
APPENDIX F

PRELIMINARY MEASURES SCREENING – CALFED & NODOS INVESTIGATIONS

This page intentionally
left blank.

APPENDIX F

Preliminary Measures Screening – CALFED and NODOS Investigations

This appendix summarizes previous storage investigations under the CALFED storage program and also evaluates those storage options for the NODOS Investigations.

F.1 CALFED SURFACE STORAGE PROGRAM

CALFED began the initial screening with a list of fifty-two potential reservoir sites (see Figure F-1). The initial screening was conducted to reduce the number of sites to a more manageable number for detailed evaluation during project-specific studies. CALFED eliminated sites providing less than 0.2 MAF of storage and those that conflicted with CALFED solution principles, objectives, or policies. Forty surface storage sites were removed from CALFED's list during the initial screening process detailed in the Initial Surface Water Storage Screening Report (August 2000). CALFED specifically looked for projects that could contribute significantly to CALFED's multiple purpose objectives. These included potential sites that could provide broad benefits for water supply, flood control, water quality, and the ecosystem. Those sites not retained for additional CALFED consideration may still be developed for others for other purposes.

The screening of the potential reservoir sites for further CALFED consideration consisted of two stages:

- ❖ **Initial Screening** – To identify and eliminate those reservoir sites that were clearly impracticable for the CALFED Bay-Delta Program. The initial screening was based on a minimum storage capacity and potential for conflict with CALFED's restoration programs, solution principles and policies. An interagency team drawn from the CALFED participating agencies cooperated in the initial screening. The initial screening was based on available information; more information was available for some sites than others. Since CALFED was seeking to eliminate those reservoir sites that are clearly impracticable for the Program, the availability of information was not important. For example, a site with limited available engineering information in a location clearly in conflict with the CALFED Ecosystem Restoration Program would be removed from CALFED consideration. Other sites, with little available information, were retained because no clear reason was found for removing them from consideration.
- ❖ **Project Specific Evaluations (future)** – Will focus subsequent evaluation on surface storage sites with the most potential of helping meet CALFED goals and objectives.

This screening resulted in selection of the following 12 surface reservoir sites for further CALFED consideration:

- ❖ Four north of the Delta offstream storage alternatives, including the Red Bank Project, Thomes-Newville Project, Colusa Project, and Sites Project.
- ❖ In-Delta storage and enlargement of Los Vaqueros Reservoir.
- ❖ Four south-of-the-Delta storage alternatives, including Ingram Canyon Reservoir, Quinto Creek Reservoir, Panoche Reservoir, and Montgomery Reservoir.
- ❖ Enlargement of Shasta Lake (Shasta Dam) and Millerton Lake (Friant Dam).

The previously listed reservoir sites are also identified on Figure F-2.

