implement communication strategies with broad interest groups to brief them on flood management planning in their regions. Regional implementing and operating agencies, land use agencies, and interest groups will be invited to participate in the planning process. Each regional planning process will seek input, as appropriate, from agricultural interests, environmental interests, permitting agencies/resource agencies, local emergency responders, tribes, and other stakeholders. DWR anticipates that a regional flood working group will be formed in each region. For additional details, see Master Response 14.

T_TNC3-06

See responses to comments T_TNC3-02 and T_TNC3-05.

T_TU1-01

DR. HENERY: Hi. I'm Rene Henery Henry. I'm California Science Director for Trout Unlimited. And our organization and the diverse constituency that we represent are deeply concerned with the nexus between flood safety and also the health of our rivers and fisheries.

T_TU1-02

Our perspective is that the most effective way to provide flood safety, minimize long-term costs, and support those rivers and fisheries is by allowing rivers room to expand during high flow events. And with that in mind, we think that the best way to provide public safety -- provide for public safety during this flood-prone time, and also support those critical resources of our rivers and fisheries is through the expansion of new and existing bypasses and the acquisition of flood easements.

I think that's pretty much the message that we'd like to communicate. We really look forward to working with the Board and the DWR as the -- you do what it takes to ensure that this plan succeeds at providing all the services we believe it was created to provide.

T_TU1-03

So in summary, we support viable solutions that give rivers room in order to minimize long-term costs,

protect public safety, and support fisheries and aquatic ecosystems.

Thank you.

PRESIDENT CARTER: Thank you, Mr. Henery.

Trout Unlimited, Rene Henry, California Science Director (Public Hearing, January 27, 2012)

Response

T_TU1-01

The comment introduces the commenter and his organization, Trout Unlimited. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_TU1-02

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework.

Appendix E, "2012 Central Valley Flood Protection Plan Conservation Framework," provides a preview of a long-term Conservation Strategy that DWR is developing to support the 2017 CVFPP Update. The Conservation Framework focuses on promoting ecosystem functions and multi-benefit projects in the context of integrated flood management for near-term implementation actions and projects. The Conservation Framework provides an overview of the floodway ecosystem conditions and trends and key conservation goals that further clarify the CVFPP's ecosystem goal. For additional details, see Master Response 7.

As stated in Master Response 1, the existing bypass system in the Sacramento River Basin (including the Sutter and Yolo bypasses and associated inflow weirs) forms the central backbone of the Sacramento River Flood Control Project and redirects damaging floodflows away from the main channels of the Sacramento and Feather rivers. The considerable capacity of the bypass system (up to 490,000 cfs) also slows the movement of floods, effectively attenuating flood peaks and flows into the Delta. The existing bypass system also supports a vibrant seasonal agricultural economy and provides important habitat for multiple terrestrial and aquatic species. In the San Joaquin River Basin, the bypass system includes the Chowchilla, Eastside, and Mariposa bypasses.

The Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper

Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass. For additional details, see Master Response 1.

T_TU1-03

See response to comment T_TU1-02, above.

T_TU2-01

DR. HENERY: Good Carter, President Carter, members of the board. My name is Dr. René Henry. I'm the California Science Director for Trout Unlimited.

And we have already submitted some comments to you as part of a joint letter along with some other organizations, and we'll be submitting additional specific comments from Trout Unlimited.

And my purpose in speaking to you today is really

just to highlight a few of those comments and summarize them a little bit to make sure that their intent is clear and just to draw your attention to them a little bit more.

T_TU2-02

We feel that the plan as it stands has done several things really well. The conservation framework has done a great job of laying out the context that we are operating in. And I think the State Systemwide Investment Approach, while I don't necessarily -- I feel like there's room for it to be improved, it also does a good job of talking about how some of the different components of the plan might work together.

T_TU2-03

One of the challenges of the plan -- and I'm going to say this by way of lead in to sort of three things that I want to highlight in terms of opportunity for improvement. One of the big challenges of the plan, as we see it at TU, is that it doesn't layout a clear vision.

You've heard a number of people say that this plan really constitutes a paradigm shift. And, in fact, a member of the Board made that same comment at the meeting where the plan was presented. And I think that that's the case, but that it's not articulated clearly. And in our own work outside of this context and even here today in the comments that we've heard, I think you see the absence of that vision in the perspective simultaneously that the

plan is not doing what it needs to do for conservation and is not doing what it needs to do for agriculture

You know, at TU we believe that there is -- that there are solutions to flood protection that are good for flood safety that are good for agriculture, and that are also good for the environment, and for the aquatic species that a lot of our constituency really care about. But in the absence of the plan laying out a clear vision, it's very difficult to see how we're going to get to those or how we can work together to achieve those.

So that's one of the big things that I think is missing from the plan is a clear vision and a vision that incorporates conservation in really specific ways.

T_TU2-04

The second thing that I'd like to draw the Board's attention to is the lack of -- and it's related to the lack of a vision, the lack of specific objectives. So development of the regional plans is going to be really important we've heard for executing projects on the ground, but we haven't heard any specific objectives, or there are not those specific objectives in this plan that are going to get us from goals, from a vision to the regional planning place.

So I think right now this plan is sort of a plan to plan. And I think that's just a big missed opportunity. This is an unprecedented step in the history

of our State. And it's a very important one for all of these different constituencies that I've mentioned and others. And I think it needs -- there's a real need for some leadership here, and not just leadership, but for a framework that will get us from that vision to its actual implementation on the ground. And we see a lot of the building blocks for that here, but a lot of it is getting pushed off to a later date. So we'd like to see specific objectives in the plan as well

T_TU2-05 And then finally -- and some of this was also discussed at the meeting where the plan was presented to the Board, but there are a lot of projects that are happening right now with a direct potential long-term benefit for flood control. The San Joaquin River Restoration Project is a great example. There are alternatives in the process being developed by these, you know, large groups of agencies and organizations working on the project that include alteration to existing flood control facilities, levee setbacks that could have a huge benefit for flood control in the long term, and even in the medium term. And those projects should be incorporated into the plan from the outset, so that we are, you know, maximizing the energy that we invest in these areas.

And so that they -- we don't end up having to

T_TU2-06

redo work and cover old ground later, because we are not lining up all of our parallel directives or potentially parallel directives.

So just in summary, we really appreciate the work that's gone into the plan so far. We'd like to see a more clearly articulated vision that incorporates conservation. We would also like to see incorporation of existing projects on the ground that have the potential to benefit flood protection. And we'd also like to see clear objectives that are going to get us from that vision to implementation of some of these specific projects, and the benefits for the ecosystem and for flood protection and flood safety that we're really hoping will come out of this process long term.

Thank you.

PRESIDENT CARTER: Thank you, Mr. Henry.

Trout Unlimited, René Henry (Public Hearing, February 24, 2012)

Response

T_TU2-01

The comment refers to the commenter's prior testimony, which is contained in comment letter T_TU1 and responded to in responses to comments T_TU1-01, T_TU1-02, and T_TU1-03. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_TU2-02

The comment compliments DWR on the CVFPP. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_TU2-03

As stated in Master Response 8, the State Legislature enacted comprehensive flood risk management legislation in 2007, including the Central Valley Flood Protection Act of 2008. This law set a clear directive for an integrated systemwide approach to Central Valley flood management, and provided detailed guidance for DWR to follow in formulating the CVFPP. The Central Valley Flood Protection Act of 2008 specifically requires the CVFPP to provide significant systemwide benefits, evaluate both structural and nonstructural improvements, provide a description of the entire system and its current performance, promote multipurpose projects, and leverage other funding sources. These requirements for the CVFPP are embedded in SB 5 and codified in CWC Sections 9600–9625.

DWR, in coordination with USACE, the Board, and multiple stakeholders, used this legislative direction to formulate the CVFPP's primary and supporting goals, listed below.

CVFPP Primary Goal:

- *Improve Flood Risk Management*—Reduce the chance of flooding and damages, once flooding occurs, and improve public safety, preparedness, and emergency response through the following:

- Identifying, recommending, and implementing structural and nonstructural projects and actions that benefit lands currently receiving protection from facilities of the SPFC

- Formulating standards, criteria, and guidelines to facilitate implementation of structural and nonstructural actions for protecting urban areas and other lands of the Sacramento and San Joaquin river basins and the Delta

CVFPP Supporting Goals:

- *Improve Operations and Maintenance*—Reduce systemwide maintenance and repair requirements by modifying the flood management systems in ways that are compatible with natural processes, and adjust, coordinate, and streamline regulatory and institutional standards, funding, and practices for operations and maintenance, including significant repairs.

- *Promote Ecosystem Functions*—Integrate the recovery and restoration of key physical processes, self-sustaining ecological functions, native habitats, and species into flood management system improvements.

- *Improve Institutional Support*—Develop stable institutional structures, coordination protocols, and financial frameworks that enable effective and adaptive integrated flood management (designs, operations and maintenance, permitting, preparedness, response, recovery, and land use and development planning).

- *Promote Multi-Benefit Projects*—Describe flood management projects and actions that also contribute to broader integrated water management objectives identified through other programs.

In addition, the DPEIR includes the following specific statutory objectives:

- *Maximize Flood Risk Reduction Benefits within the Practical Constraints of Available Funds*—Ensure that technically feasible and cost-effective solutions are implemented to maximize the flood-risk reduction benefits given the practical limitations of available funding, and provide a feasible, comprehensive, and long-term financing plan for implementing the plan.

- *Adopt the CVFPP by July 1, 2012*—Complete all steps necessary to develop and adopt the CVFPP by July 1, 2012, or such other date as may be provided by the Legislature.

- Meet Multiple Objectives Established in Section 9616 of the California Water Code, as Feasible.

In accordance with legislative direction and reflecting stakeholder input, DWR prepared the 2012 CVFPP to describe the State's vision for flood management in the Central Valley. This vision for flood management in the Central Valley is for a sustainable flood management system that provides a high degree of public safety, promotes long-term economic stability, and supports restoration of compatible riverine and floodplain ecosystems.

In the CVFPP, DWR describes the SSIA, which is a proposal for achieving the State's vision for flood management. The SSIA helps achieve the State's vision for flood management in a balanced manner by promoting responsible investment of public funds, commensurate with flood risks, in projects that integrate multiple benefits, in proactive maintenance of SFPC facilities and residual risk management, and in wise management of floodplains protected by the SPFC. For additional details, see Master Response 8.

The attainment of multiple benefits in the CVFPP is further addressed in Master Response 7. As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction for the CVFPP to "…include a description of both structural and nonstructural means for improving the performance and elimination of deficiencies of levees, weirs, bypasses, and facilities, including facilities of the State Plan of Flood Control, and, wherever feasible, meet multiple objectives…" (CWC Section 9616(a)). The legislation further identifies 14 objectives, two of which address water supply and groundwater recharge (CWC Sections 9616(a)(3) and 9616(a)(14)).

The CVFPP includes a high-level discussion on integrating water supply benefits with flood management improvements. The SSIA elements focus on public safety and improvement of flood management, consistent with the legislative direction and CVFPP primary goal; however, implementing these elements could improve water management because expanding floodways and the bypass system could improve the flexibility of reservoir operations and increase in-channel groundwater recharge. The SSIA describes potential opportunities for integrating water supply benefits with proposed flood management actions, but it does not include specific project recommendations related to water supply because of the need for future site-specific proposals and analyses. During post-adoption activities (regional flood management planning and development of basin-wide feasibility studies), additional details will be developed, including specific water management features as part of multi-benefit projects, in collaboration with interested local and regional agencies and organizations.

The Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework.

Appendix E, “2012 Central Valley Flood Protection Plan Conservation Framework,” provides a preview of a long-term Conservation Strategy that DWR is developing to support the 2017 CVFPP Update. The Conservation Framework focuses on promoting ecosystem functions and multi-benefit projects in the context of integrated flood management for near-term implementation actions and projects. The Conservation Framework provides an overview of the floodway ecosystem conditions and trends and key conservation goals that further clarify the CVFPP’s ecosystem goal.

The Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to include multiple objectives, where feasible, when proposing improvements to flood management facilities, including opportunities and incentives for expanding or increasing the use of floodway corridors (CWC Section 9616(a)(12)). The potential for recreational use of the flood control system has long been recognized. The SSIA involves floodplain

reconnection and floodway expansion, which would improve ecosystem functions, fish passage, and the quantity, quality, and diversity of natural habitats, all of which would contribute to an increase in recreation opportunities and augment the aesthetic values of those areas. Expanding habitat areas would increase opportunities for fishing, hunting, and wildlife viewing. Recreation-related spending associated with increased use by visitors can be an important contributor to local and regional economies. During post-adoption activities (regional flood management planning and development of basin-wide feasibility studies), DWR will work with local and regional implementing agencies and partners to refine CVFPP elements, including developing additional details on site-specific recreation features as part of multi-benefit projects. For additional details, see Master Response 7.

T_TU2-04

In regard to specific objectives, this comment is similar to comment T_TU2-03. See response to comment T_TU2-03, above.

Additionally, as stated in Master Response 19, the California Central Valley Flood Protection Act of 2008 (SB 5) defined multiple objectives for the CVFPP, codified in CWC Section 9616, to be achieved wherever feasible. Goals for the CVFPP were collaboratively drafted by DWR, its partners (the Board and USACE), and interested parties through an extensive communications and engagement process, capturing the guidance and objectives provided by CWC Section 9616. As a result of this process, one primary goal and four supporting CVFPP goals (described below) were established and provided guidance in forming specific CVFPP policies and physical elements.

The process used to develop CVFPP goals is described in Section 1.6 of the plan, titled "Formulation of the 2012 Central Valley Flood Protection Plan." Much of this information is repeated and/or summarized in Section 2.1.2, "Purpose and Objectives of the Proposed Program," and Section 2.2, "Development of the Proposed Program," of the DPEIR. Relevant information from those sections is provided below.

The five CVFPP goals were carried forward and became the program objectives of the DPEIR, as follows:

Primary Objective:

- *Improve Flood Risk Management*—Reduce the chance of flooding and damages, once flooding occurs, and improve public safety, preparedness, and emergency response through the following:

- Identifying, recommending, and implementing structural and nonstructural projects and actions that benefit lands currently receiving protection from facilities of the SPFC.

- Formulating standards, criteria, and guidelines to facilitate implementation of structural and nonstructural actions for protecting urban areas and other lands of the Sacramento and San Joaquin river basins and the Delta.

Supporting Objectives:

- *Improve Operations and Maintenance*—Reduce systemwide maintenance and repair requirements by modifying the flood management systems in ways that are compatible with natural processes, and adjust, coordinate, and streamline regulatory and institutional standards, funding, and practices for operations and maintenance, including significant repairs.

- *Promote Ecosystem Functions*—Integrate the recovery and restoration of key physical processes, self-sustaining ecological functions, native habitats, and species into flood management system improvements.

- *Improve Institutional Support*—Develop stable institutional structures, coordination protocols, and financial frameworks that enable effective and adaptive integrated flood management (designs, operations and maintenance, permitting, preparedness, response, recovery, and land use and development planning).

- *Promote Multi-Benefit Projects*—Describe flood management projects and actions that also contribute to broader integrated water management objectives identified through other programs.

Three additional program objectives were developed for the PEIR and reflect specific direction provided in the authorizing legislation (summarized in Chapter 1.0, "Introduction," of the DPEIR). These statutory objectives are as follows:

Statutory Objectives:

- *Maximize Flood Risk Reduction Benefits within the Practical Constraints of Available Funds*—Ensure that technically feasible and cost-effective solutions are implemented to maximize the flood risk reduction benefits given the practical limitations of available funding, and provide a feasible, comprehensive, and long-term financing plan for implementing the plan.

- *Adopt the CVFPP by July 1, 2012*—Complete all steps necessary to develop and adopt the CVFPP by July 1, 2012, or such other date as may be provided by the Legislature.

- *Meet Multiple Objectives Established in Section 9616 of the California Water Code, Wherever Feasible:*

  – Reduce the risk to human life, health, and safety from flooding, including protection of public safety infrastructure.

  – Expand the capacity of the flood management system in the Sacramento–San Joaquin Valley[3] to either reduce flood flows or convey floodwaters away from urban areas.

  – Link the flood protection system with the water supply system.

  – Reduce flood risks in currently nonurbanized areas.

  – Increase the engagement of local agencies willing to participate in improving flood protection, ensuring a better connection between State flood protection decisions and local land use decisions.

  – Improve flood protection for urban areas to the urban level of flood protection.

  – Promote natural dynamic hydrologic and geomorphic processes.

  – Reduce damage from flooding.

  – Increase and improve the quantity, diversity, and connectivity of riparian, wetland, floodplain, and shaded riverine aquatic habitats, including the agricultural and ecological values of these lands.

  – Minimize flood management system operations and maintenance requirements.

  – Promote the recovery and stability of native species' populations and overall biotic community diversity.

[3] CGC Section 65007(g) defines the Sacramento–San Joaquin Valley as follows: *"Sacramento–San Joaquin Valley" means any lands in the bed or along or near the banks of the Sacramento River or San Joaquin River, or any of their tributaries or connected therewith, or upon any land adjacent thereto, or within any of the overflow basins thereof, or upon any land susceptible to overflow there from. The Sacramento–San Joaquin Valley does not include lands lying within the Tulare Lake basin, including the Kings River."*

- Identify opportunities and incentives for expanding or increasing use of floodway corridors.

- Provide a feasible, comprehensive, and long-term financing plan for implementing the CVFPP.

- Identify opportunities for reservoir reoperation in conjunction with groundwater flood storage.

For additional details, see Master Response 19.

T_TU2-05

As stated in Master Response 14, as part of post-adoption activities, the Board and DWR will continue to work collaboratively with local, State, and federal agencies, environmental interests, and other parties to develop regional flood management plans and further refine the proposed elements of the SSIA.

The State has a strong interest in coordinating and implementing integrated projects that achieve multiple benefits. Effective integration across planning efforts means that all programs and projects, when implemented, work together to achieve key goals in a cost-effective manner; are sequenced and prioritized appropriately; and do not adversely affect or interfere with intended benefits. Although effectively integrating planning across programs while considering multiple benefits can be challenging, doing so can also provide opportunities to share knowledge and identify mutually beneficial solutions that might not have been considered otherwise, thus minimizing duplication and reducing costs.

DWR will continue to coordinate with other flood management and ecosystem enhancement efforts during implementation of the CVFPP. A few key examples include the Delta Stewardship Council's Delta Plan, the San Joaquin River Restoration Program, and the BDCP. These are described in more detail below.

Delta Plan *(see "Central Valley Flood Protection Plan and the Delta Plan" (fact sheet dated March 23, 2012))*
The Delta Stewardship Council is developing a comprehensive, long-term management plan for the Delta and the Suisun Marsh—the Delta Plan—to achieve the goals of improving water supply reliability and restoring the ecosystem, as described in CWC Section 85054. The CVFPP is one of many management plans that could contribute to achievement of the goals of the Delta Plan.

The primary goal of the CVFPP is to improve flood risk management, with a focus on lands protected by facilities of the SPFC, including those lands located in the Delta. However, SPFC facilities protect only portions of the Delta; other programs address flood management needs outside areas protected by the SPFC (outside the CVFPP study area). The major elements of the CVFPP's recommended approach—the SSIA—are consistent with the policies and recommendations in the draft Delta Plan (Delta Stewardship Council 2012), which address the following topics:

- **Improve emergency preparedness and response**—Both plans discuss preparing for and responding to flood emergencies, including preparing emergency response plans and protocols.

- **Finance and implement flood management activities**—Both plans acknowledge the challenges associated with financing O&M and repairs, and contain similar recommendations to pursue formation of regional levee districts.

- **Prioritize flood management investment**—Both plans emphasize the need to prioritize future investments in flood management and leverage funding to achieve multiple objectives and benefits.

- **Improve residential flood protection**—Both plans acknowledge the need to associate levels of flood protection with assets at risk; the CVFPP incorporates the Urban Levee Design Criteria document by reference and supports the development of criteria for repairing levees in rural areas (criteria appropriate to the lands and uses being protected).

- **Protect and expand floodways floodplains and bypasses**—Both the Delta Plan and the CVFPP recommend further evaluation of Paradise Cut.

- **Integrate Delta levees and ecosystem function**—The Delta Plan recommends development of a criterion to define locations of future setback levees and the CVFPP recommends the use of setback levees to provide local and regional benefits.

- **Limit of liability**—Both plans acknowledge the need to address increasing exposure of the State and other public agencies to liability associated with failure of flood management facilities; both plans also include recommendations related to flood insurance reform.

Under the SSIA, when making flood management investments in areas of the Delta protected by the SPFC, the State will consider structural and nonstructural actions to help achieve the following objectives:

- 200-year level of flood protection, minimum, for urban areas (e.g., Stockton metropolitan area)

- 100-year level of flood protection for small communities in the Delta that are not already protected by urban improvements (e.g., Clarksburg, Hood, Courtland, Walnut Grove, Isleton, and Rio Vista)

- Improved flood management in rural-agricultural areas, through integrated projects that achieve multiple benefits and help preserve rural-agricultural land uses, including projects to restore levee crown elevations and provide all-weather access for inspection and floodfighting; economically feasible projects to resolve known levee performance problems; and agricultural conservation easements, when consistent with local land use plans and in cooperation with willing landowners

In addition, the SSIA includes system elements, such as a potential expansion of the Yolo Bypass, to increase the capacity of the flood management system, attenuate peak floodflows, and increase opportunities for ecosystem restoration compatible with the BDCP (another major management plan contributing to the Delta Plan). The SSIA also includes a potential new Lower San Joaquin Bypass to alleviate flood risk to the Stockton metropolitan area and to provide opportunities for environmental restoration and agricultural preservation.

As discussed in the draft Delta Plan, many upstream actions could affect the State's ability to meet the Delta Plan's coequal goals. The State is sensitive to the effects that upstream SPFC improvements may have on the Delta and is developing more detailed policies to minimize and mitigate potential redirected hydraulic impacts or other adverse impacts. The results of preliminary systemwide evaluations indicate that implementing the SSIA as a whole would not result in significant adverse effects on the Delta. However, post-adoption implementation actions and studies to refine the SSIA will involve evaluating any potential temporary downstream impacts caused by the sequencing of CVFPP implementation and providing mitigation.

San Joaquin River Restoration Program *(see "Central Valley Flood Protection Plan and San Joaquin River Restoration Program" (fact sheet dated March 23, 2012))*
The SJRRP is a comprehensive long-term effort to restore flows to the San Joaquin River from Friant Dam to the confluence of the Merced River, restoring a self-sustaining Chinook salmon fishery in the river while reducing or avoiding adverse water supply impacts from restoration flows.

The CVFPP focuses on the areas currently receiving protection from SPFC facilities. The Restoration Area considered in the SJRRP encompasses the San Joaquin River and associated areas and structures from Friant Dam to the Merced River confluence; this area is largely rural-agricultural with some small communities. A portion of the Restoration Area receives flood protection from SPFC facilities.

Under the SSIA, the State will consider investments for improving management of flood risks for rural-agricultural areas and small communities as follows:

- Structural and nonstructural options for improving flood protection for small communities protected by the SPFC, targeting a 100-year (1 percent annual chance) flood

- Improved flood management in rural-agricultural areas, through integrated projects that achieve multiple benefits and help preserve rural-agricultural land uses, including projects to restore levee crown elevations and provide all-weather access for inspection and floodfighting; economically feasible projects to resolve known levee performance problems; and agricultural conservation easements (when consistent with local land use plans and in cooperation with willing landowners)

To facilitate restoration, modifications to river channels, bypasses, and water diversion and flood management facilities in the Restoration Area are anticipated. Many of the SJRRP modifications would require additional detailed studies and regulatory permits, and some of those actions are associated with SPFC facilities. Where feasible and consistent with the CVFPP, some SJRRP actions could be considered in CVFPP implementation and may be included in future updates to the CVFPP.

Bay-Delta Conservation Plan *(see "Central Valley Flood Protection Plan and Bay Delta Conservation Plan" (fact sheet dated March 23, 2012))*
The BDCP is a long-term multipurpose plan, developed pursuant to the federal Endangered Species Act and the California Natural Community Conservation Planning Act, to help meet California's goal for Delta management to restore and protect water supply, water quality, and ecosystem health. The public draft BDCP and its EIR/EIS are scheduled for release in mid-2012.

The BDCP Plan Area includes the legal Delta, the Suisun Marsh, and the Yolo Bypass. The CVFPP focuses on areas currently receiving protection from SPFC facilities. Portions of the Delta, as well as the Yolo Bypass (a major SPFC facility instrumental in managing flood risks in the

Sacramento River Basin), are within both the BDCP Plan Area and the CVFPP's SPFC Planning Area. The Suisun Marsh, part of the BDCP Plan Area, is included in the Extended SPA as described in the DPEIR.

Although flood management is not within the scope of the BDCP, at least two proposed conservation measures directly relate to flood management: (1) the Yolo Bypass Fisheries Enhancement seeks to improve upstream and downstream fish passage through the bypass, and (2) Seasonally Inundated Floodplain Restoration calls for greater duration of flows along the Yolo Bypass.

The CVFPP recommended approach—the SSIA—proposes expanding the Yolo Bypass to increase its ability to accommodate large floodflows. The proposed expansion also presents opportunities to improve fish passage at SPFC facilities, improve fish access to upstream aquatic habitat, and facilitate natural flow attenuation, consistent with BDCP conservation measures. Under the SSIA, the State will also consider a new bypass in the south Delta. This could be accomplished by expanding Paradise Cut or other routes in the vicinity, and may include levee construction, gate structures and/or weirs, habitat components, and agricultural easements.

Implementation of the CVFPP, and of many management components of the BDCP, will require further studies to refine physical features. These studies provide additional opportunities for coordination and to help achieve mutual goals and objectives. For additional details, see Master Response 14.

T_TU2-06

See responses to comments T_TU2-03, T_TU2-04, and T_TU2-05, above.

T_TU3-01

MR. STALLING: Yes. Well, thank you, Chairman and the Board, for allowing me to address you with some comments. My name's Dave Stalling and I'm the Communications Director for Trout Unlimited in California. Trout Unlimited is a national nonprofit group made primarily up of anglers, fishermen who are working to protect and restore native trout, salmon, steelhead and their watersheds and their habitat.

In fact, Trout Unlimited leads agriculture. It's very important to the California economy. And in fact, we work all over the state with loggers and grape growers and wineries and farmers cooperatively to protect and improve habitat for trout, salmon, and steelhead.

So with that, we do support a plan that conserves

farmland while improving fish and wildlife habitat for hundreds of anglers and others.

With that said, we think it's critically important that this plan incorporate floodplains, flood bypasses, and levee setbacks to give rivers room to breathe and spread out during high waters. This will help protect lives and property. It will increase reliability and quality of water supply by protecting the Delta and recharging groundwater. It'll give more certainty to local governments in their decisions particularly on where and when they can and can't build. It will reduce flood risk. And it will improve and enhance fish habitat, wildlife and recreation.

You know, salmon and steelhead in particular we've seen a lot of research now that shows that floodplains, because they're in that critical time of year, they're shallow and they get more warm and there's more nutrients in there, that salmon and steelhead grow a lot faster and are, therefore, healthier and stronger; because it's part of the way they evolve with the natural ebbs and flows and letting the river breathe and allowing these salmon and steelhead to, you know, live the way they adapted to and adjusted to.

So with that said, we look very forward to working with you on ways to incorporate floodplains,

bypasses, and levee setbacks.

And I want to thank you for this opportunity to comment.

BOARD MEMBER MacDONALD: Thank you.

Trout Unlimited, Dave Stalling (Public Hearing, April 5, 2012)

Response

T_TU3-01

The comment introduces the commenter and his organization, Trout Unlimited, and expresses opinions about the value of widened floodplains for salmon and steelhead fisheries. As stated in Master Response 1, the existing bypass system in the Sacramento River Basin (including the Sutter and Yolo bypasses and associated inflow weirs) forms the central backbone of the Sacramento River Flood Control Project and redirects damaging floodflows away from the main channels of the Sacramento and Feather rivers. The considerable capacity of the bypass system (up to 490,000 cfs) also slows the movement of floods, effectively attenuating flood peaks and flows into the Delta. The existing bypass system also supports a vibrant seasonal agricultural economy and provides important habitat for multiple terrestrial and aquatic species. In the San Joaquin River Basin, the bypass system includes the Chowchilla, Eastside, and Mariposa bypasses.

The Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency. Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass. For additional details, see Master Response 1.

As stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

A portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of levees in rural areas. For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements.

The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable.

In addition to expansion of the bypass system, levee reconstruction, and other elements, the SSIA includes State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans. These easements would be used to preserve agriculture and prevent urban development in current agricultural areas, discouraging conversion to land uses that would increase flood risks within floodplains protected by SPFC facilities. Agricultural conservation easements could be purchased through various DWR programs; an example is DWR's Flood Corridor Program, which focuses on nonstructural flood risk reduction integrated with protection of natural resources and agricultural lands.

The PEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

T_TU4-01

MR. STALLING: Thank you. Thank you, Mr.

Chairman, and thank you, the Board, for this opportunity to comment. My name is Dave Stalling and I'm the Communications Director for Trout Unlimited in California.

Trout Unlimited is a national nonprofit made up primarily of anglers and fishermen who care about protecting native trout, salmon, steelhead in their watersheds and their habitat. And we've been involved in the process here for a while. And thank you again for that opportunity.

We think it's very critically important that this plan include and incorporate floodplains, flood bypasses, and levee setbacks to allow the river to breathe and expand, which we feel will not only reduce flood risks and protect people and lives, but will increase the reliability and quality of water supply particularly by recharging the groundwater.

It will help ensure more regularity in government decision making, particularly on where and when we can't build.

And of course it'll help protect fish and wildlife and the recreational opportunities that go along with rich and wildlife, like fishing and hunting.

There's pretty good research out of the Davis Center for Watershed Science that shows the importance of floodplain to salmon. And it's actually some research I'd

be happy to discuss and share with the previous speaker. But it shows that, you know, these rivers evolve with floodplains and the salmon evolved with those floodplains. And the floodplains not only allow juvenile salmon to stay out of the main current and conserve energy. But because the floodplains are shallower and warmer and full of more nutrients, the salmon grow quicker and are therefore healthier and can survive oceanic conditions better and survive predation.

In addition to that, the floodplains also show to help improve native vegetation and reduce some of the exotic invasives, and also boost and improve nutrients for farming.

So we think it's good all around. And we want to continue working with you to ensure we have a plan that not only protects fish and wildlife and fishing opportunities, but protects farms and protects people and lives.

Thank you for this opportunity to comment.

PRESIDENT EDGAR: Thank you.

;

Trout Unlimited, Dave Stalling (Public Hearing, April 9, 2012)

Response

T_TU4-01

The comment introduces the commenter and his organization, Trout Unlimited, and expresses opinions about the value of widened floodplains for salmon and steelhead fisheries. As stated in Master Response 1, the existing bypass system in the Sacramento River Basin (including the Sutter and Yolo bypasses and associated inflow weirs) forms the central backbone of the Sacramento River Flood Control Project and redirects damaging floodflows away from the main channels of the Sacramento and Feather rivers. The considerable capacity of the bypass system (up to 490,000 cfs) also slows the movement of floods, effectively attenuating flood peaks and flows into the Delta. The existing bypass system also supports a vibrant seasonal agricultural economy and provides important habitat for multiple terrestrial and aquatic species. In the San Joaquin River Basin, the bypass system includes the Chowchilla, Eastside, and Mariposa bypasses.

The Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency. Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass. For additional details, see Master Response 1.

As stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

A portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of levees in rural areas. For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements.

The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable.

In addition to expansion of the bypass system, levee reconstruction, and other elements, the SSIA includes State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans. These easements would be used to preserve agriculture and prevent urban development in current agricultural areas, discouraging conversion to land uses that would increase flood risks within floodplains protected by SPFC facilities. Agricultural conservation easements could be purchased through various DWR programs; an example is DWR's Flood Corridor Program, which focuses on nonstructural flood risk reduction integrated with protection of natural resources and agricultural lands.

The PEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

T_USFWS1

T_USFWS1-01

MR. WELSH: Good afternoon. My name is Dan Welsh. I'm an assistant field supervisor with the U.S. Fish and Wildlife Service in the Sacramento Fish and Wildlife Office.

Our office is coordinating the Service's input to the Draft Central Valley Flood Protection Plan. I would like to thank the Board for the opportunity to speak today.

T_USFWS1-02

The Service also appreciates the opportunities the Department of Water Resources and the Board have provided to coordinate on the development of the draft plan. We are currently reviewing the public draft plan and we appreciate that many of our previous comments have been incorporated into the plan -- into this draft.

T_USFWS1-03

We also appreciate the opportunity to share with the Board our perspective on aspects of the plan we would like the Board to focus on as the plan proceeds through the adoption process. Specifically, we would like the Board to focus on the sections of the legislation, which require the plan to, one, improve systemwide ecosystem function, and, two, increase and improve the quantity, diversity, and connectivity of riparian, wetland, and flood plan and shaded riverine aquatic habitats.

T_USFWS1-04

We feel the plan could be stronger. The plan could be strengthened by focusing more on ecosystem restoration goals. The plan relies considerably on restoration projects to address potential adverse effects to fish and wildlife species and their habitat. And while mitigating project impacts is necessary, we recommend that the supporting goal of promoting ecosystem functions, also receive attention as the plan is implemented.

Identifying actions to establish connectivity of habitat, improved fish passage, and expand habitat for listed species beyond mitigating for impacts would demonstrate that these are goals the State intends to pursue in conjunction with the primary goal of reducing flood risk.

T_USFWS1-05

We're also concerned with the timing of implementation of ecosystem restoration actions.

Individual flood risk management projects will likely be phased over time, based on funding, creating a lack of assurance that the ecosystem restoration goals will be met. The plan should ensure ecosystem restoration projects and mitigation would occur in conjunction with, or prior to, projects which create adverse effects to species and habitat.

In summary, we believe the plan could be strengthened by increasing the focus on ecosystem restoration goals. The Service appreciates the opportunity to address the Board, and we look forward to continuing to work with DWR and the Board on development of this plan and on the conservation strategy.

T_USFWS1-06

Thank you.

PRESIDENT CARTER: Thank you, Mr. Welsh.

U.S. Fish and Wildlife Service, Dan Welsh, Assistant Field Supervisor (Public Hearing, February 24, 2012)

Response

T_USFWS1-01

The comment introduces the commenter and his professional affiliation. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_USFWS1-02

The comment recognizes the previous opportunities to provide input on the proposed program. The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_USFWS1-03

As stated in Master Response 19, the California Central Valley Flood Protection Act of 2008 (SB 5) defined multiple objectives for the CVFPP, codified in CWC Section 9616, to be achieved wherever feasible. Goals for the CVFPP were collaboratively drafted by DWR, its partners (the Board and USACE), and interested parties through an extensive communications and engagement process, capturing the guidance and objectives provided by CWC Section 9616. As a result of this process, one primary goal and four supporting CVFPP goals (described below) were established and provided guidance in forming specific CVFPP policies and physical elements.

The process used to develop CVFPP goals is described in Section 1.6 of the plan, titled “Formulation of the 2012 Central Valley Flood Protection Plan.” Much of this information is repeated and/or summarized in Section 2.1.2, “Purpose and Objectives of the Proposed Program,” and Section 2.2, “Development of the Proposed Program,” of the DPEIR. Relevant information from those sections is provided below.

The five CVFPP goals were carried forward and became the program objectives of the PEIR, as follows:

Primary Objective:

- *Improve Flood Risk Management*—Reduce the chance of flooding and damages, once flooding occurs, and improve public safety, preparedness, and emergency response through the following:

  – Identifying, recommending, and implementing structural and nonstructural projects and actions that benefit lands currently receiving protection from facilities of the SPFC.

  – Formulating standards, criteria, and guidelines to facilitate implementation of structural and nonstructural actions for protecting urban areas and other lands of the Sacramento and San Joaquin river basins and the Delta.

Supporting Objectives:

- *Improve Operations and Maintenance*—Reduce systemwide maintenance and repair requirements by modifying the flood management systems in ways that are compatible with natural processes, and adjust, coordinate, and streamline regulatory and institutional standards, funding, and practices for operations and maintenance, including significant repairs.