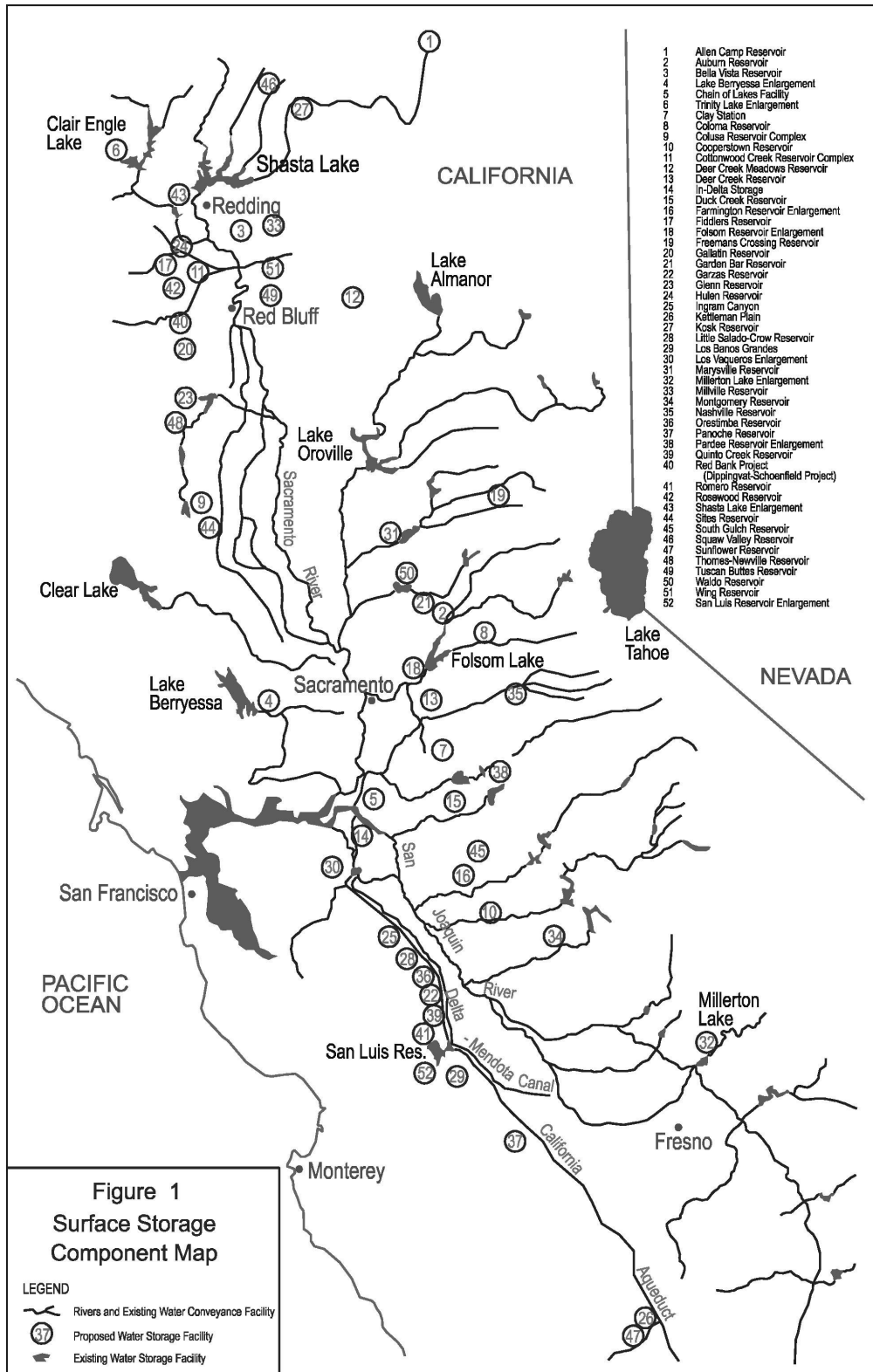


Figure F-1. Surface Storage Component Map

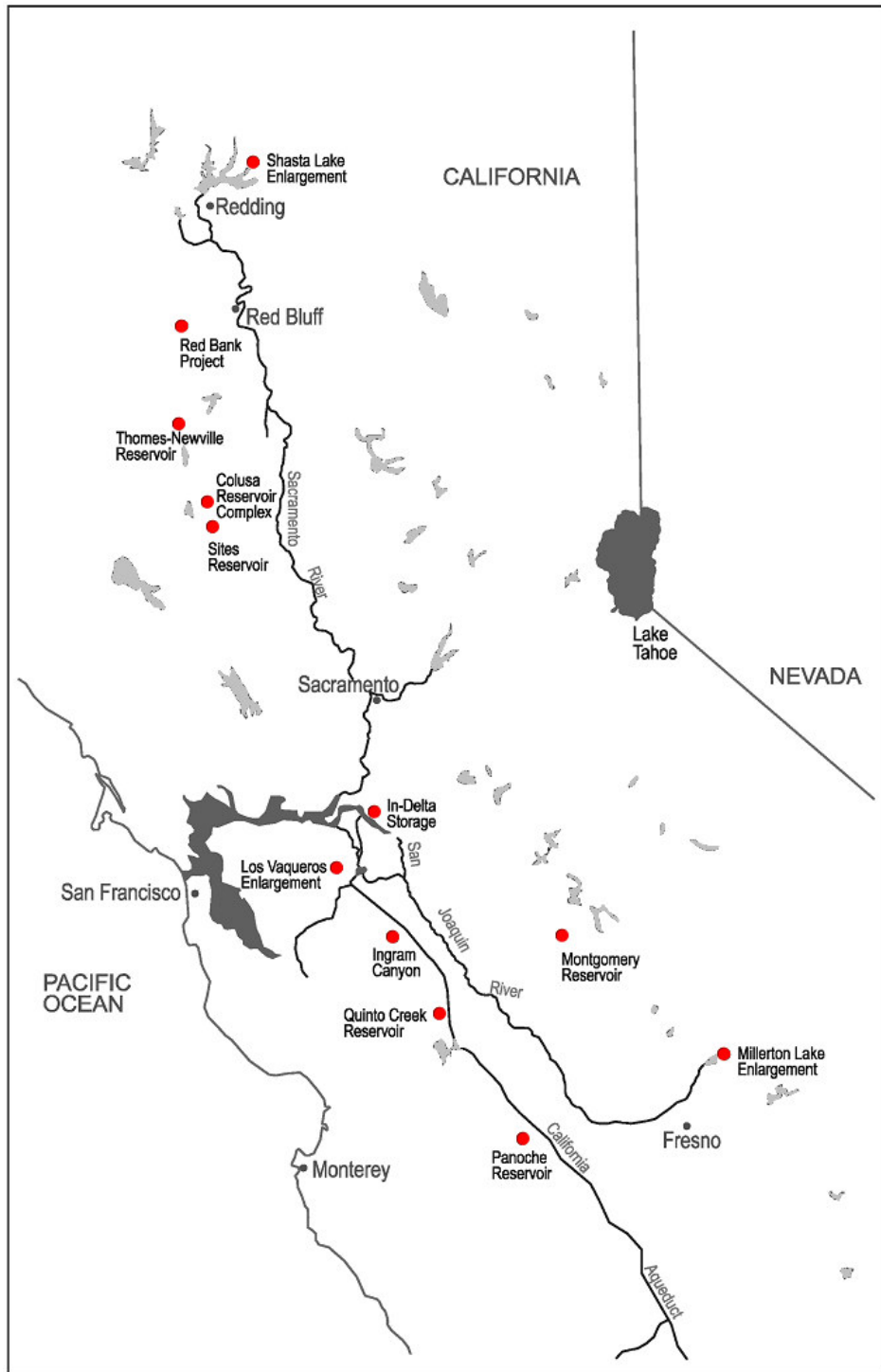


Figure F-2. Integrated Storage Investigations Potential Surface Water Storage Alternatives

Based on existing information, some potential storage facilities appeared to be more promising in contributing to CALFED goals and objectives and more implementable due to relative costs and stakeholder support. Subsequent evaluation has focused on surface storage sites with the most potential for helping meet CALFED goals and objectives during Stage 1, including the five surface storage projects identified by the CALFED ROD.

F.1.1 Integrated Storage Investigation

DWR began the investigating north-of-the-Delta offstream storage opportunities as a two-year reconnaissance-level study in late 1997 as part of the ISI Program. These investigations were funded to provide information for the completion of the programmatic EIS/EIR.

F.1.2 Coordination with CALFED's Mission Statement, Objectives, Solution Principles, and Policy

Early in the CALFED Program, CALFED developed a mission statement, a set of objectives, and a set of solution principles to guide a solution to problems in the Bay-Delta system. Potential new surface storage reservoirs must be consistent with these.