- *Promote Ecosystem Functions*—Integrate the recovery and restoration of key physical processes, self-sustaining ecological functions, native habitats, and species into flood management system improvements.

- *Improve Institutional Support*—Develop stable institutional structures, coordination protocols, and financial frameworks that enable effective and adaptive integrated flood management (designs, operations and maintenance, permitting, preparedness, response, recovery, and land use and development planning).

- *Promote Multi-Benefit Projects*—Describe flood management projects and actions that also contribute to broader integrated water management objectives identified through other programs.

Three additional program objectives were developed for the PEIR and reflect specific direction provided in the authorizing legislation (summarized in Chapter 1.0, "Introduction," of the DPEIR). These statutory objectives are as follows:

Statutory Objectives:

- *Maximize Flood Risk Reduction Benefits within the Practical Constraints of Available Funds*—Ensure that technically feasible and cost-effective solutions are implemented to maximize the flood risk

reduction benefits given the practical limitations of available funding, and provide a feasible, comprehensive, and long-term financing plan for implementing the plan.

- *Adopt the CVFPP by July 1, 2012*—Complete all steps necessary to develop and adopt the CVFPP by July 1, 2012, or such other date as may be provided by the Legislature.

- *Meet Multiple Objectives Established in Section 9616 of the California Water Code, Wherever Feasible:*

  – Reduce the risk to human life, health, and safety from flooding, including protection of public safety infrastructure.

  – Expand the capacity of the flood management system in the Sacramento–San Joaquin Valley to either reduce flood flows or convey floodwaters away from urban areas.

  – Link the flood protection system with the water supply system.

  – Reduce flood risks in currently nonurbanized areas.

  – Increase the engagement of local agencies willing to participate in improving flood protection, ensuring a better connection between State flood protection decisions and local land use decisions.

  – Improve flood protection for urban areas to the urban level of flood protection.

  – Promote natural dynamic hydrologic and geomorphic processes.

  – Reduce damage from flooding.

  – Increase and improve the quantity, diversity, and connectivity of riparian, wetland, floodplain, and shaded riverine aquatic habitats, including the agricultural and ecological values of these lands.

  – Minimize flood management system operations and maintenance requirements.

  – Promote the recovery and stability of native species' populations and overall biotic community diversity.

  – Identify opportunities and incentives for expanding or increasing use of floodway corridors.

- Provide a feasible, comprehensive, and long-term financing plan for implementing the CVFPP.

- Identify opportunities for reservoir reoperation in conjunction with groundwater flood storage.

For additional details, see Master Response 19. The SSIA is a responsible and balanced investment approach to achieve the objectives listed above.

As stated in Master Response 7, the SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework.

Appendix E, “2012 Central Valley Flood Protection Plan Conservation Framework,” provides a preview of a long-term Conservation Strategy that DWR is developing to support the 2017 CVFPP Update. The Conservation Framework focuses on promoting ecosystem functions and multi-benefit projects in the context of integrated flood management for near-term implementation actions and projects. The Conservation Framework provides an overview of the floodway ecosystem conditions and trends and key conservation goals that further clarify the CVFPP’s ecosystem goal. For additional details, see Master Response 7.

T_USFWS1-04

See response to comment T_USFWS1-03. The comment suggests that the CVFPP provide ecosystem restoration and other ecological benefits beyond the minimum required for mitigation. This is a policy suggestion that goes beyond the mitigation requirements of CEQA and the concepts of mitigation nexus and proportionality described in CEQA Guidelines Section 15041(a). The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_USFWS1-05

As stated in Section 4.6.2 of the CVFPP:

> Phasing of system improvements will help accommodate the timing of project planning, design, land acquisition, partnering, etc., as well as funding availability. Implementation phasing is not, however, intended to expedite implementation of some SSIA elements at the expense of other elements. Progress will be made with implementation of all elements during each phase of program implementation.

The ecosystem restoration elements of the CVFPP do not preclude any individual CVFPP projects from compliance with CEQA, the California and federal ESA, and other applicable environmental laws. If an individual project is legally required to mitigate for impacts on endangered species or other protected biological resources, the implementation of the mitigation would be required regardless of the status of ecosystem restoration efforts related to the CVFPP. The timing of implementation of that mitigation would be based on the terms of the environmental authorizations obtained for the project. However, if ecosystem restoration efforts prior to implementation of the individual project, in effect, provided "mitigation credits," those "credits" could potentially be used as mitigation for the individual project.

As stated above in response to comment T_USFWS1-04, the concept of ecosystem restoration efforts exceeding mitigation requirements is a policy issue and outside the CEQA process. However, the DPEIR specifically addresses ecosystem restoration efforts as potential mitigation in Mitigation Measure BIO-A-2b (NTMA), "Ensure Full Compensation for Losses of Riparian Habitat Functions and Values Caused by Implementing the Vegetation Management Strategy Along Levees." If ecosystem restoration is to be used as mitigation for habitat impacts resulting from implementation of the LCM element of the CVFPP VMS, Mitigation Measure BIO-A-2b (NTMA) specifically requires that the mitigating

ecosystem restoration activities be complete before the vegetation management impacts occur.

T_USFWS1-06

See responses to comments T_USFWS1-03, T_USFWS1-04, and T_USFWS1-05, above.

T_WARD1-01

MR. WARD: Thank you. My name is Lauren Ward. I do business as Ward Farms. I own land adjacent to the Cherokee Canal, and clearly I'm not excited about owning land in a bypass, but that's not what I want to talk about.

I am concerned that the plan that you have before you has not given the Board sufficient financial information to let you make a decision about the allocation of resources that you're being asked to make. So I took the plan and I did a financial analysis of the four options that are presented, and I have copies of that analysis that are here for today, which I will -- can I hand these out.

PRESIDENT EDGAR: Just give them to the clerk, please. No, her.

MR. WARD: You can hand them out now, if you would, please.

And I'm going to refer you to the third page of that analysis, which gives you a spreadsheet and shows you the financial effects of the four options that you have been presented.

I want to talk about just two of those options, because there's no need to run through anyone other than the one that's been recommended, which is the systemwide investment or the least expensive option, which is

protected high risk communities.

The mid-point of the cost range on the State Systemwide Investment Approach is 15 and a half billion dollars. And that is projected to save annually $220 million in flood damages. But, of course, that does not take into account the interest cost on the monies that would be necessary to spend that 15 and a half billion nor does it take into account any of the operations and maintenance costs to the system.

Two years ago, the State sold bonds at 3.6 percent. So if I use that same 3.6 percent on 15 and a half billion dollars, the annual interest charge that the State taxpayers would have to bear is $558 million under the systemwide approach. And in exchange for that, they would save $220 million. So the State would suffer a net loss of $338 million, if you are to adopt this option.

If I look at the least expensive option, which is protect high risk communities, we spend five and a half billion dollars less. The mid-point of the range being $10 billion. The projected savings are 207 million, which is almost the same as under the systemwide approach. The interest is considerably lower. It's only 360 million. And the loss is considerably less, it's only 153 million.

Now, this information should have been presented to you in the report that you were given, because it's

necessary. You're being asked to allocate the resources of the State of California. What this analysis shows, quite simply, ladies and gentlemen, is that this plan is neither financially feasible for the State of California nor is it fiscally responsible.

T_WARD1-02 Second point I want to make is that there's been a lot of discussion about environmental benefits from this proposal. And I happen to be a strong environmentalist and have worked very hard to create a lot of wildlife refuges in this State. If we were to spend $10,000 acre for prime rice ground, and we wanted to save 10,000 acres of habitat, which is what these plans -- this recommended plan proposes, it would cost $100 million. It should not be part of your thinking that you're going to spend 15 and a half billion dollars for something that we could achieve for $100 million. And if we did do it that way, we could buy habitat that the Department of Fish and Game wants in locations that they want from willing sellers and do considerably less damage.

So I would encourage you, as you look at the conceptual plans before you, to take into account what the fiscal effects are. We're not going to get this money free the Feds. The federal government requires 1 to 1 benefit ratio. The benefits that are set forth in those plans in no way will justify us obtaining funds from the

federal government to do this. You're going to have to raise bond money to do this. And, quite frankly, I don't think the citizens of California are going to vote for a plan that shows the losses that this plan shows.

Thank you very much.

(Applause.)

PRESIDENT EDGAR: Thank you, Mr. Ward.

Lauren Ward
Handout @ Woodland Hearing

Index No. 193

T_WARD1-03 The following comments are applicable to the DPEIR and the Draft 2012 Central Valley Flood Protection Plan:

Statutory Objectives: The Executive Summary of the 2012 Central Valley Flood Protection Plan Draft Environmental Impact Report sets forth the Statutory Objectives to be met on pages ES 13 and ES 14. These include:

"Ensure that technically feasible and cost-effective solutions are implemented to maximize the flood risk reduction benefits given the practical limitations of available funding, and provide a feasible, comprehensive, and long-term financing plan for implementing the plan." (Page ES 13)

Statutory Objectives Not Met: Neither the DPEIR nor the Draft Plan meet these statutory objectives. In fact, there is no financial analysis of the four options contained in either of the documents nor is any financing plan presented. Various, but not all, components of the estimated cost and savings of the various options are sprinkled throughout the Draft Plan but no comprehensive analysis of costs and benefits is made. More significantly, no estimates of Operations and Maintenance expenses are provided, making it impossible to compare the respective options and allocate resources among them.

The only references to financing are 34 lines of text found on pages 2-50 and 2-51 of the DPEIR and pages 4-36 through 4-40 of the Draft Plan. These sections refer generally to hopes for Federal grants, local district cost-sharing, and State bond funds but they do not meet the statutory objectives. The comprehensiveness of these sections might best be described by the colloquialism about an old fellow who is "fixing to get ready to get started to get going".

Financial Analysis: Using the data presented in the Draft Plan and ignoring the absence of Operations and Maintenance expenses,,following is a financial analysis of the four options presented. It shows that:

1. All of the four options presented have an interest cost each year (from $360 million to $1.314 billion) that exceeds 100% of the annual projected flood losses of $329 million per year if no project is undertaken.

2. The plan omits all operating and maintenance costs for any of the options, thus understating the cost of each option.

3. None of the options presented can be described as financially feasible.

(Continued on next page)

Financial Analysis of Four Options

Option	Protect High Risk Communities	State Systemwide Investment Approach
Estimated Capital Cost	$9-11 Billion	$14-17 Billion
Mid Point of Est Cost	$10 Billion	$15.5 Billion
Estimated reduction in Expected annual damages of $329	63%	67%
Million if no project	$207 Million	$220 Million
Interest on Capital Invested at 3.6%	$360 Million	$558 Million
Net Annual Loss Before Operations and Maintenance	$153 Million	$338 Million

Option	Achieve SFPC Design Capability	Enhance Flood System Capacity
Estimated Capital Cost	$19-23 Billion	$32-41 Billion
Mid Point of Est Cost	$21 Billion	$36.5 Billion
Estimated Reduction in Expected annual damages of $329	47%	80%
Million if no project	$155 Million	$263 Million
Interest on Capital Invested at 3.6%	$756 Million	$1.314 Billion
Net Annual Loss Before Operations and Maintenance	$601 Million	$1.051 Billion

From the above tables it can be seen that:

All of the options have an annual interest cost greater than 100% of the projected annual flood damage costs of $329 Million. Expressed another way, it would be cheaper for the State of California to compensate the victims of flooding for 100% of their losses than to undertake any of the four options presented.

Because DWR has not presented any estimate of Operations and Maintenance Costs, the true burden to the State from undertaking any of the options is even greater than shown here.

Federal Cost Sharing?

Both the DPEIR and the Draft Plan discuss the hope that Federal cost sharing will be available for nearly half the project. Yet on page 1-19 of the Draft Plan we find the

statement: *"Primarily in order to demonstrate a federal interest, flood damage reduction benefits of a project must exceed project costs. In other words, the benefit-to-cost ratio must be greater than one. To be recommended for funding in the President's budget, a more robust benefit-to-cost ratio is generally required."*

Ignoring the Operations and Maintenance Costs which have been omitted and the interest cost on borrowed funds , and dividing the annual estimated savings into the projected capital investment, the number of years required to reach a 1:1 benefits-to-costs ratio for each of the options is:

Option	Cost / Savings in Years
Protect High Risk Communities	48.3 years
State Systemwide Investment Approach	70.5 years
Achieve SFPC Design Capability	135.5 years
Enhance Flood System Capacity	138.8 years

Even in the Federal world, these payback periods could not be considered to meet a 1:1 Costs-to-Benefits ratio.

And Please Note: Because the calculations above do not include any Operations and Maintenance Costs, the number of years required to reach a 1:1 cost-to-benefits ratio is much longer for all options.

Please Also Note: The first two options compared, "Protect High Risk Communities" and "State Systemwide Investment Approach" are projected to save nearly the same amount, $207 Million vs $220 Million respectively, yet the State Systemwide Investment Approach is projected to cost $5.5 Billion more. The number of years required to earn that extra $13 Million back is 423 years! Viewed another way, drop 8 zeros from the estimated cost and savings and the incremental investment in the Systemwide option is akin to spending $55 to save 13 cents.

If the Department has been charged with proposing financially feasible alternatives, the Systemwide approach must have missed that stage of the vetting.

T_WARD1-04

Absence of Storage

While the DPEIR acknowledges that climate models forecast less Sierra snowpack and earlier runoff, the Draft Plan is deficient in not providing for increased storage to mitigate flooding and, more importantly, provide water for California's needs.

T_WARD1-05

Wildlife Habitat

The recommended Systemwide approach contemplates permanent removal from production of 10,000 acres of prime farmland, justified in part by the assertion this will become wildlife habitat. However by including this land in bypasses which must be maintained to minimize obstruction to flood flows, the quality of this habitat will be severely degraded.

At a cost of $10,000 per acre DFG could purchase 10,000 acres of habitat it wants at a total cost of $100 million. The Draft Flood Plan should not be used as an excuse to spend $ billions to accomplish an objective that can be accomplished much more cheaply.

T_WARD1-06

Public Response

The Flood Board has been repeatedly told by the various components of the responding public that:

1. No removal of prime farmland should be made.
2. No removal of land from county tax rolls is wanted.
3. Bypass expansion is not wanted.
4. Flood control is wanted.
5. More storage is wanted.
6. Wildlife habitat and riparian corridor protection is desirable.
7. Financial feasibility must be considered.

T_WARD1-07

Alternative Proposal

To meet the requests of the responding public, the following alternative plan is offered:

Flood Control. Adopt the option "Protect High Risk Communities". This will provide virtually the same measure of flood protection ($207 million vs $220 million) as the Systemwide approach at a cost $5.5 Billion less than. While it does not meet the financial feasibility test, it is the least financially offensive of the options presented.

Increase Storage. Spend $4 Billion on increasing storage on the Sacramento, Feather, and San Joaquin river systems.

Proposals already exist to raise Shasta Dam by 18.5 feet at a projected cost just over $1 Billion. Such a raise is projected to increase storage by 14% or 630,000 acre feet. At a value of $100/acre foot, this water is worth $63 Million to the State in addition to its value for hydro power generation and flood control mitigation. There are also proposals to raise Shasta Dam by more than 18.5 feet, some by as much as 35 feet, which should be studied.

Increase storage on the Feather River system by raising the Oroville Dam and/or increasing storage in the Forebay and Afterbay. Again, three values are derived from increased storage -- water value, hydro power generation, and flood control mitigation. Allocate $1 Billion to the Feather River system subject to further DWR studies.

Allocate $2 Billion for increasing storage south of the Delta. The greatest need for water is south of the Delta and more storage in this part of the state reduces the problems associated with moving water through the Delta.

Purchase easements on lands in the Central Valley Flood Plain. Acquire $1 billion of non-development easements on lands within the 200 year flood plain. These easements would permit farming to continue, would leave the land in private ownership and on the tax rolls, and would prohibit development which does not provide its own protection – at its own cost - against a 200 year flood.

Allocate $1 billion for riparian restoration and public recreation in the Central Valley. Restore riparian habitat on the Sacramento, Feather, Yuba, American, and San Joaquin river systems. Acquire public access facilities and public recreation lands within the river corridors.

The total projected cost for these proposals is $16 billion or roughly the same as the Systemwide approach and it addresses four pressing needs: more water storage, more public recreation facilities, improved wildlife habitat, and flood protection. As the stored water and recreation have positive values, it also may meet the statutory financial feasibility requirement.

s/Lauren Ward

4/11/12

Lauren Ward (Public Hearing, April 6, 2012)

Response

T_WARD1-01

As stated in Master Response 9, the SSIA was formulated by assembling the most promising, affordable, and timely elements of the three preliminary approaches to best meet legislative requirements and identified CVFPP goals. The SSIA reflects a balanced and fiscally responsible approach, which will be developed further as DWR completes more detailed studies and designs for site-specific capital improvements and develops other, systemwide flood improvement projects. The Central Valley Flood Protection Act of 2008 (SB 5) requires a systemwide approach for developing the CVFPP (CWC Section 9603) and requires inclusion of multiple benefits, where feasible (CWC Section 9616). Not all potential SSIA benefits have been detailed or quantified (e.g., avoided damage to infrastructure and/or life loss, ecosystem restoration), and the planning-level cost estimates remain preliminary; therefore, it is inappropriate to analyze the benefit-cost ratio using information contained in the high-level 2012 CVFPP. During post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, and development of a financing plan for the CVFPP), DWR will refine the physical elements of the CVFPP and confirm their feasibility, including the costs and benefits of site-specific improvements.

Beginning in the 1850s, flood facilities were built in increments over many decades through the individual and combined efforts of local, State, and federal agencies. The facilities were constructed with the materials at hand over many decades, following evolving design standards and construction techniques. As a result, these flood management facilities provide varying levels of protection, depending on when and how they were constructed and upgraded. Constructing these facilities has also resulted in the loss of natural floodplain habitats, including wetlands.

Construction of the Central Valley's flood management facilities was originally driven by the need to defend the developing valley floor against periodic floods while maintaining navigable channels for commerce. Over time, some facilities have become obsolete or have nearly exceeded their expected service lives, and they are in need of major modification or repair. Further, facilities originally constructed primarily for navigation, sediment transport, and flood management are now also recognized as important for water supply conveyance, ecosystem functions, recreation, and other beneficial uses.

Today, the SPFC must contend with a lack of stable funding and with concerns like deferred maintenance, changes to regulations and societal priorities, dated construction techniques, and imprudent development in deep floodplains, leaving almost a million people at risk. To address these challenges, and to meet legislative direction for a systemwide approach that focuses on public safety and promotes multi-benefit projects, DWR formulated the SSIA, with a preliminary cost estimated between $14 billion and $17 billion. The high cost of the SSIA reflects the costly nature of providing flood protection in the Central Valley's deep floodplains and the current conditions of the SPFC facilities, as described in the *Flood Control System Status Report* (DWR 2011).

Specific project features ultimately implemented for the SSIA will depend on a host of factors. These factors include the results of detailed project feasibility studies; designs and cost estimates; environmental benefits and impacts; interaction with other local projects and system improvements; participation by local, State, and federal agencies in project implementation; and changing physical, institutional, and economic conditions. Costs presented in the 2012 CVFPP are preliminary planning-level estimates. The actual costs of these elements will depend on the specific projects that are justified by feasibility studies, project scopes, implementation times, future economic and contractor-bidding conditions, and many other factors. Funding sources for SSIA projects will vary according to factors such as the type of project or program, beneficiaries, availability of funds, and project or program urgency. Cost-sharing among State, federal, and local agencies may also change depending on project objectives and agency interests. Post-adoption activities (regional flood management planning, development of basin-wide feasibility studies, and development of a financing plan for the CVFPP) will further develop and refine additional project-specific details on cost, feasibility, funding, cost sharing, and local capacity to pay.

Currently available bond funding is insufficient to fully implement the recommended SSIA as a whole. After adoption of the CVFPP in 2012, DWR will prepare a framework for financing projects at a regional level. DWR will use the information gathered during preparation of the framework to prepare the financing plan for the CVFPP that will guide investment in flood-risk management in the Central Valley during the next 20 years (CWC Section 9616(a)(13)). The financing plan will be available in 2013, after adoption of the 2012 CVFPP. The financing plan is critical to implementation, given the uncertainty regarding State, federal, and local agencies' budgets and cost-sharing capabilities. The financing plan may include legislative actions to establish reliable funding for continued implementation of the SSIA in its totality to benefit the entire Central

Valley and state of California. For additional details, see Master Response 9.

As stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA "alternatives" for further evaluation in two basin-wide feasibility studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management

activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For further details, see Master Response 15.

T_WARD1-02

This comment is similar to comment T_WARD1-01. See response to comment T_WARD1-01, above.

Additionally, as stated in Master Response 4, in recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments would vary from region to region depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, all areas protected by the SPFC would receive flood risk management benefits from fully implementing the SSIA. Further, the State places a priority on flood management improvement projects that provide multiple benefits to support broad State interests and expand cost-sharing opportunities.

Cost-sharing rules are governed by federal and State laws, regulations, and policies, which have continued to evolve over time. CWC Section 12585.7 identifies the State cost-share of nonfederal capital costs for flood

management projects. The State normally pays 50 percent of the nonfederal cost-share, but will pay up to 20 percent more (for a maximum of 70 percent of the nonfederal cost-share) if the project makes significant contributions to other State interests and objectives (e.g., the ecosystem, recreation, open space, protection for disadvantaged communities, and protection for transportation and water supply facilities).

The 2012 CVFPP includes an estimate of potential cost-sharing by State, federal, and local entities for the SSIA, developed to assist with CVFPP development and analysis. However, cost-sharing for implementation of the SSIA will be refined during feasibility studies and project implementation as additional project-level information is gathered and the interests of the partnering agencies in elements of the SSIA are identified. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, and development of a financing plan for the CVFPP) will address cost-sharing and local capacity to pay.

The CVFPP does not provide funding assurances for any specific project or improvement element, and current bond funding is not sufficient to fully implement the SSIA. A financing plan will be prepared as part of the post-adoption activities (CWC Section 9620(c)). For additional details, see Master Response 4.

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during

post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework. For additional details, see Master Response 7.

T_WARD1-03

This comment is similar to comment T_WARD1-01. See response to comment T_WARD1-01, above.

T_WARD1-04

As stated in Master Response 10, in developing the CVFPP and formulating the SSIA, DWR considered various forms of storage for flood management, including operational changes to existing reservoirs with flood storage, new or expanded flood storage in reservoirs, and storage in floodplains. Specifically, one of the preliminary approaches—Enhance Flood System Capacity—included enlarging the flood storage allocation of several multipurpose reservoirs to improve management of flood risks on lands protected by the SPFC. This evaluation found potential benefits from and opportunities for reservoir flood storage and operational changes, such as improving flexibility in managing hydrologic changes (such as climate change) and potentially offsetting the hydraulic effects of certain system improvements on downstream reaches. At the same time, these analyses addressed both the physical limitations of these opportunities and the potential negative effects of increasing flood-storage allocations on water supply and other beneficial uses. The analyses of reservoir storage and flood operations that were conducted in support of the 2012 CVFPP are described in Attachment 8B in Appendix A, "Central Valley Flood Protection Plan."

Storage elements ultimately retained in the SSIA are based on preliminary systemwide analyses conducted for the 2012 CVFPP, legislative direction for the CVFPP, and the findings of prior and ongoing studies. Among those studies are ongoing surface storage investigations and prior local, State, and federal studies such as the Shasta Lake Water Resources Investigation, North-of-the-Delta Offstream Storage (Sites Reservoir), In-Delta Storage Program, Los Vaqueros Reservoir Expansion, and Upper San Joaquin River Basin Storage Investigation (Temperance Flat Reservoir). However, no new site-specific investigations of surface storage were included in the systemwide analyses conducted to support the 2012 CVFPP.

In the 2012 CVFPP, the SSIA includes coordinated reservoir operations aimed at making the most efficient and effective use of current flood storage allocations in existing reservoirs, and implementation of the authorized Folsom Dam Raise (see Section 3.5.4 of the CVFPP). These SSIA storage elements appropriately reflect the conceptual level of detail and systemwide focus of the 2012 CVFPP, without precluding future consideration of new or expanded storage by the State or local agencies. At this time, the SSIA does not include new reservoirs or expansion of storage (other than at Folsom Dam) solely for the purpose of flood management; however, DWR will continue to consider flood management in the context of, and as an objective of, its ongoing multi-benefit surface storage investigations and systemwide reoperation studies. Should these State investigations or other related efforts by local or federal agencies identify flood management as a component of a feasible reservoir storage project, this may be reflected in future updates to the CVFPP.

Ongoing investigations are being conducted to determine the feasibility of surface storage and consider potential environmental effects. The analyses included in these surface storage studies are more detailed than those conducted at a systemwide scale for the 2012 CVFPP. Consequently, these studies are developing more comprehensive information about the potential costs and benefits of site-specific increases in flood storage.

DWR recognizes the importance of developing additional water storage capacity in California to support an increasing population, to help compensate for the anticipated loss of snowpack storage as a result of climate change, and to maintain the important role of Central Valley agriculture for the nation and the world. For these reasons, multipurpose reservoir projects will likely continue to be proposed and, if successful, may help to meet needs for flood storage capacity. For additional details, see Master Response 10.

T_WARD1-05

This comment is similar to comment T_WARD1-01. See response to comment T_WARD1-01, above.

Additionally, as stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

A portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of levees in rural areas. For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements.

The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed

land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable. For additional details, see Master Response 2.

As stated in Master Response 1, the PEIR recognizes that converting current land uses (particularly agricultural uses) to bypass and related uses (such as habitat and recreation) would result in potentially significant and unavoidable impacts, particularly on agriculture, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 1.

T_WARD1-06

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

Anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the

conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_WARD1-07

As stated in Master Response 24, the DPEIR evaluated a reasonable range of alternatives (seven were considered and five received full analysis, and a sixth alternative is included in the FPEIR for the non-CEQA purpose of helping support a future vegetation variance application to USACE) (see

Chapter 5.0, "Alternatives"). The DPEIR explained how additional alternatives were screened and the basis for eliminating some alternatives from more detailed consideration. The scope of the alternatives analysis in the DPEIR was sufficient to "foster informed decision making and public participation." Attachment 7, "Plan Formulation Report," in CVFPP Volume II provides additional information regarding the foundational development of alternatives presented in the DPEIR.

Several commenters specifically requested analysis of an alternative that includes the expansion or construction of new upstream reservoirs. Potential development of upstream storage facilities does not offer a feasible alternative to floodplain conveyance and/or storage in relation to the CVFPP. As a result, CEQA does not require that such an alternative be included. For additional details, see Master Response 24.

As stated in Master Response 10, ongoing investigations are being conducted to determine the feasibility of surface storage and consider potential environmental effects. The analyses included in these surface-storage studies are more detailed than those conducted at a systemwide scale for the 2012 CVFPP. Consequently, these studies are developing more comprehensive information about the potential costs and benefits of site-specific increases in flood storage.

Some specific examples of ongoing multipurpose surface-storage investigations and related investigations that are examining the feasibility of adding new flood storage are listed below.

- **Upper San Joaquin River Basin Storage Investigation**—An evaluation of increasing storage in Millerton Reservoir or building a new multipurpose reservoir upstream, such as Temperance Flat Reservoir. The current formulation includes an additional storage allocation for flood management.

- **North-of-Delta Offstream Storage Investigation**—An evaluation of building a new offstream reservoir in the Sacramento River Basin west of the Sacramento River, also known as Sites Reservoir. Flood management benefits may be possible by coordinating storage operations with other multipurpose reservoirs, such as Shasta Dam and Reservoir.

- **Shasta Lake Water Resources Investigation**—An evaluation of raising Shasta Dam for multiple purposes. The formulation considered an additional allocation for flood storage as well as operational changes, but these options are not being carried forward.

Analyses for the 2012 CVFPP and for previous and ongoing studies (such as Reclamation's Shasta Lake Water Resources Investigation) have found that increasing flood storage in Shasta Dam and Reservoir would not significantly reduce flood risks for lands protected by the SPFC, for several reasons. Shasta Reservoir has a sizeable flood-storage allocation capable of managing a 1 percent chance (100-year) flood from its tributary watershed; consequently, the dam and reservoir are already regulating floodflows adequately for all but the most severe and infrequent floods. More importantly, other uncontrolled tributaries (those not regulated by reservoirs) downstream from Shasta Dam, such as Cottonwood Creek, contribute peak flood flows along reaches of the Sacramento River with SPFC levees that exceed the flood releases from Shasta Dam. Additional storage in Shasta Dam and Reservoir would not address the significant flood flows produced by these unregulated tributaries. Previous studies by USACE and others have indicated that a new flood management reservoir on Cottonwood Creek would conflict with goals for watershed management and environmental restoration in the Cottonwood Creek watershed, and would have significant environmental effects. This example indicates that increased storage capacity may not always result in meaningful flood-management benefits, and that increased storage may not be feasible in locations where it is most needed.

As stated in Master Response 2, in addition to expansion of the bypass system, levee reconstruction, and other elements, the SSIA includes State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans. These easements would be used to preserve agriculture and prevent urban development in current agricultural areas, discouraging conversion to land uses that would increase flood risks within floodplains protected by SPFC facilities. Agricultural conservation easements could be purchased through various DWR programs; an example is DWR's Flood Corridor Program, which focuses on nonstructural flood risk reduction integrated with protection of natural resources and agricultural lands. For additional details, see Master Response 2.

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and

(3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important SRA habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework.

Appendix E, "2012 Central Valley Flood Protection Plan Conservation Framework," provides a preview of a long-term Conservation Strategy that DWR is developing to support the 2017 CVFPP Update. The Conservation Framework focuses on promoting ecosystem functions and multi-benefit projects in the context of integrated flood management for near-term implementation actions and projects. The Conservation Framework provides an overview of the floodway ecosystem conditions and trends and key conservation goals that further clarify the CVFPP's ecosystem goal.

The Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to include multiple objectives, where feasible, when proposing improvements to flood management facilities, including opportunities and incentives for expanding or increasing the use of floodway corridors (CWC Section 9616(a)(12)). The potential for recreational use of the flood control system has long been recognized. The SSIA involves floodplain reconnection and floodway expansion, which would improve ecosystem functions, fish passage, and the quantity, quality, and diversity of natural habitats, all of which would contribute to an increase in recreation opportunities and augment the aesthetic values of those areas. Expanding habitat areas would increase opportunities for fishing, hunting, and wildlife viewing. Recreation-related spending associated with increased use by visitors can be an important contributor to local and regional economies. During post-adoption activities (regional flood management planning and development of basin-wide feasibility studies), DWR will work with local and regional implementing agencies and partners to refine CVFPP

elements, including developing additional details on site-specific recreation features as part of multi-benefit projects. For additional details, see Master Response 7.

See also response to comment T_WARD1-01.

T_WARD2-01 MR. WARD: Thank you. I have a handout, and I would direct, any of you that want to look at it, to page four. The middle page four it's an alternate proposal. That's what I'd like to talk about.

My name is Lauren Ward. I'm a landowner in Butte County actually, and I've attended a meeting in Richvale and a meeting in Marysville on this subject. And I'd like to speak specifically to Mr. Edgar's request for recommendations as to steps that you could be taking.

As a Board, you've heard a lot of different things from people, but I summarize them as saying that people have said to you that they do not want a removal of prime farm land from production, the counties don't want a removal of land from the county tax rolls, bypass expansion is not wanted, more storage is wanted, wildlife habitat or riparian corridor protection are important, and finally, financial feasibility needs to be addressed.

So I've thought about what is a constructive way that you can deal with these conflicts, and I have an

alternative proposal to put forth to you. First of all, under the subject of flood control, I recommend that you adopt the protect high risk communities option. That's a $10 billion option.

If you look at the savings to be derived from that, they're almost exactly the same savings as are projected under the systemwide alternative. It's $207 million versus $220 million. And since we're dealing with rough estimates over many, many years, those are essentially the same proposals financially, except that the systemwide approach spends another five and a half billion dollars to get $13 million of projected savings, payback, by the way, of 423 years.

So I suggest that you adopt the protect high risk communities. I don't -- I haven't heard anyone object to the idea of getting increased flood control. It's not a protection item that anybody has objected to.

T_WARD2-02 Secondly, spend $4 billion on increased storage, but don't spend it on downstream storage. The only thing that's accomplished with downstream storage, besides the destruction that you've heard about, is that after the flood event is passed, that water is released to the ocean. If you spend $4 billion on upstream storage, let's take the Shasta Dam, for example, which the estimates to raise it 18 and a half feet, according to the federal

government, are $1 billion, you'll pick up 630,000 acre feet of storage.

Now, I don't know how we value that, but I know what people are paying for water right now to move it down to the San Joaquin Valley, and that water is worth at least $100 an acre foot. So you'll pick up $63 million worth of water when you do that, and you will also have more water available for power generation and more importantly you'll have water that's in storage, and therefore you will mitigate downstream flooding.

Spend another billion dollars in the Feather River system, increase the height of the Oroville Dam, increase the storage in the forebay and the afterbay, go to the upstream reservoirs that fill the Feather River system and spend the money up there. That will do us some good.

Spend $2 billion south of the Delta, for increased storage. We know how difficult it is to move water through the Delta. We know that the greatest needs for water are in southern California and the San Joaquin Valley, so we should be focusing our efforts in the areas where the water is most critically needed.

T_WARD2-03 Purchase easements, development easements, or more specifically non-development easements, on lands in the Central Valley floodplain. The old adage when you're

in a hole, the first thing to do is to stop digging is applicable here. Part of the reason that you're faced with these problems is because development has been allowed in those floodplains. So let's put a halt to it.

If people want to continue to develop out there after we've bought the easements, that's their privilege, but people should only be allowed to develop if they are willing to spend the money themselves to protect that development against the 200-year flood.

T_WARD2-04 And finally, spend a billion dollars for riparian corridor restoration and protection. We need more public recreation in the valley. There's considerable value to that. We all agree that we need to protect the habitat for fisheries and our wildlife. And we know that our rivers and streams have been badly degraded. So take a billion dollars and spend it that way.

T_WARD2-05 If you add all that up, you get $16 billion. The systemwide alternative that's been put forth for you projects spending something like 14 to 17 billion dollars. So I have proposed something that fits within the framework of what you're currently looking at. The difference is, particularly with a focus on upstream storage, you will add value to the system by doing this, instead of simply spending money, getting rid of water that we really need to save.

Thank you very much.

PRESIDENT EDGAR: Thank you very much, and thanks for putting your time into that. That was very helpful.

Lauren Ward (Public Hearing, April 11, 2012)

Response

T_WARD2-01

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP. For additional details, see Master Response 13.

As stated in Master Response 9, the SSIA was formulated by assembling the most promising, affordable, and timely elements of the three preliminary approaches to best meet legislative requirements and identified CVFPP goals. The SSIA reflects a balanced and fiscally responsible approach, which will be developed further as DWR completes more detailed studies and designs for site-specific capital improvements and develops other, systemwide flood improvement projects. The Central Valley Flood Protection Act of 2008 (SB 5) requires a systemwide approach for developing the CVFPP (CWC Section 9603) and requires inclusion of multiple benefits, where feasible (CWC Section 9616). Not all potential SSIA benefits have been detailed or quantified (e.g., avoided damage to infrastructure and/or life loss, ecosystem restoration), and the planning-level cost estimates remain preliminary; therefore, it is inappropriate to analyze the benefit-cost ratio using information contained in the high-level 2012 CVFPP. During post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, and development of a financing plan for the CVFPP), DWR will refine the physical elements of the CVFPP and confirm their feasibility, including the costs and benefits of site-specific improvements. For additional details, see Master Response 9.

As stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood

protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning. For additional details, see Master Response 15.

As stated in Master Response 24, CEQA requires that an EIR, in addition to analyzing the environmental effects of a proposed project, consider and analyze project alternatives that would reduce adverse environmental impacts (PRC Section 21061; *CALFED Proceedings* at 1143, 1163).

Section 15126.6 of the CEQA Guidelines indicates that an EIR must "describe a range of reasonable alternatives to the project ... which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. ..." An EIR need not consider every conceivable alternative to a project or alternatives that are infeasible. (*Id*.; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 574 (*Goleta*).) "In determining the nature and scope of alternatives to be examined in an EIR, the Legislature has decreed that local agencies shall be guided by the doctrine of 'feasibility.' " *Id*. at 565. CEQA defines "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." (PRC Section 21061.1; see also CEQA Guidelines Section 15364.)