During the initial screening process, CALFED considered potential conflicts with each of the four objectives noted in Section 2.2.1. Only the ecosystem objective resulted in conflicts. To meet the ecosystem objective, the CALFED Ecosystem Restoration Program (ERP) proposed substantial actions to rehabilitate the natural processes in the Bay-Delta estuary and its watershed to support, with minimal ongoing human intervention, natural aquatic and associated terrestrial biotic communities, in ways that favor native members of those communities. Reservoir sites that significantly limit the success of the ERP are in direct conflict with the CALFED ecosystem objective. The "Essential Fish Habitat" covered in the Sustainable Fisheries Act of 1996 is one helpful measure of potential conflict. Those reservoir sites which conflict with CALFED objectives are considered to be infeasible based on logistics as defined in Clean Water Act Section 404(b)(1) Guidelines.

The six solution principles noted in Section 2.2.1 have guided CALFED Program development from the beginning. Reservoir sites that violate these solution principles should not be carried forward. Reservoir sites that violate one or more of the CALFED solution principles would also generally be infeasible based on cost or logistics as defined in the Clean Water Act Section 404(b)(1) Guidelines. A site considered unaffordable based on the CALFED solution principle would also be infeasible based on cost in the Clean Water Act Section 404(b)(1) Guidelines.