"There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason." CEQA Guidelines Section 15126.6(a). The rule of reason "requires the EIR to set forth only those alternatives necessary to permit a reasoned choice" and to "examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project." CEQA Guidelines Section 15126.6(f). An EIR does not have to consider alternatives "whose effect cannot be reasonably ascertained and whose implementation is remote and

speculative." CEQA Guidelines Section 15126.6(f)(3). Further, "an EIR need not study in detail an alternative that is infeasible or that the lead agency has reasonably determined cannot achieve the project's underlying fundamental purpose." *CALFED Proceedings*, *supra*, at 1165 (citing and quoting Goleta, supra, at 574 ("a project alternative which cannot be feasibly accomplished need not be extensively considered").) Further, "a lead agency may structure its EIR alternative analysis around a reasonable definition of underlying purpose and need not study alternatives that cannot achieve that basic goal." *CALFED Proceedings*, *supra*, at 1166.

The DPEIR evaluated a reasonable range of alternatives (seven were considered and five received full analysis, and a sixth alternative is included in the FPEIR for the non-CEQA purpose of helping support a future vegetation variance application to USACE) (see Chapter 5.0, "Alternatives"). The DPEIR explained how additional alternatives were screened and the basis for eliminating some alternatives from more detailed consideration. The scope of the alternatives analysis in the DPEIR was sufficient to "foster informed decision making and public participation." Attachment 7, "Plan Formulation Report," in CVFPP Volume II provides additional information regarding the foundational development of alternatives presented in the DPEIR.

Several commenters specifically requested analysis of an alternative that includes the expansion or construction of new upstream reservoirs. As stated in Master Response 10, above, potential development of upstream storage facilities does not offer a feasible alternative to floodplain conveyance and/or storage in relation to the CVFPP. As a result, CEQA does not require that such an alternative be included. For additional details, see Master Response 10.

Commenters also broadly criticized the level of detail in the analysis of the alternatives, without identifying specific information considered to have been inappropriately omitted. A review of the 142-page alternatives analysis in the DPEIR demonstrates that the alternatives were adequately described and the potential environmental impacts comprehensively analyzed. The standard articulated in the CEQA Guidelines and case law has been more than satisfied. For additional details, see Master Response 24.

T_WARD2-02

This comment is partially responded to by response to comment T_WARD2-01, above.

Additionally, as stated in Master Response 10, ongoing investigations are being conducted to determine the feasibility of surface storage and consider

potential environmental effects. The analyses included in these surface-storage studies are more detailed than those conducted at a systemwide scale for the 2012 CVFPP. Consequently, these studies are developing more comprehensive information about the potential costs and benefits of site-specific increases in flood storage.

Some specific examples of ongoing multipurpose surface-storage investigations and related investigations in the Sacramento Valley that are examining the feasibility of adding new flood storage are listed below.

- **North-of-Delta Offstream Storage Investigation**—An evaluation of building a new offstream reservoir in the Sacramento River Basin west of the Sacramento River, also known as Sites Reservoir. Flood management benefits may be possible by coordinating storage operations with other multipurpose reservoirs, such as Shasta Dam and Reservoir.

- **Shasta Lake Water Resources Investigation**—An evaluation of raising Shasta Dam for multiple purposes. The formulation considered an additional allocation for flood storage as well as operational changes, but these options are not being carried forward.

Analyses for the 2012 CVFPP and for previous and ongoing studies (such as Reclamation's Shasta Lake Water Resources Investigation) have found that increasing flood storage in Shasta Dam and Reservoir would not significantly reduce flood risks for lands protected by the SPFC, for several reasons. Shasta Reservoir has a sizeable flood-storage allocation capable of managing a 1 percent chance (100-year) flood from its tributary watershed; consequently, the dam and reservoir are already regulating floodflows adequately for all but the most severe and infrequent floods. More importantly, other uncontrolled tributaries (those not regulated by reservoirs) downstream from Shasta Dam, such as Cottonwood Creek, contribute peak flood flows along reaches of the Sacramento River with SPFC levees that exceed the flood releases from Shasta Dam. Additional storage in Shasta Dam and Reservoir would not address the significant flood flows produced by these unregulated tributaries. Previous studies by USACE and others have indicated that a new flood management reservoir on Cottonwood Creek would conflict with goals for watershed management and environmental restoration in the Cottonwood Creek watershed, and would have significant environmental effects. This example indicates that increased storage capacity may not always result in meaningful flood-management benefits, and that increased storage may not be feasible in locations where it is most needed. For additional details, see Master Response 10.

T_WARD2-03

As stated in Master Response 2, in addition to expansion of the bypass system, levee reconstruction, and other elements, the SSIA includes State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans. These easements would be used to preserve agriculture and prevent urban development in current agricultural areas, discouraging conversion to land uses that would increase flood risks within floodplains protected by SPFC facilities. Agricultural conservation easements could be purchased through various DWR programs; an example is DWR's Flood Corridor Program, which focuses on nonstructural flood risk reduction integrated with protection of natural resources and agricultural lands. For additional details, see Master Response 2.

Additionally, as stated in Master Response 4, these impacts generally are social and economic in nature, and CEQA does not require addressing them except to the extent that they relate to potentially significant adverse effects on the physical environment. Nonetheless, the responses shown below have been prepared to maximize responsiveness to public participation in the CVFPP.

State law (SB 5) requires an urban level of flood protection for urban and urbanizing areas within the Sacramento–San Joaquin Valley so that these areas will withstand a 1-in-200-year flood event (CGC Sections 65865.5, 65962, and 66474.5). Under the terms of SB 5, adoption of the 2012 CVFPP by the Board would trigger the schedule of compliance actions required for cities and counties to make findings related to an urban level of flood protection.

However, the CVFPP does not create any new requirements or assurances for levels of flood protection in the Central Valley; the local findings requirements regarding the required levels of protection were established by the State Legislature with the passage of SB 5. Similarly, the plan does not change existing State requirements related to new development in nonurbanized areas, including small communities, which must continue to meet the national FEMA standard of flood protection (per CGC Sections 65865.5, 65962, and 66474.5). This national standard corresponds to the minimum level of flood protection (100-year flood) required for participation in the NFIP, and is consistent with the existing Building Code. The Central Valley Flood Protection Act of 2008 further clarifies that the CVFPP is a descriptive document, and neither the development nor the adoption of the CVFPP constitutes a commitment by the State to provide any particular level of flood protection (CWC Sections 9603(a) and 9603(b)).

The Central Valley Flood Protection Act of 2008 establishes legislative requirements for the CVFPP. For example, the legislation directs DWR to consider structural and nonstructural methods for providing an urban level of flood protection (200-year or 0.5 percent chance) to current urban areas (CWC Sections 9614(i) and 9616(a)(6)), and encourages wise use of floodplains through a better connection between State flood protection decisions and local land use decisions (CWC Section 9616(a)(5)). The SSIA proposes flood protection investments for rural-agricultural areas, small communities, and urban areas consistent with legislative direction and commensurate with flood risk to people and property.

The SSIA identifies minimum flood protection targets when State investments are made to protect public safety in urban areas and small communities (protection from 200- and 100-year flood events, respectively). However, the plan acknowledges that State investments alone cannot achieve these targets in all communities without leveraging federal and local funds, and encourages higher levels of flood protection whenever feasible. The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas, and that are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development in floodplains. The SSIA does not target a minimum level of flood protection for State investments in rural-agricultural areas outside of the small communities because conditions and local interests differ from one area to another, and additional regional planning efforts are needed to formulate solutions that meet community needs and State investment priorities. However, the SSIA includes various options for addressing flood risks in rural-agricultural areas, including the following:

- Projects to maintain levee crown elevations for existing rural SPFC levees and provide all-weather access roads for inspection and floodfighting

- Economically feasible projects to resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs

- System elements (such as new and expanded bypasses) that would lower water surface elevations within some rural and urban channels

All areas would benefit from State investments in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery. For additional details, see Master Response 4.

T_WARD2-04

As stated in Master Response 7, the Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to meet multiple objectives, where feasible, when proposing improvements to flood management facilities, including integration of ecosystem benefits (CWC Sections 9616(a)(7), 9616(a)(9), and 9616(a)(11)).

The SSIA includes the supporting goal of improving ecological conditions on a systemwide basis, using integrated policies, programs, and flood-risk reduction projects that will help to (1) provide ecological benefits, (2) move beyond traditional project-by-project compensatory mitigation, and (3) create opportunities to develop flood management projects that may be more sustainable and cost-effective over time. Under the SSIA, ecosystem restoration opportunities are integral parts of flood system improvements, including projects for urban areas, small communities, and rural-agricultural areas. Integrating ecosystem restoration into these flood protection projects will focus on preserving important shaded riverine aquatic habitat along riverbanks and help restore the regional continuity/connectivity of such habitats. In addition, SSIA ecosystem restoration activities may include improving fish passage, increasing the extent of inundated floodplain habitat, creating opportunities to allow river meandering and other geomorphic processes, or other measures that may be identified during post-adoption activities. Potential effects on flood management and channel capacity will be considered during implementation of any ecosystem restoration actions. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, State and USACE permitting) will allow for detailed development and review of the conceptual ecosystem restoration targets described in the CVFPP and its attached Conservation Framework.

Appendix E, “2012 Central Valley Flood Protection Plan Conservation Framework,” provides a preview of a long-term Conservation Strategy that DWR is developing to support the 2017 CVFPP Update. The Conservation Framework focuses on promoting ecosystem functions and multi-benefit projects in the context of integrated flood management for near-term implementation actions and projects. The Conservation Framework provides an overview of the floodway ecosystem conditions and trends and key conservation goals that further clarify the CVFPP’s ecosystem goal.

The Central Valley Flood Protection Act of 2008 (SB 5) sets legislative direction to include multiple objectives, where feasible, when proposing improvements to flood management facilities, including opportunities and incentives for expanding or increasing the use of floodway corridors (CWC

Section 9616(a)(12)). The potential for recreational use of the flood control system has long been recognized. The SSIA involves floodplain reconnection and floodway expansion, which would improve ecosystem functions, fish passage, and the quantity, quality, and diversity of natural habitats, all of which would contribute to an increase in recreation opportunities and augment the aesthetic values of those areas. Expanding habitat areas would increase opportunities for fishing, hunting, and wildlife viewing. Recreation-related spending associated with increased use by visitors can be an important contributor to local and regional economies. During post-adoption activities (regional flood management planning and development of basin-wide feasibility studies), DWR will work with local and regional implementing agencies and partners to refine CVFPP elements, including developing additional details on site-specific recreation features as part of multi-benefit projects. For additional details, see Master Response 7.

T_WARD2-05

See response to comment T_WARD2-01, above.

T_WILLIAMS1-01

MR. WILLIAMS: I'm the anchor?

PRESIDENT CARTER: Yes. Welcome. Good afternoon.

MR. WILLIAMS: Thank you, President Carter, and members of the Board. I'm here as a citizen, because what you are considering today and all the work you're doing affects me as a resident outside Davis, who, in the first pass of the revised FEMA maps, was placed in the flood zone. Since then, we've been moved out of the flood zone when we provided primary data. But I'm one of the beneficiaries of what you're doing to project the members of the urban community.

My concern is, is that I shouldn't benefit, and the people who like me shouldn't benefit on the backs of the farmers of this State. We need to do everything we can to be making the farming industry, the farming economy, and the -- as vibrant as possible.

I worked in information technology, and often we would end up solving a problem which was created by the solution for a problem before it. What I've heard today is, is that we have existing structures, which are not being maintained to their optimum level, that habitat is being allowed to grow in them. And I would like to make sure that before we eminent domain or ask the farmers to sell productive farm land and take it out of our economy, that we do everything we can to maintain the system that we have.

I hate to think that we are predicting the future

of more growth of flood impingements in what we add, but the reality is if we now have a system that isn't working to optimal, there's a real good chance that that's a predictor that we're going to expand the system and then repeat that error.

So I would encourage you to make sure that we are maintaining and bringing back up to standard the systems that we have and not burdening the farmers in order that people like myself, part of the urban portion of this State, can benefit. We need to benefit together, and we don't need to throw out the baby with the bath water.

Thank you.

PRESIDENT CARTER: Thank you, Mr. Williams.

Matt Williams (Public Hearing, February 24, 2012)

Response

T_WILLIAMS1-01

As stated in Master Response 3, the SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. Implementing the SSIA would increase the percentage of the population receiving at least 100-year (1 percent annual chance) flood protection from the current 21 percent to more than 90 percent (CVFPP, page 3-40). The remaining 10 percent of the population would receive benefits through residual risk management actions. Based on initial planning-level cost estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to provide flood stage reduction benefits to many of the areas in the system, including small communities and rural-agricultural areas.

In addition, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) in Section 3.3, "Agriculture and Forestry Resources," of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed. For additional details, see Master Response 3.

As stated in Master Response 4, State law (SB 5) requires an urban level of flood protection for urban and urbanizing areas within the Sacramento–San Joaquin Valley so that these areas will withstand a 1-in-200-year flood event (CGC Sections 65865.5, 65962, and 66474.5). Under the terms of SB 5, adoption of the 2012 CVFPP by the Board would trigger the schedule of compliance actions required for cities and counties to make findings related to an urban level of flood protection.

However, the CVFPP does not create any new requirements or assurances for levels of flood protection in the Central Valley; the local findings requirements regarding the required levels of protection were established by the State Legislature with the passage of SB 5. Similarly, the plan does not change existing State requirements related to new development in nonurbanized areas, including small communities, which must continue to meet the national FEMA standard of flood protection (per CGC Sections 65865.5, 65962, and 66474.5). This national standard corresponds to the minimum level of flood protection (100-year flood) required for participation in the NFIP, and is consistent with the existing Building Code. The Central Valley Flood Protection Act of 2008 further clarifies that the CVFPP is a descriptive document, and neither the development nor the adoption of the CVFPP constitutes a commitment by the State to provide any particular level of flood protection (CWC Sections 9603(a) and 9603(b)).

The Central Valley Flood Protection Act of 2008 establishes legislative requirements for the CVFPP. For example, the legislation directs DWR to consider structural and nonstructural methods for providing an urban level of flood protection (200-year or 0.5 percent chance) to current urban areas (CWC Sections 9614(i) and 9616(a)(6)), and encourages wise use of floodplains through a better connection between State flood protection decisions and local land use decisions (CWC Section 9616(a)(5)). The SSIA proposes flood protection investments for rural-agricultural areas, small communities, and urban areas consistent with legislative direction and commensurate with flood risk to people and property. For additional details, see Master Response 4.

As stated in Master Response 6, DWR recognizes the importance of proper maintenance to protect State, local, and federal investments in the flood management system. However, maintenance activities alone do not meet current needs or legislative requirements for the CVFPP (e.g., urban level of protection, systemwide approach, and providing multiple benefits). This is highlighted in the evaluation conducted for the preliminary approach called “Achieve SPFC Design Flow Capacity.”

The Achieve SPFC Design Flow Capacity preliminary approach focuses on reconstructing SPFC facilities to meet current engineering criteria without making major changes to facility footprints or operations. To achieve the design flow capacity, reconstruction is required because the original specifications focused primarily on levee prism geometry, and current evaluations have shown them to be insufficient in passing design flows if geotechnical and other engineering conditions (e.g., underseepage) are not improved. This approach was formulated to address legislation that required DWR to consider structural actions necessary to reconstruct SPFC

facilities to their design standard (CWC Section 9614(g)). It also addresses requests from stakeholders to consider reconstructing the existing flood management system in place, or without major modification to facility locations.

Based on an initial assessment, this preliminary approach is estimated to cost approximately $19 billion to $23 billion and take 30–35 years to implement. This approach would improve the reliability of SPFC facilities compared to existing conditions. However, in many locations, upstream levee reconstruction would increase peak flows and stages downstream because upstream levee failures would be reduced compared to existing conditions. Further, the level of protection would be highly variable throughout the system and would not be linked to the current public safety needs and legislated requirements, and to assets at risk within the floodplain. Consequently, this approach would only partially address the primary CVFPP goal of improving flood risk management.

Investments in SPFC reconstruction would initially reduce SPFC O&M costs, but long-term costs to maintain the system would remain high. Thus, this approach would only partially contribute to the goal of improving O&M. Opportunities to integrate ecosystem restoration and enhancement would be limited and would not contribute to improved ecosystem functions on a systemwide scale. There would also be few opportunities to promote multipurpose benefits including incorporating new groundwater recharge or other water-related benefits, and promoting ecosystem functions, recreation, or agricultural sustainability. Consequently, an approach focusing on maintenance, repair, and reconstruction of existing facilities would contribute in only a minor way to the supporting goals of multi-benefit projects.

Improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures).

The SSIA promotes efficient and sustainable long-term O&M practices through the following:

- Reforming and consolidating State and local agencies' roles and responsibilities for O&M

- Standardizing criteria by which maintenance practices, procedures, and inspections are performed and reported

- Implementing strategies to adequately and reliably fund routine activities and streamline permitting

Some of the proposed activities may involve legislative action, new institutional arrangements involving local maintaining agencies, modifications to existing State programs, and additional or redirected funding. For additional details, see Master Response 6.

T_YCBOS1-01

MR. LEE: Hi, President Carter. Chris Lee with the Yolo County Administrator's Office, here on behalf of the Yolo County Board of Supervisors.

T_YCBOS1-02

Yolo County had significant staff following the development of the Central Valley Flood Protection Plan with great interest, not to mention representatives of local reclamation districts and others. So the Board and

T_YCBOS1-03

County staff were caught off guard by the inclusion of projects that have significant impacts on, not only the livelihoods but the homes of many of our constituents.

While we did receive some notice that measures including the setback of the Yolo Bypass levees and widening of the Fremont Weir would be included in the administrative draft, there's very limited engagement of Yolo county political representatives, community members, and staff prior to these, you know, massive projects being included in a public document.

Without extensive outreach and engagement of Yolo county elected officials and community members, the Board is positioned to oppose the widening of the Fremont Weir and setbacks to the Yolo Bypass levees. And we hope that your Board, especially in light of the rapid five-month period proposed to adopt this plan, will commit to extensive engagement and outreach with us to discuss these proposals that will have a profound impact on the constituents of Yolo county.

Thanks.

PRESIDENT CARTER: Thank you, Mr. Lee.

Yolo County Board of Supervisors, Chris Lee (Public Hearing, January 27, 2012)

Response

T_YCBOS1-01

The comment does not raise specific questions or information regarding the adequacy of the environmental analysis provided in the DPEIR, nor does the comment specify additional information needed or particular insufficiencies in the DPEIR. The comment is noted.

T_YCBOS1-02

As stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

A portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area) would support floodway expansion and repair and/or reconstruction of levees in rural areas. For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass

expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements.

The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable.

In addition to expansion of the bypass system, levee reconstruction, and other elements, the SSIA includes State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans. These easements would be used to preserve agriculture and prevent urban development in current agricultural areas, discouraging conversion to land uses that would increase flood risks within floodplains protected by SPFC facilities. Agricultural conservation easements could be purchased through various DWR programs; an example is DWR's Flood Corridor Program, which focuses on nonstructural flood risk reduction integrated with protection of natural resources and agricultural lands.

The PEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating

back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

T_YCBOS1-03

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

Phase 1 of the public engagement planning process focused on identifying problems and needs and crafting specific goals for the CVFPP. A variety of regional and topic-based work groups formed during this phase. Phase 2 focused on identifying individual actions that could be taken to achieve the CVFPP goals, and engaged stakeholders through continued regional and topic-based work groups and public workshops.

After Phase 2, stakeholders indicated that they preferred to review more developed materials and information before continuing with intense working meetings. With that understanding, DWR focused its efforts on content development (considering previously provided input and ongoing analyses) and developed a cohesive working draft document for stakeholder review in fall 2011. Outreach efforts included e-mail communications and updates, workshops, webinar briefings, and meetings with individuals and agencies. Work group members were also given an opportunity to review and comment on a working draft of the CVFPP. However, with a commitment to complete a public draft CVFPP within the legislated time frame, the degree of engagement provided in Phases 1 and 2 was not feasible for Phases 3 and 4.

The Board provided various opportunities for members of the public and agencies to comment on the public draft CVFPP, released in December 2011. Hearings were held in 2012 on April 5 (Sacramento), April 6 (Marysville), April 9 (Stockton), and April 11 (Woodland), and public comments were heard and discussed at both regular and special Board meetings. DWR also accepted comments on the DPEIR, which was released in early March 2012. More information on the Board's process for public review and plan adoption can be found on its Web site, http://www.cvfpb.ca.gov.

Anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be

conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_YCBOS2-01

MS. MARCHAND: Good afternoon, President Carter and members of the Board. I'm Petrea Marchand. I'm the Manager of Intergovernmental Affairs for Yolo County.

And on behalf of the Yolo County Board of Supervisors, I know you've heard this at a previous meeting, you're aware that the Board of Supervisors is opposed to the widening of the Fremont Weir, expanding of the bypass and the associated measures.

We have, since we testified last, met with the Department of Water Resources and the Resources Agency and proposed a means through which Yolo County could participate in a study of that bypass expansion during the 2012 to 2017 period proposed by the plan.

And we encourage you, during your review in the next six months, to make those bypass expansions, including the Yolo Bypass expansion, a focus of your review efforts, and specifically to develop an approach to

T_YCBOS2-02

include local government and other stakeholders in not only the discussions during your review period, but also in the discussions that follow.

And specifically, we have a proposal for you related to public outreach. We believe, and it's kind of amazing that a representative from Yolo County would be here to say -- today to say this, but we believe that you should follow in the example of the Bay Delta Conservation Plan.

There's a -- it's a -- it is an unusual thing for local government to say at this point. But you should also learn from the mistakes that the Bay Delta Conservation Plan made early in the process. Specifically when they started, they had -- they included the Yolo Bypass Conservation Measure, which, as you may know, is a project to modify the weir to allow additional flooding for fish habitat. They included that as part of the larger Bay Delta Conservation Plan process.

As a result, stakeholders who were interested in that specific process had to attend multiple-day meetings, and found it very difficult to both receive the information and to participate in a specific process.

The State did not start making progress on that conservation measure until they created with the new Administration a technical working group that focused specifically on the Yolo Bypass Conservation Measure. They invited all of the stakeholders in the bypass, including individual landowners and farmers, who are two

separate interests in the bypass, as well as local government and nonprofit organizations, to participate.

The amount of information that has been transferred as a result, is, I think, a model for other such projects that you may be considering in the Central Valley Flood Protection Plan process.

It essentially allowed for more sophisticated interaction by stakeholders, and it also - and this is probably as important - resulted in new locally-supported ideas to address some of the key issues that were brought up. And those ideas, I believe, are under serious consideration by the State.

The County does not believe that the development of these regional plans is enough, in terms of public outreach. They are still big areas that you're covering. And the people who are affected by these projects don't have the time or the resources to participate in long, in-depth regional planning processes that don't cover -- that cover issues that aren't related to the issue at hand.

T_YCBOS2-03 So I urge you to consider a different approach as you move forward, and to really spend some time during the six-month review period, similar to some of the comments you heard from other speakers, on specifying what that process is going to look like and providing the funding to

make sure that it happens. I truly believe, from our experience at the Bay Delta Conservation Plan, that it's going to make a huge difference in the ability to achieve positive outcomes for flood protection in California.

T_YCBOS2-04 And lastly, I just wanted to say that as you've heard from other speakers, again, we urge you to focus on the bypass expansion and the other rural issues that were expressed by other speakers. Those are also of concern to Yolo County. But right now, our major focus is the bypass expansion as well as the public outreach process.

T_YCBOS2-05 Yolo County, as many of you may know, is committed to helping the State achieve goals. We've done it in the past, when it comes to ag land preservation and habitat conservation, greenhouse gas emissions reductions. You name it, Yolo County has been there as a partner, but we are incredibly frustrated by the process thus far, that has excluded Yolo County and also our other local organizations and hope that you'll consider a better process in the future for working with us.

Thank you.

PRESIDENT CARTER: Thank you, Ms. Marchand.

Yolo County Board of Supervisors, Petrea Marchand, Manager of Intergovernmental Affairs (Public Hearing, February 24, 2012)

Response

T_YCBOS2-01

As stated in Master Response 1, the existing bypass system in the Sacramento River Basin (including the Sutter and Yolo bypasses and associated inflow weirs) forms the central backbone of the Sacramento River Flood Control Project and redirects damaging floodflows away from the main channels of the Sacramento and Feather rivers. The considerable capacity of the bypass system (up to 490,000 cfs) also slows the movement of floods, effectively attenuating flood peaks and flows into the Delta. The existing bypass system also supports a vibrant seasonal agricultural economy and provides important habitat for multiple terrestrial and aquatic species. In the San Joaquin River Basin, the bypass system includes the Chowchilla, Eastside, and Mariposa bypasses.

The Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC, Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass. For additional details, see Master Response 1.

T_YCBOS2-02

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars.

Anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction. For additional details, see Master Response 13.

As stated in Master Response 14, development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts. Information and outcomes from the regional planning process will inform the State-led basin-wide feasibility studies, preparation of a financing plan for the CVFPP, and the first update of the CVFPP (scheduled for completion by 2017). This regional effort is scheduled to be launched publicly in June 2012 and is anticipated to continue through 2013.

DWR will engage regional flood planning partners to develop and implement communication strategies with broad interest groups to brief them on flood management planning in their regions. Regional implementing and operating agencies, land use agencies, and interest groups will be invited to participate in the planning process. Each regional planning process will seek input, as appropriate, from agricultural interests, environmental interests, permitting agencies/resource agencies, local emergency responders, tribes, and other stakeholders. DWR anticipates that a regional flood working group will be formed in each region.

Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. The studies will be conducted in coordination with USACE (and ongoing cost-share feasibility studies) and local implementing agencies. It is anticipated that working groups will

form to help evaluate and refine bypass expansion options, identify implementation challenges, and provide input in the planning process.

As part of post-adoption activities, the Board and DWR will continue to work collaboratively with local, State, and federal agencies, environmental interests, and other parties to develop regional flood management plans and further refine the proposed elements of the SSIA.

Elements of the CVFPP are expected to be refined and modified based on regional flood management planning efforts and the two basin-wide feasibility studies. This is especially true for larger system elements that require more studies and feasibility evaluations to better understand their costs and benefits and to reduce the level of uncertainty. All applicable project-specific environmental review will be conducted before implementation of projects stemming from the CVFPP. For additional details, see Master Response 14.

T_YCBOS2-03

See response to comment T_YCBOS2-02, above. Additionally, as stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. For additional details, see Master Response 15.

T_YCBOS2-04

See response to comment T_YCBOS2-01, above.

T_YCBOS2-05

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, “Engagement Record,” in Appendix A, “Central Valley Flood Protection Plan.” The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of

management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP. Phase 1 of the public engagement planning process focused on identifying problems and needs and crafting specific goals for the CVFPP. A variety of regional and topic-based work groups formed during this phase. Phase 2 focused on identifying individual actions that could be taken to achieve the CVFPP goals, and engaged stakeholders through continued regional and topic-based work groups and public workshops.

After Phase 2, stakeholders indicated that they preferred to review more developed materials and information before continuing with intense working meetings. With that understanding, DWR focused its efforts on content development (considering previously provided input and ongoing analyses) and developed a cohesive working draft document for stakeholder review in fall 2011. Outreach efforts included e-mail communications and updates, workshops, webinar briefings, and meetings with individuals and agencies. Work group members were also given an opportunity to review and comment on a working draft of the CVFPP. However, with a commitment to complete a public draft CVFPP within the legislated time frame, the degree of engagement provided in Phases 1 and 2 was not feasible for Phases 3 and 4.

The Board provided various opportunities for members of the public and agencies to comment on the public draft CVFPP, released in December 2011. Hearings were held in 2012 on April 5 (Sacramento), April 6 (Marysville), April 9 (Stockton), and April 11 (Woodland), and public comments were heard and discussed at both regular and special Board meetings. DWR also accepted comments on the DPEIR, which was released in early March 2012. More information on the Board's process for public review and plan adoption can be found on its Web site, http://www.cvfpb.ca.gov. For additional details, see Master Response 13.

T_YCBOS3-01

MR. LEE: Good afternoon, President Edgar, members of the Board. My name is Chris Lee. I work for

the County Administrator's Office, and I'm here with a few comments delivered on behalf of the Yolo County Board of Supervisors.

We divide it up into a couple of different areas focusing on the multi-benefit projects, existing system maintenance, rural versus urban, flood protection, ag land conversion, and the bypass proposals and other regional issues.

Start off first by mentioning that, as many of you know, the Board of Supervisors has a position of opposition against proposals to expand the Yolo Bypass. However, in March, staff recommended and the Board approved a recommendation that we submit requests to DWR and the State to fund Yolo County's participation and staff resources so that the County can constructively participate in any proposals to implement or design and further refine the proposals to expand the bypass.

Specifically, on the bypass expansion issue, the County is concerned that the plan needs to specify that through 2012 through 2017 this is planning exercise. There's some inconsistencies between the draft plan and the project -- Programmatic EIR.

For example, the plan on page 433 states that the intent to acquire lands to implement systemwide projects, including extending and expanding the bypass system

between 2012 and 2017, while the EIR states that bypasses quote could be modified, and makes clear that subsequent environmental review is necessary.

It's Yolo County's understanding that the State will not make a decision regarding the bypass expansion until after the study is complete and the plan is updated after 2017. The draft plan should clearly state this intent.

T_YCBOS3-02 Second, the State should not lump any study of the Yolo Bypass expansion into a regional flood plan process proposed for Yolo County and the sounding areas. The bypass expansion is very complex and includes several different stakeholder groups. Furthermore, there is interesting interactions between the Yolo Bypass conservation measure proposed under the Bay Delta Conservation Plan, and the study of expanding The Yolo Bypass that's considered by the Draft CVFPP.

Similar to the process that the Yolo Bypass Conservation Measure is set up for the Yolo -- for that project, there should be a separate group for considering the Yolo Bypass expansion under the CVFPP.

T_YCBOS3-03 Second, the Board appreciates staff's recommendation and the testimony today regarding ag land conservation. Specifically how crop damage and ag conversion at -- losses to agricultural production were

not included as elements in the regional economic analysis in Attachment 8H.

Furthermore, we also appreciate the comment under the benefit assessment framework, 8I, that the attachment refers to qualitative benefits for enhanced agricultural sustainability without giving support to how this would be achieved. And it's very important to the County that impacts to agricultural productivity and conversion are considered in the plan.

With that stated, we think that the draft plan skirts this issue currently, and a more detailed discussion is necessary of the impacts of either converting or decreasing productivity of up to 40,000 acres under the CVFPP.

The proposed bypass expansions particularly would require new flooding easements on agricultural land and would impact agricultural productivity on these lands. Yolo County, for example, is in the process of completing a study of the agricultural impacts, including indirect economic impacts of flooding the Yolo Bypass more often for fish habitat. Such analyses are not covered by the Draft EIR, even though that document notes the potential for such impacts.

Consequently, the plan should mention the need for such analyses, and discuss means through which the

State will estimate and mitigate such agricultural economic impacts as part of the project proposals.

T_YCBOS3-04 Next comment is about the rural versus urban standards of flood protection. Yolo County supports 100-year level of flood protection for small communities and a separate standard for rural levees. Yolo County is working with the Central Valley Flood Protection Association to further work on proposals for rural levee standards, as well as ensuring funding for rural levee protection improvements.

As all of you have seen by driving up Interstate 5 from Sacramento presumably this morning, Yolo County has historically directed its growth to cities and away from the floodplain. As a result, the County has only two legacy communities in the 100-year floodplain Knights Landing and Clarksburg.

Unfortunately, despite significant savings to State and federal government, in terms of flood protection and costs for potential disasters through FEMA, Yolo County has less money available to do the type of levee improvements that might be feasible in an area like Natomas.

As a result, the County requests that the plan should incentivize the type of land-use planning that's been historically prevalent in Yolo County, by providing

additional funding for rural levees and small communities in these areas.

T_YCBOS3-05 The last area for our comments are about multi-benefit projects. The plan promotes multi-benefit projects as a goal, but it does not adequately articulate how these flood protection projects will incorporate these multiple benefits.

For example, the expansion of the Yolo Bypass could simultaneously provide additional fish habitat for endangered salmon species, while impacting the habitat for endangered Giant garter snake. The State should develop criteria to make these types of decisions where the tradeoffs include balancing benefits for aquatic species against impacts to terrestrial species, for instance, Swainson's Hawk, which would be a concern for the conversion of lot of ag land as considered under the CVFPP.

T_YCBOS3-06 Finally, the plan takes credit for essentially, and assumes ecological benefits of modifying the Fremont Weir and expanding the Yolo Bypass by incorrectly assuming that these benefits wouldn't occur absent the expansion of the bypass.

For instance, as previously mentioned, the Bay Delta Conservation Plan proposes increasing habitat for certain fish species through seasonal flooding in the

bypass without a setback of levees. The plan should acknowledge that the ecological benefits it touts may well occur independently through other efforts under way that are unrelated to the plan.

Thank you for the opportunity to testify today.

PRESIDENT EDGAR: Chris, you're going to give us those written.

MR. LEE: Yes. We can submit those in writing. And we'll also have detail comments on the Draft Programmatic Environmental Impact Report.

PRESIDENT EDGAR: That would be great. We appreciate that. Those are very helpful comments. We have one more speaker before the break. I'm sorry. Jim is going to kill me over here. But we'd like to finish that up, first, before the break, if we could.

Thank you.

Yolo County Board of Supervisors, Chris Lee (Public Hearing, April 11, 2012)

Response

T_YCBOS3-01

References to land acquisition in the 2012–2017 time period do not apply to any one particular project. Therefore, although land acquisition for any potential Yolo Bypass expansion likely would not occur before 2017, there may be other CVFPP activities for which land could be acquired before 2017.

T_YCBOS3-02

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form “alternatives” for further evaluation and comparison on a system wide scale. For additional details, see Master Response 13.

As stated in Master Response 14, the BDCP Plan Area includes the legal Delta, the Suisun Marsh, and the Yolo Bypass. The CVFPP focuses on areas currently receiving protection from SPFC facilities. Portions of the Delta, as well as the Yolo Bypass (a major SPFC facility instrumental in managing flood risks in the Sacramento River Basin), are within both the BDCP Plan Area and the CVFPP's SPFC Planning Area. The Suisun Marsh, part of the BDCP Plan Area, is included in the Extended SPA as described in the DPEIR.

Although flood management is not within the scope of the BDCP, at least two proposed conservation measures directly relate to flood management: (1) the Yolo Bypass Fisheries Enhancement seeks to improve upstream and downstream fish passage through the bypass, and (2) Seasonally Inundated Floodplain Restoration calls for greater duration of flows along the Yolo Bypass.

The CVFPP recommended approach—the SSIA—proposes expanding the Yolo Bypass to increase its ability to accommodate large floodflows. The proposed expansion also presents opportunities to improve fish passage at SPFC facilities, improve fish access to upstream aquatic habitat, and facilitate natural flow attenuation, consistent with BDCP conservation measures. Under the SSIA, the State will also consider a new bypass in the south Delta. This could be accomplished by expanding Paradise Cut or other routes in the vicinity, and may include levee construction, gate structures and/or weirs, habitat components, and agricultural easements.

Implementation of the CVFPP, and of many management components of the BDCP, will require further studies to refine physical features. These studies provide additional opportunities for coordination and to help achieve mutual goals and objectives. For additional details, see Master Response 14.

T_YCBOS3-03

As stated in Master Response 2, the PEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant

environmental topics or information were raised in the comments. For additional details, see Master Response 2.

Additionally, as stated in Master Response 3, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and 3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be replaced or relocated, and various methods of preserving topsoil would be followed. For additional details, see Master Response 3.

Regarding the issue of the economic effects of conversion of agricultural land, as stated in CEQA Guidelines Section 15131, “Economic or social information may be included in an EIR or may be presented in whatever form the agency desires. Economic or social effects of a project shall not be treated as significant effects on the environment.” In addition, assessing economic effects at this time would be highly speculative, given the high-level nature of the CVFPP and the multiple variables involved in an economic analysis. Given these conditions, it would not be appropriate to include an economic analysis in the PEIR, other than the evaluation of effects on jobs and the evaluation of growth-inducing impacts required by CEQA and included in the PEIR.