As a matter of policy, CALFED has focused on offstream reservoir sites for new surface storage, but will consider expansion of existing on-stream reservoirs. CALFED will not pursue storage at new on-stream reservoir sites due to environmental impacts and implementability issues. Offstream storage generally results in fewer environmental impacts than new on-stream storage. On-stream storage generally has much higher impacts on the aquatic environment than offstream storage. The offstream sites, filled primarily by diversion, are generally located on small or intermittent drainages where the impacts on the aquatic environment are much smaller than with on-stream reservoirs located on major rivers or tributaries. CALFED Agencies believe mitigation costs will be substantially less with the offstream reservoirs that will make the on-stream reservoirs infeasible based on cost in the Clean Water Act Section 404(b)(1) Guidelines. In addition, CALFED Agencies believe that most on-stream sites will have such high aquatic

Table F-1
Surface Water Storage Initial Alternatives
 (Source: CALFED Initial Surface Water Storage Screening Report, August 2000)

No.	Component	Location			Type	Description	Gross Storage Capacity	Minimum Storage Capacity (<200 TAF)	CALFED Objectives, Principles, or Policy Conflicts	Location	Environmental Impacts
		County	River/Stream	Region							
1	Allen Camp Reservoir	Modoc County	Pit River	East Side Sacramento Valley	On-Stream Storage	Increase regulating and yield opportunities	196 TAF	✗			
2	Auburn Reservoir	Placer County	NF American River	East Side Sacramento Valley	On-Stream Storage	Increase regulating and yield opportunities	315 to 2,300 TAF		✗		
3	Bella Vista Reservoir	Shasta County	Little Cow Creek	East Side Sacramento Valley	On-Stream Storage	Increase regulating and yield opportunities in the northern Sacramento Valley	146 TAF	✗			
4	Lake Berryessa Enlargement	Napa County	Putah Creek	West Side Sacramento Valley	Off-Stream Storage	Storage for North Bay Aqueduct and/or new westside canal	Additional 4.4 to 11.7 TAF		✗		
5	Chain of Lakes Facility	Sacramento/San Joaquin Counties	Sacramento/San Joaquin Delta	In-Delta	Island Storage in Delta	A chain of contiguous island storage facilities from the north Delta to the export facilities	300 to 600 TAF		✗		
6	Trinity Lake Enlargement	Trinity County	Trinity River	West Side Sacramento Valley	Enlarged Existing On-Stream Storage	Develop in conjunction with pump/conveyance facility; transports Shasta storage to Trinity Lake	Additional 4,800 TAF		✗		
7	Clay Station	Sacramento County	Laguna Creek	San Joaquin Valley	Off-Stream Storage	Storage for American River flows	170 TAF	✗			
8	Coloma Reservoir	El Dorado County	SF American River	East Side Sacramento Valley	On-Stream Storage	Increase regulating and yield opportunities	710 TAF		✗		
9	Colusa Reservoir Complex	Colusa/Glenn Counties	Funks Creek	West Side Sacramento Valley	Off-Stream Storage	Storage for new westside canal and Sacramento River flows	3,300 TAF				✗
10	Cooperstown Reservoir	Stanislaus County	N/A	San Joaquin Valley	Off-Stream Storage	Storage for Stanislaus and Tuolumne River flows	609 TAF		✗		
11	Cottonwood Creek Reservoir Complex	Tehama/Shasta Counties	Cottonwood Creek	West Side Sacramento Valley	Combined On-Stream and Off-Stream Storage	Storage for new westside canal and Sacramento River flows. Includes Dutch Gulch and Tehama Reservoirs.	1,600 TAF		✗		
12	Deer Creek Meadows Reservoir	Tehama County	Deer Creek	East Side Sacramento Valley	On-Stream Storage	Increase regulating and yield opportunities	200 TAF		✗		
13	Deer Creek Reservoir	Sacramento County	Near Rancho Murietta	San Joaquin Valley	Off-Stream Storage	Storage for American River flows	600 TAF		✗		
14	In-Delta Storage	Sacramento/San Joaquin Counties	Sacramento/San Joaquin Delta	In-Delta	Island Storage in Central or Southern Delta	Island storage in the Delta flows	230 TAF				
15	Duck Creek Reservoir	San Joaquin County	Calaveras watershed	San Joaquin Valley	Off-Stream Storage	Storage for Mokelumne and Calaveras River flows	100 TAF	✗			
16	Farmington Reservoir Enlargement	San Joaquin County	Littejohns Creek	San Joaquin Valley	Off-Stream Storage	The existing reservoir would be improved for conservation storage of surplus Stanislaus River flows conveyed through the Upper Farmington Canal	100 TAF	✗			
17	Fiddlers Reservoir	Tehama/Shasta Counties	MF Cottonwood Creek	West Side Sacramento Valley	On-Stream Storage	Storage for new westside canal and Sacramento River flows	310 to 545 TAF		✗		
18	Folsom Reservoir Enlargement	El Dorado, Placer and Sacramento Counties	American River	East Side Sacramento Valley	Enlarged Existing On-Stream Storage	Increase regulating and yield opportunities	Additional 365 TAF		✗		
19	Freemans Crossing Reservoir	Yuba and Nevada Counties	Yuba River	East Side Sacramento Valley	On-Stream Storage	Increase regulating and yield opportunities	300 TAF		✗		
20	Gallatin Reservoir	Tehama County	Elder Creek	West Side Sacramento Valley	On-Stream Storage	Increase regulating capabilities and yield opportunities	183 TAF	✗			
21	Garden Bar Reservoir	Sutter County	Bear River	East Side Sacramento Valley	On-Stream Storage	Provide water supply opportunities in conjunction with Camp far West and Oroville Reservoirs	245 TAF		✗		
22	Garzas Reservoir	Stanislaus County	Garzas Creek	South-of-Delta Aqueduct Storage	Off-Stream Storage	Off-aqueduct storage for the California Aqueduct or the Delta-Mendota Canal	139 to 1,754 TAF		✗		
23	Glenn Reservoir	Glenn/Tehama Counties	Stony Creek	West Side Sacramento Valley	Off-Stream Storage	Storage for Tehama-Colusa Canal or new westside canal	8,206 TAF		✗		
24	Hulen Reservoir	Shasta County	NF Cottonwood Creek	West Side Sacramento Valley	On-Stream Storage	Increase regulating capabilities and yield opportunities.			✗		
25	Ingram Canyon	Stanislaus County	Ingram Creek	South-of-Delta Aqueduct Storage	Off-Stream Storage	Off-aqueduct storage for the California Aqueduct or the Delta-Mendota Canal	333 to 1,201 TAF			✗	
26	Kettleman Plain	Kings County	Kettleman Hill	South-of-Delta Aqueduct Storage	Off-Stream Storage	Off-aqueduct storage for the California Aqueduct or the Delta-Mendota Canal	133 to 283 TAF		✗		
27	Kosk Reservoir	Shasta County	Pit River	East Side Sacramento Valley	On-Stream Storage	Increase regulating and yield opportunities	800 TAF		✗		