T_YCBOS3-04

As stated in Master Response 4, the SSIA identifies minimum flood protection targets when State investments are made to protect public safety in urban areas and small communities (protection from 200- and 100-year flood events, respectively). However, the plan acknowledges that State investments alone cannot achieve these targets in all communities without leveraging federal and local funds, and encourages higher levels of flood protection whenever feasible. The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas, and that are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development in floodplains. The SSIA does not target a minimum level of flood protection for State investments in rural-agricultural areas outside of the small communities because conditions and local interests differ from one area to another, and additional regional planning efforts are needed to formulate

solutions that meet community needs and State investment priorities. However, the SSIA includes various options for addressing flood risks in rural-agricultural areas, including the following:

- Projects to maintain levee crown elevations for existing rural SPFC levees and provide all-weather access roads for inspection and floodfighting

- Economically feasible projects to resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs

- System elements (such as new and expanded bypasses) that would lower water surface elevations within some rural and urban channels

All areas would benefit from State investments in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery.

In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments would vary from region to region depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, all areas protected by the SPFC would receive flood risk management benefits from fully implementing the SSIA. Further, the State places a priority on flood management improvement projects that provide multiple benefits to support broad State interests and expand cost-sharing opportunities.

The CVFPP does not include levee design criteria for rural areas, but recognizes that the urban levee design criteria are not always practical or affordable for protecting rural areas. DWR supports future development and implementation of rural levee repair criteria in coordination with local and regional flood management agencies.

Cost-sharing rules are governed by federal and State laws, regulations, and policies, which have continued to evolve over time. CWC Section 12585.7 identifies the State cost-share of nonfederal capital costs for flood management projects. The State normally pays 50 percent of the nonfederal cost-share, but will pay up to 20 percent more (for a maximum of 70 percent of the nonfederal cost-share) if the project makes significant contributions to other State interests and objectives (e.g., the ecosystem, recreation, open space, protection for disadvantaged communities, and protection for transportation and water supply facilities).

The 2012 CVFPP includes an estimate of potential cost-sharing by State, federal, and local entities for the SSIA, developed to assist with CVFPP development and analysis. However, cost-sharing for implementation of the SSIA will be refined during feasibility studies and project implementation as additional project-level information is gathered and the interests of the partnering agencies in elements of the SSIA are identified. Post-adoption activities (e.g., regional flood management planning, development of basin-wide feasibility studies, and development of a financing plan for the CVFPP) will address cost-sharing and local capacity to pay.

The CVFPP does not provide funding assurances for any specific project or improvement element, and current bond funding is not sufficient to fully implement the SSIA. A financing plan will be prepared as part of the post-adoption activities (CWC Section 9620(c)). For additional details, see Master Response 4.

Regarding the issue of incentivizing land use planning that minimizes flood risk, the CVFPP does not include an incentive program as suggested in the comment. However, communities that have implemented land use planning to avoid development in flood-prone areas should find that complying with SB 5's land use requirements will require much less effort than required by communities that have developed, or plan to develop, in areas with less than a 200-year level of flood protection.

T_YCBOS3-05

As stated in Master Response 1, expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available. For additional details, see Master Response 1. Balancing the effects and benefits of various methods for implementing individual projects will be considered as part of project-specific evaluation and design. Criteria for balancing resource priorities will be developed as appropriate on a project-by-project basis.

T_YCBOS3-06

As stated in Master Response 14, as part of post-adoption activities, the Board and DWR will continue to work collaboratively with local, State, and federal agencies, environmental interests, and other parties to develop regional flood management plans and further refine the proposed elements of the SSIA.

The State has a strong interest in coordinating and implementing integrated projects that achieve multiple benefits. Effective integration across planning efforts means that all programs and projects, when implemented, work together to achieve key goals in a cost-effective manner; are

sequenced and prioritized appropriately; and do not adversely affect or interfere with intended benefits. Although effectively integrating planning across programs while considering multiple benefits can be challenging, doing so can also provide opportunities to share knowledge and identify mutually beneficial solutions that might not have been considered otherwise, thus minimizing duplication and reducing costs.

DWR will continue to coordinate with other flood management and ecosystem enhancement efforts during implementation of the CVFPP. A few key examples include the Delta Stewardship Council's Delta Plan, the SJRRP, and the BDCP. For additional details, see Master Response 14.

T_YOUNG1-01

MR. YOUNG: Thank you for coming up today and hearing all the comments. And I'm quite sure you'll hear a lot more of them. Everything that I had to say has already been said, but there is one thing I'd like to reiterate -- two things.

One is the lack of public input up till now. We have been held in the dark, and I do not think it's right.

T_YOUNG1-02

The second thing is I want to make sure that the funding for this program is in your plan that's adopted, and to make sure that the funding is based on benefit cost. Those who benefit the most, pay the most. I see this plan as a instrument to protect the City of Sacramento at the expense of agriculture.

Thank you.

PRESIDENT EDGAR: Thank you.

(Applause.)

Russell Young (Public Hearing, April 6, 2012)

Response

T_YOUNG1-01

As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012 CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars.

The Board provided various opportunities for members of the public and agencies to comment on the public draft CVFPP, released in December 2011. Hearings were held in 2012 on April 5 (Sacramento), April 6 (Marysville), April 9 (Stockton), and April 11 (Woodland), and public comments were heard and discussed at both regular and special Board meetings. DWR also accepted comments on the DPEIR, which was released in early March 2012. More information on the Board's process for public review and plan adoption can be found on its Web site, http://www.cvfpb.ca.gov.

For additional details, see Master Response 13.

T_YOUNG1-02

As stated in Master Response 14, the SSIA prioritizes State investments and other activities to contribute to achieving this vision of the CVFPP on a systemwide scale, recognizing current funding limitations. The SSIA is a conceptual plan for flood system improvements, and additional post-adoption work is needed to refine its individual elements. Some elements of the SSIA have already been implemented (through the Early Implementation Projects Program since 2007, for example). Others may be accomplished before the first update of the CVFPP in 2017, and many will require additional time to fully develop and implement. Ongoing and new planning studies, engineering, feasibility studies, environmental review, designs, funding, and partnering are required to better define, and incrementally fund and implement, elements of the SSIA during the next 20–25 years.

Regional flood management planning, to be conducted in each of nine regions identified in the 2012 CVFPP, is an important next step in identifying specific improvements to rural-agricultural areas, small

communities, and urban areas consistent with the SSIA. Upon CVFPP adoption, DWR will work closely with local entities to collect on-the-ground information regarding flood risks and needs, identify potential local and regional improvement projects, assess the performance and feasibility of these projects, and develop proposals that reflect the priorities of local entities in reducing flood risks. Each regional plan will present an assessment of proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. DWR intends to provide guidance as well as technical and financial assistance to local agencies to prepare the regional flood management plans, subject to availability of funds.

Among other things, regional flood management plans are anticipated to:

- Describe specific projects, including their potential costs, regional and systemwide benefits, and beneficiaries

- Provide a financial plan describing how the proposed projects would be funded, including cost sharing and financing for local shares

For additional details, see Master Response 14.

As stated in Master Response 15, the Central Valley Flood Protection Act of 2008 (SB 5) does not commit the State to any specific level of flood protection, action, prioritization, or funding (see CWC Section 9603). In recognition of current funding limitations, State investments under the SSIA would be prioritized commensurate with risks to people and property and opportunities to achieve multiple benefits. Consequently, State investments under the 2012 CVFPP would vary from region to region, depending on the assets at risk (people, property, and infrastructure) and severity of flood risk (frequency and depth). However, most areas protected by the SPFC would realize flood risk management benefits under the SSIA.

As part of CVFPP implementation, the regional planning process will gather DWR, the Board, and local interests (flood management agencies, land use agencies, flood emergency responders, permitting agencies, environmental and agricultural interests, and other stakeholders) to develop regional plans that will include lists of prioritized projects and funding strategies for each of the nine regions identified in the CVFPP. In a parallel effort, a systemwide planning process will refine the basin-specific objectives (Sacramento and San Joaquin basins) identified in the 2012 CVFPP. The most promising system elements will be combined with the prioritized list of regional elements identified in the regional plans to form SSIA “alternatives” for further evaluation in two basin-wide feasibility

studies, one in the Sacramento River Basin and one in the San Joaquin River Basin.

Propositions 1E and 84 approved $4.9 billion for statewide flood management improvements. Up to $3.3 billion is allocated to improvements in the Central Valley (i.e., flood protection for areas protected by SPFC facilities). DWR invested approximately $1.6 billion of the bond funds between 2007 and 2011 (along with about $490 million in local investments and $780 million in federal investments), conducting emergency repairs, early-implementation projects, and other improvements. Up to $1.7 billion of additional bond funding will be available during the next 5 years for CVFPP-related projects. Use of bond funds will be prioritized based on the severity of flood risks, considering proposed project costs and benefits and contributions to basin-wide solutions (consistent with the CVFPP).

The current available bond funding is insufficient to implement the entirety of the recommended SSIA. After the Board adopts the CVFPP, DWR will create a financing plan for potential legislative actions to fund the next increment of capital improvements, O&M, and residual risk management activities for the CVFPP. The CVFPP Financing Plan will be informed by other post-adoption activities, including regional and basin-wide planning.

Flood management projects are typically cost-shared among federal, State, and local government agencies. Under existing federal law, the federal cost-share for construction may be 50–65 percent of the total project cost, depending on the amount of lands, easements, rights-of-way, and relocations necessary for the project. In recent years, many federally authorized projects and studies have not been adequately funded by the federal government.

Under State law, the State cost-share for federal flood projects is currently between 50 and 70 percent of the nonfederal share of the project costs, depending on the project's contributions to multiple objectives. After the passage of Proposition 84 and Proposition 1E, DWR developed interim cost-sharing guidelines for flood projects where the federal government is not currently sharing in the project costs. The State cost-share under these guidelines may range from 50 to 90 percent, depending on the project's contribution to multiple objectives and the degree to which the local area may be economically disadvantaged. Although the State currently has bond funds available for some flood projects, funding at this level may be unsustainable. Insufficient State funds are available to implement all of the SSIA. The CVFPP Financing Plan will address these cost-share formulas and potential new sources of funds to pay the capital costs. For additional details, see Master Response 15.

T_YSFB1-01

MS. BROCKER: President Edgar, Board Members,

thank you for holding this public hearing today, and thank you for having more public hearings than required by law. My name is Tara Brocker. I'm President of the Yuba Sutter Farm Bureau, and I'm honored to be here today to speak on behalf of local agriculture.

I've heard a lot of good comments today, a lot of comments from farmers. I hope that you will take into consideration their concerns. I heard a lot of good comments from Dan Peterson. I thought he really articulated how farming in a floodplain can be very difficult, and it's nice to hear from agency people that understand that concerns of agriculture.

First, I'm here to encourage -- I am encouraged by Jeremy's comments as well this morning about improving the plan to incorporate more local stakeholder involvement. We really need that to happen, if we're going to regain trust from the locals.

T_YSFB1-02 And what Farm Bureau would like to see, in addition to that, is a change in attitude that will show a commitment to preserve, protect, and respect agriculture and rural communities. That means we want to avoid conversion of our very valuable, non-renewable, productive ag ground. A loss of 40,000 acres is treated like it's nothing, like it's no big deal. But to a small community that relies on agriculture to support its economic basis

and its future, that is a huge deal.

According to the American Farmland Trust, 40,000 acres is the same amount of ground that is converted every year to development. So we don't take that lightly that we're going to convert another 40,000 towards flood protection.

And I think that the respect towards agriculture has been something that's really been overlooked. We bring a lot of value to the table, and we're experts at farming. And so often the government comes with its we're-here-to-help motto, and tries to tell us how we could better manage the land or what we need to be doing differently. And it would be really nice if, in this plan, there was an air of respect, and we were treated as the experts that know how to farm and manage that resource.

T_YSFB1-03 Second, even though staff has indicated they are going to include locals, I feel it's so important that I want to restate that in order for there to be any chance to build trust, you must include local agencies, landowners, and stakeholders in the planning and development, as well as the implementation of this plan.

T_YSFB1-04 Third, I want to encourage the Board to recognize the need for a FEMA Ag Zone to keep language in the plan that recognizes -- or that addresses flood insurance and

building restrictions in the remapping of rural areas.

T_YSFB1-05 Fourth, we need a plan to show agriculture they are committed to protecting us. And the first step in the right direction would be to make a hard commitment of funding resources to rural levee projects. For instance, monies from Prop 1E. We need the plan to show hard dollars to things that matter to us like preserving legacy communities, which are vital for agricultural communities to survive. This is where farmers send their children to school, buy gas and groceries, take their mail, attend church, and have their volunteer fire departments.

T_YSFB1-06 Fifth, we'd like to talk about bypass expansion. Levee setbacks and bypass expansions are bad for agricultural. We believe the focus should be on fixing the bypass system we have. The environmental interests have managed to negatively interfere with what we have currently, and we no longer receive the relief from the system because of the encroachment of habitat to a system that priority is to provide flood protection not habitat.

And here we are today talking about a plan that answers to the problem is to take more ground, convert it from a positive economic impact to increase the size of a system, and add more habitat.

We want to see you go to the local ground-up driven plan that focuses on fixing what we have and not

appeasing environmental interests. If by the local process it had decided that expansion is necessary, it should start at the bottom and work up the system. It must include a formal rural levee standard, and it must find a way to work with locals to place habitat and environmental impacts outside of the system.

It shouldn't be an either/or program. We should be able to come together with local communities and develop a program that can include habitat and environment in a positive way that would work well with agricultural.

So just to recap, my five main points today are preserve, protect, and respect agricultural; have a local driven ground-up planning and implementation process; support a FEMA ag zone; commit to hard monies for rural areas, such as the 1E funds; and let's fix what we have and limit environmental impacts.

On behalf of the Yuba Sutter Farm Bureau, I want to thank you for giving our commitments full consideration and taking the time to hear our concerns today.

Thank you.

PRESIDENT EDGAR: Thanks very much. Good to see you.

(Applause.)

Yuba Sutter Farm Bureau, Tara Brocker (Public Hearing, April 6, 2012)

Response

T_YSFB1-01

The commenter suggests that the Board incorporate more involvement by local stakeholders to make certain that the interests of local farmers are included. As stated in Master Response 13, the Board will continue to involve local stakeholders after adoption of the CVFPP. Stakeholder engagement will be an important component of the basin-wide feasibility studies and other elements of CVFPP post-adoption activities. For additional details, see Master Response 13.

T_YSFB1-02

As stated in Master Response 2, the CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to the State's flood management goals.

The 2012 CVFPP outlines a broad range of potential physical and institutional projects and actions to reduce flood risks. Some actions identified in the SSIA can be implemented within the existing footprint of the SPFC, while others will require new lands and/or easements. Because the SSIA was developed at a conceptual or program level, it does not identify any specific project; therefore, any lands or properties that may be needed to implement the plan are unknown at this time. Initial, preliminary planning-level analyses indicate that actions outlined in the SSIA (expansion of the bypass system; new bypasses; and levee reconstruction, including levee setbacks) could expand flood system lands by as much as 40,000 acres. However, this initial estimate will be refined during follow-on studies and further analysis conducted after adoption of the CVFPP. It is anticipated that land uses within any expansions of the flood management system would be a mix of flood facilities and agricultural and environmental conservation uses; however, the exact amount and geographical distribution of these land uses will require further analyses as future specific projects are considered and evaluated.

A portion of the lands and easements needed to implement the SSIA would support improvements to urban levees, but the majority (by surface area)

would support floodway expansion and repair and/or reconstruction of levees in rural areas. For preliminary planning purposes, it has been estimated that about 75 percent of lands that could be used for bypass expansion could continue to support agricultural uses (would be compatible with floodways), while about 25 percent would likely be converted to floodways with supplemental ecosystem benefits. However, these preliminary planning estimates will be refined during subsequent project-level analyses. The actual needs for and uses of land will vary depending on the types and locations of specific flood system improvements.

The conceptual elements proposed in the SSIA will be analyzed further and refined during anticipated post-adoption activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these post-adoption activities are completed, site-specific proposals will be developed with dimensions, locations, and operational parameters for potential facilities. These follow-on planning efforts are anticipated to commence in mid to late 2012, and will provide opportunities for landowners, local governments, and other stakeholders to participate. The State desires to complete its refined analysis of bypass system expansion and other SSIA system elements as part of basin-wide feasibility studies sometime by 2015, at which time potential needs for land acquisition—in fee title and as easements—could be identified. The CVFPP states the preference to work with willing landowners for needed land acquisitions. All land acquisitions conducted to implement the SSIA will comply with State and federal laws, as applicable.

The PEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

T_YSFB1-03

As stated in Master Response 13, anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental

documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_YSFB1-04

As stated in Master Response 3, the State supports efforts to reform FEMA's NFIP to more equitably reflect corresponding flood risks, including establishing a flood zone for agriculturally based communities to allow replacement of existing structures or reinvestment development in the floodplain. The State also supports identifying a special, lower-premium rate structure that reflects actual flood risks for agricultural buildings in rural-agricultural areas located in Special Flood Hazard Areas. The State will work with local flood management interests to pursue reform of the FEMA NFIP. For additional details, see Master Response 3.

T_YSFB1-05

As stated in Master Response 3, the SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. Implementing the SSIA would increase the percentage of the population receiving at least 100-year (1 percent annual chance) flood protection from the current 21 percent to more than 90 percent (CVFPP, page 3-40). The remaining 10 percent of the population would receive benefits through residual risk management actions. Based on initial planning-level cost estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to provide flood stage reduction benefits to many of the areas in the system, including small communities and rural-agricultural areas.

In addition, the PEIR prepared for the CVFPP includes mitigation measures that further protect agricultural resources, or minimize adverse effects on agricultural resources that could result from implementation of the SSIA. For example, Mitigation Measure AG-1a (NTMA) on pages 3.3-34 and 3.3-35 of the DPEIR calls for, among other things, design and siting of projects to minimize conversion of Important Farmland to nonagricultural uses and avoid splitting or fragmenting parcels that would remain in agricultural use. In addition, during construction and operation of facilities, a means of convenient access to agricultural properties would be maintained, agricultural infrastructure and other improvements affected by projects (e.g., irrigation pipelines, power lines, drainage systems) may be

replaced or relocated, and various methods of preserving topsoil would be followed.

The State supports the continued viability of small communities to preserve cultural and historical continuity and provide important social, economic, and public services to rural populations and agricultural enterprises. The SSIA describes State investment priorities in small community flood protection while avoiding the inducement of imprudent growth within SPFC floodplains. Under the SSIA, many small communities would receive increased flood protection benefits as a result of system improvements focused on protecting nearby urban areas. For example, levee improvements may be constructed upstream from an urban area to prevent a scenario in which floodwaters from an upstream levee breach would flow down gradient into the urban area. The upstream levee improvement that may extend into rural locations would therefore also reduce flood risks for the rural area immediately adjacent to the improved levee segment. Conditions in small communities would also be evaluated on a case-by-case basis to identify appropriate State investments in additional structural and/or nonstructural actions (e.g., levees, flood walls, floodproofing, or relocations).

The SSIA also outlines various State investments that would contribute to improved flood-risk management in rural-agricultural areas outside small communities. These actions are aimed at promoting sustainable rural-agricultural economies without inducing imprudent urban development or increasing flood risks within lands protected by the SPFC. No target minimum level of flood protection has been established for prioritizing State investments in rural-agricultural areas (see CWC Section 9603). However, the SSIA proposes (1) projects that maintain levee crown elevations for rural SPFC levees and provide all-weather access roads for inspection and floodfighting; (2) economically feasible projects that resolve known SPFC performance problems, in conjunction with development of criteria for rural levee repairs; (3) system elements (e.g., bypass expansion) that lower peak flood stages within some rural channels; and (4) actions to manage residual flood risks.

All areas protected by the SPFC would benefit from State investments included in the SSIA to improve residual risk management, such as enhanced flood emergency preparedness, response, and recovery. The SSIA also proposes State investments to preserve agriculture and discourage urban development in rural floodplains (e.g., purchasing agricultural easements from willing landowners, when consistent with local land use planning). For additional details, see Master Response 3.

T_YSFB1-06

As stated in Master Response 1, the existing bypass system in the Sacramento River Basin (including the Sutter and Yolo bypasses and associated inflow weirs) forms the central backbone of the Sacramento River Flood Control Project and redirects damaging floodflows away from the main channels of the Sacramento and Feather rivers. The considerable capacity of the bypass system (up to 490,000 cfs) also slows the movement of floods, effectively attenuating flood peaks and flows into the Delta. The existing bypass system also supports a vibrant seasonal agricultural economy and provides important habitat for multiple terrestrial and aquatic species. In the San Joaquin River Basin, the bypass system includes the Chowchilla, Eastside, and Mariposa bypasses.

The Central Valley Flood Protection Act of 2008 requires DWR to evaluate ways to "….expand the capacity of the flood protection system in the Sacramento–San Joaquin Valley to either reduce floodflows or convey flood waters away from urban areas" (CWC Section 9616(a)(2)). Bypasses have served an essential role in providing these functions.

The CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible

agricultural land uses within the bypass. For additional details, see Master Response 1.

Regarding maintenance of the flood management system, as stated in Master Response 6, DWR recognizes the importance of proper maintenance to protect State, local, and federal investments in the flood management system. However, maintenance activities alone do not meet current needs or legislative requirements for the CVFPP (e.g., urban level of protection, systemwide approach, and providing multiple benefits). This is highlighted in the evaluation conducted for the preliminary approach called "Achieve SPFC Design Flow Capacity."

The Achieve SPFC Design Flow Capacity preliminary approach focuses on reconstructing SPFC facilities to meet current engineering criteria without making major changes to facility footprints or operations. To achieve the design flow capacity, reconstruction is required because the original specifications focused primarily on levee prism geometry, and current evaluations have shown them to be insufficient in passing design flows if geotechnical and other engineering conditions (e.g., underseepage) are not improved. This approach was formulated to address legislation that required DWR to consider structural actions necessary to reconstruct SPFC facilities to their design standard (CWC Section 9614(g)). It also addresses requests from stakeholders to consider reconstructing the existing flood management system in place, or without major modification to facility locations.

Based on an initial assessment, this preliminary approach is estimated to cost approximately $19 billion to $23 billion and take 30–35 years to implement. This approach would improve the reliability of SPFC facilities compared to existing conditions. However, in many locations, upstream levee reconstruction would increase peak flows and stages downstream because upstream levee failures would be reduced compared to existing conditions. Further, the level of protection would be highly variable throughout the system and would not be linked to the current public safety needs and legislated requirements, and to assets at risk within the floodplain. Consequently, this approach would only partially address the primary CVFPP goal of improving flood risk management.

Investments in SPFC reconstruction would initially reduce SPFC O&M costs, but long-term costs to maintain the system would remain high. Thus, this approach would only partially contribute to the goal of improving O&M. Opportunities to integrate ecosystem restoration and enhancement would be limited and would not contribute to improved ecosystem functions on a systemwide scale. There would also be few opportunities to promote multipurpose benefits including incorporating new groundwater

recharge or other water-related benefits, and promoting ecosystem functions, recreation, or agricultural sustainability. Consequently, an approach focusing on maintenance, repair, and reconstruction of existing facilities would contribute in only a minor way to the supporting goals of multi-benefit projects.

Improving O&M is a supporting goal of the CVFPP. The SSIA includes elements to address and improve O&M at existing facilities as part of residual risk management. These elements include identifying and repairing after-event erosion, developing and implementing enhanced O&M programs and practices, and forming regional O&M organizations and sustained investments in flood system maintenance (management of the Sacramento River channel and levees, bank protection, and rehabilitation of flood structures).

The SSIA promotes efficient and sustainable long-term O&M practices through the following:

- Reforming and consolidating State and local agencies' roles and responsibilities for O&M
- Standardizing criteria by which maintenance practices, procedures, and inspections are performed and reported
- Implementing strategies to adequately and reliably fund routine activities and streamline permitting

Some of the proposed activities may involve legislative action, new institutional arrangements involving local maintaining agencies, modifications to existing State programs, and additional or redirected funding. For additional details, see Master Response 6.

The comment reiterates the commenter's earlier comments. See responses to comments T_YSFB1-02, T_YSFB1-03, and T_YSFB1-05.

T_ZUMALT1

T_ZUMALT1-01

Good morning, Mr. Zumalt, welcome.

MR. ZUMALT: Good morning. What we can agree on is the need for a project for improving the flood control in the area, and that houses don't belong in low-lying areas, subdivisions. But I think my biggest problem with this, where my facilities are located, the barn, is about a mile above the mouth of the Feather River where it goes into the Sacramento.

You're planning its current implementation would pretty much eliminate my operation and my house. That house has been there since 1860, 1870. I realize the need

T_ZUMALT1-02

for urban protection, but what's been happening in the

rural areas with this Board's action, the Army Corps of Engineers' actions and FEMA's actions reducing all floodplains to a 50-year floodplain has had a very detrimental effect to agriculture in general.

T_ZUMALT1-03

Agriculture requires more than just open land to be functional and economic. If it's not economic, it ceases to exist, and I don't feel that your report has adequately addressed the impacts to the agricultural areas.

T_ZUMALT1-04

Agriculture seems to be whipping boy when anybody wants habitat, when the urban area wants land for new housing, or they need water. If we use what's happening in Reclamation District 100 as an example of how some of the farms are being treated, we're going to be non-existent in the area.

And I think that farms are needed in those areas as a holding pattern for that property. It's the highest and best use of that land. And if the farming concerns aren't properly addressed, you're going to eliminate farming in those areas, even if the land is there.

T_ZUMALT1-05

The other thing there's a misconception and some misinformation in your report. If you go to Map 2.1 on your listed levees of high concern, Reclamation District 1000 areas have been improved and not been taken off the map. If you look at the cross canal, and the levee on the

east side of the river on the Sacramento River down to approximately Powerline Road, I think that SAFCA has improved all of those levees, and your map doesn't reflect that current information.

T_ZUMALT1-06

And the other misconception that was put in the report is that residents don't seem to have any understanding of the flood issues in the area. I can't speak to the urban counterparts, but I can assure you that the rural people know good and well what the problems are, very specific, because they live with it.

T_ZUMALT1-07

Thank you.

PRESIDENT CARTER: Thank you, Mr. Zumalt.

And for the record, Mr. Zumalt, could you please introduce yourself.

MR. ZUMALT: Steven Zumalt.

PRESIDENT CARTER: Thank you.

Steven Zumalt (Public Hearing, January 27, 2012)

Response

T_ZUMALT1-01

As stated in Master Response 1, the CVFPP's recommended approach—the SSIA—includes proposals for new bypasses and expansions as a potentially cost-effective, systemwide approach to (1) provide flood protection benefits to large areas throughout the SPFC planning area (including rural-agricultural areas, small communities, and urban areas); (2) provide opportunities to improve ecosystem functions and continuity and contribute to mitigation for proposed structural improvements, as well as mitigation for operations and maintenance of flood management facilities; and (3) provide flexibility to adapt to future change in climate and improved system resiliency.

Expansion of the Sutter, Yolo, and Sacramento bypasses were identified as examples of increasing the overall capacity of the flood management system to convey and attenuate large flood events. Peak flood stages could be reduced along the Sacramento River, and to a lesser extent, along its tributaries. Lowering flood stages throughout much of the system would benefit urban, small-community, and rural-agricultural areas alike. Constructing new bypasses, such as constructing a bypass from the upper Feather River to the Butte Basin and expanding Paradise Cut from the San Joaquin River into the south Delta, would further contribute to reducing peak flood stage along reaches of the Feather River and lower San Joaquin River.

Several factors would be considered in the design and operation of bypass improvement elements: existing land uses, hydraulic considerations, ecosystem restoration features and benefits (including conservation and restoration of aquatic and floodplain habitats), and continued compatible agricultural land uses within the bypass.

The CVFPP is a high-level document that describes the State's vision for a sustainable flood management system in the Central Valley. The SSIA is a responsible and balanced investment approach to achieve this vision. The CVFPP and its PEIR do not permit any specific actions to move forward that would be subject to further evaluation under CEQA. The CVFPP does not provide detailed project descriptions or funding assurances, nor does it preclude any future actions that could contribute to flood management goals.

Specific dimensions, capacities, and alignments for expanded and new bypasses have not been determined as part of the preliminary analyses

conducted for the 2012 CVFPP. The analyses contained in the 2012 CVFPP are intended to be conceptual only; they were included as a basis for a program-level analysis that would allow broad comparisons of various flood management options. Potential locations and preliminary sizes described in the plan were identified using information obtained from previous studies and through discussions with local agencies and stakeholders.

Considerable additional work will be required before the bypass projects proposed in the plan are approved and implemented. Details about the dimensions, capacities, and alignments of expanded and new bypasses will be refined during post-adoption implementation activities. These activities include regional flood management planning, development of basin-wide feasibility studies, completion of project-level proposals and CEQA compliance, development of a Conservation Strategy, and State and USACE permitting. As these activities are conducted, the feasibility of proposed bypass elements will be evaluated and opportunities for public engagement and input will become available.

The PEIR recognizes that converting current land uses (particularly agricultural uses) to bypass and related uses (such as habitat and recreation) would result in potentially significant and unavoidable impacts, particularly on agriculture, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 1.

Regarding the reference to homes not being located in low-lying areas, as stated in Master Response 2, in addition to expansion of the bypass system, levee reconstruction, and other elements, the SSIA includes State investments in agricultural conservation easements, which involves working with willing landowners where easements would be consistent with local land use plans. These easements would be used to preserve agriculture and prevent urban development in current agricultural areas, discouraging conversion to land uses that would increase flood risks within

floodplains protected by SPFC facilities. Agricultural conservation easements could be purchased through various DWR programs; an example is DWR's Flood Corridor Program, which focuses on nonstructural flood risk reduction integrated with protection of natural resources and agricultural lands.

T_ZUMALT1-02

The comment about "actions reducing all floodplains to a 50-year floodplain" is unclear. DWR is not aware of any such policy being implemented by the State, USACE, or FEMA.

As noted in Master Response 3, the SSIA describes an approach to managing rural flood risks through a combination of physical improvements and nonstructural actions to protect small communities and support sustainable rural-agricultural enterprises. Implementing the SSIA would increase the percentage of the population receiving at least 100-year (1 percent annual chance) flood protection from the current 21 percent to more than 90 percent (CVFPP, page 3-40). The remaining 10 percent of the population would receive benefits through residual risk management actions. Based on initial planning-level cost estimates developed to evaluate elements of various scenarios considered under the 2012 CVFPP, more than 20 percent of total SSIA investments would support rural-agricultural and small community improvements, and residual risk management. In addition, systemwide elements (which account for almost 40 percent of total SSIA investments) are anticipated to provide flood stage reduction benefits to many of the areas in the system, including small communities and rural-agricultural areas.

The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR. The comment is noted.

T_ZUMALT1-03

As stated in Master Response 2, the PEIR recognizes that converting lands from agricultural uses would result in potentially significant and unavoidable impacts, as analyzed in Impacts AG-1, AG-2, and AG-3 (NTMA and LTMA). Many commenters expressed the view that such conversions should not occur, and that including such conversions in the SSIA undervalues agriculture as a primary industry in the Central Valley that provides a range of economic, social, habitat, and other benefits. Many commenters also explained that particular lands have been in family ownership for generations, often dating back to the earliest days of statehood. DWR and the Board respect these benefits and the relationships that many individuals have to any lands that might be converted, which are

anticipated to be substantial topics during any project-level public engagement processes. However, the DPEIR has adequately addressed the environmental issues at a program level and no new significant environmental topics or information were raised in the comments. For additional details, see Master Response 2.

For further discussion of effects of the CVFPP on agricultural communities, see response to comment T_Zumalt1-02 and Master Response 3.

T_ZUMALT1-04

See responses to comments T_Zumalt1-02 and T_Zumalt1-03, above, regarding how agricultural resources are addressed in the CVFPP and the PEIR.

T_ZUMALT1-05

Figure 2-1 in the CVFPP was developed when preliminary approaches to CVFPP implementation initially were being developed and analyzed. The figure shows conditions when the preliminary Achieve State Plan of Flood Control Design Flow Capacity approach was being considered. As stated in Master Response 9, three preliminary approaches were used to explore a range of potential physical changes to the existing flood management system and help highlight needed policies or other management actions: Achieve SPFC Design Flow Capacity, Protect High-Risk Communities, and Enhance Flood System Capacity. Evaluating these preliminary approaches provided information on their costs, benefits, and overall effectiveness. None of the three preliminary approaches were found to fully satisfy the legislative requirements and CVFPP goals in a cost-effective manner. However, the most promising elements of each were combined to formulate the State's preferred approach—the SSIA. The CVFPP and accompanying attachments provide additional details about the formulation and screening of elements included in the SSIA. For additional details, see Master Response 9. Because the preliminary Achieve State Plan of Flood Control Design Flow Capacity approach is not part of CVFPP implementation (as currently considered for adoption), updating Figure 2-1 would not have a meaningful effect on the content of the CVFPP.

T_ZUMALT1-06

DWR and the Board are not aware of any elements of the CVFPP indicating that rural residents are not aware of rural flood issues. DWR has sought input from multiple stakeholders, including local residents, during preparation of the CVFPP, and will continue such coordination during CVFPP implementation. As stated in Master Response 13, a multiphase public engagement planning process informed development of the 2012

CVFPP and provided many different venues for communicating and engaging with a broad range of partners and interested parties. This extensive public engagement process for plan development, which began in January 2009, involved about 450 people representing public agencies, businesses, interest-based organizations, and members of the public. The process included nearly 300 meetings and more than 40 publications, in addition to development of a public Web site and webinars. A full list of participants and forms of engagement in plan development are available in Attachment 5, "Engagement Record," in Appendix A, "Central Valley Flood Protection Plan." The participants in the engagement process assisted DWR in identifying problems, developing CVFPP goals, identifying the range of management actions to consider in the CVFPP, and reviewing and commenting on the draft content of the CVFPP.

Anticipated activities after adoption of the 2012 CVFPP include regional flood management planning, development of basin-wide feasibility studies, and completion of project-level proposals and environmental compliance. These efforts will engage local entities and stakeholders to help identify projects to meet local and regional needs for flood management, refine the conceptual system elements proposed in the adopted plan, and identify specific projects for construction.

As part of regional flood management planning, regional plans will be prepared with active participation by regional implementing, operating, and maintaining agencies; local land use agencies (counties and cities); agricultural and environmental interests; emergency responders; and tribes. This effort will collect on-the-ground information regarding flood risks and needs, identify local and regional improvement projects, assess the performance and feasibility of these projects, and develop plans that reflect the priorities of local entities in reducing flood risks in each of the nine regions identified in the CVFPP. Each plan will also assess proposed project costs and benefits, considering potential contributions to an integrated and basin-wide solution. Development of regional plans and formulation of specific capital improvement projects will be coordinated with other overlapping planning efforts by identifying common goals and pursuing opportunities to collaborate and reduce potential conflicts.

Two basin-wide feasibility studies will be prepared, one in the Sacramento River Basin and one in the San Joaquin River Basin, to refine the major system elements proposed in the 2012 CVFPP (such as bypass expansion and new bypasses) and assess their compatibility with prioritized local projects identified though regional flood management planning. These combinations of system element options and regional elements will form "alternatives" for further evaluation and comparison on a systemwide scale. Stakeholder engagement will be an important and complex component of

the basin-wide feasibility studies. It is anticipated that work groups will form to help evaluate and refine physical options for system elements (e.g., bypass expansion and new bypasses), identify implementation challenges, and provide input into the planning process. The feasibility studies will be conducted in close coordination with USACE (and ongoing federal feasibility studies) and local implementing agencies.

The regional and basin-wide feasibility planning efforts will help identify specific improvement projects for design and environmental review. Stakeholders and the public will have additional opportunities to provide input. The draft feasibility reports and any accompanying environmental documentation will be made available to the public for review and comments. For additional details, see Master Response 13.

T_ZUMALT1-07

The comment is a closing statement and confirmation of the commenter's name. The comment does not raise specific questions or information regarding the CVFPP or the adequacy of the environmental analysis provided in the DPEIR. The comment is noted.