Table F-1
(Continued)

No.	Component	Location			Type	Description	Gross Storage Capacity	Minimum Storage Capacity (<200 TAF)	CALFED Objectives, Principles, or Policy Conflicts	Location	Environmental Impacts
		County	River/Stream	Region							
28	Little Salado-Crow Reservoir	Stanislaus County	Crow Creek	South-of-Delta Aqueduct Storage	Off-Stream Storage	Off-aqueduct storage for the California Aqueduct or the Delta-Mendota Canal	132 to 250 TAF		✘		
29	Los Banos Grandes	Merced County	Los Banos Creek	South-of-Delta Aqueduct Storage	Off-Stream Storage	Off-aqueduct storage for the California Aqueduct or the Delta-Mendota Canal	275 to 2,030 TAF		✘		
30	Los Vaqueros Enlargement	Contra Costa County	Kellogg Creek	South-of-Delta Aqueduct Storage	Off-Stream Storage	Off-aqueduct storage for the California Aqueduct or the Delta-Mendota Canal	Additional 965 TAF				
31	Marysville Reservoir	Yuba County	Yuba River	East Side Sacramento Valley	On-Stream Storage	Increase regulating and yield opportunities from the Yuba River	916 TAF		✘		
32	Millerton Lake Enlargement	Fresno County	San Joaquin River		On-Stream Storage	Increase flow regulating opportunities	720 TAF				
33	Millville Reservoir	Shasta County	South Cow Creek	East Side Sacramento Valley	On-Stream Storage	Increase regulating and yield opportunities	206 TAF		✘		
34	Montgomery Reservoir	Merced County	Dry Creek	San Joaquin Valley	Off-Stream Storage	Capture and store spills from Lake McClure	240 TAF			✘	
35	Nashville Reservoir	El Dorado/Sacramento Counties	Cosumnes River	San Joaquin Valley	Combined Off-Stream and On-Stream Storage	Storage for Cosumnes River flows	1,155 TAF		✘		
36	Orestimba Reservoir	Stanislaus County	Orestimba Creek	South-of-Delta Aqueduct Storage	Off-Stream Storage	Off-aqueduct storage for the California Aqueduct or the Delta-Mendota Canal	380 to 1,140 TAF		✘		
37	Panoche Reservoir	Fresno County	Silver Creek	South-of-Delta Aqueduct Storage	Off-Stream Storage	Off-aqueduct storage for the California Aqueduct or the Delta-Mendota Canal	160 to 3,100 TAF			✘	
38	Pardee Reservoir Enlargement	Calaveras/Amador Counties	Mokelumne River	San Joaquin Valley	On-Stream Storage	Increase regulating and yield opportunities	Additional 150 TAF	✘			
39	Quinto Creek Reservoir	Merced/Stanislaus Counties	Quinto Creek	South-of-Delta Aqueduct Storage	Off-Stream Storage	Off-aqueduct storage for the California Aqueduct or the Delta-Mendota Canal	332 to 381 TAF			✘	
40	Red Bank Project (Dippingvat-Schoenfield Project)	Tehama County	SF Cottonwood Creek	West Side Sacramento Valley	Off-Stream Storage - Schoenfield Reservoir On-Stream Storage - Dippingvat Reservoir	Provide flood control and water supply opportunities	Schoenfield - 250 TAF Dippingvat - 104 TAF				✘
41	Romero Reservoir	Merced County	Romero Creek	South-of-Delta Aqueduct Storage	Off-Stream Storage	Off-aqueduct storage for the California Aqueduct or the Delta-Mendota Canal	184 TAF	✘			
42	Rosewood Reservoir	Shasta/Tehama Counties	Salt Creek and Dry Creek	West Side Sacramento Valley	On-Stream Storage	Increase regulating capabilities and yield opportunities	155 TAF	✘			
43	Shasta Lake Enlargement	Shasta County	Sacramento River	West Side Sacramento Valley	On-Stream Storage	Increase regulating capabilities and yield opportunities	Up to additional 9,750 TAF				
44	Sites Reservoir	Colusa/Glenn Counties	Funks Creek and Stone Corral Creek	West Side Sacramento Valley	Off-Stream Storage	Storage for Tehama-Colusa Canal or new westside canal	1,200 to 1,900 TAF				
45	South Gulch Reservoir	San Joaquin County	South Gulch tributary to Calaveras River	San Joaquin Valley	Off-Stream Storage	Store flows from the Calaveras and Stanislaus Rivers	180 TAF	✘			
46	Squaw Valley Reservoir	Shasta County	Squaw Valley Creek	East Side Sacramento Valley	Combined Off-Stream and On-Stream Storage	Storage for Sacramento River flows	400 TAF		✘		
47	Sunflower Reservoir	Kings/Kern Counties	Avenal Creek	South-of-Delta Aqueduct Storage	Off-Stream Storage	Off-aqueduct storage for the California Aqueduct or the Delta-Mendota Canal	360 to 600 TAF		✘		
48	Thomes-Newville Reservoir	Glenn County	Thomes Creek and Stoney Creek	West Side Sacramento Valley	Off-Stream Storage	Storage for Tehama-Colusa Canal or new westside canal	1,840 to 3,080 TAF				
49	Tuscan Buttes Reservoir	Tehama County	Paynes Creek and Inks Creek	East Side Sacramento Valley	Off-Stream Storage	Increase regulating and yield opportunities	3,675 to 5,500 TAF		✘		
50	Waldo Reservoir	Yuba County	Dry Creek	East Side Sacramento Valley	Off-Stream Storage	Storage for Yuba River Flows	60 to 300 TAF		✘		
51	Wing Reservoir	Shasta County	Inks Creek	East Side Sacramento Valley	On-Stream Storage	Increase regulating and yield opportunities	244 TAF		✘		
52	San Luis Reservoir Enlargement	Merced County	N/A	South-of-Delta Aqueduct Storage	Off-Stream Storage	Off-aqueduct storage for the California Aqueduct or the Delta-Mendota Canal	Additional 390 TAF		✘		

Bold indicates the 12 sites identified during the first screening process.

✘ Denotes an issue for that particular screening element (see column heading).

environmental impacts, that cannot be mitigated, that the sites would not be able to be developed. This would make the sites infeasible based on logistics as defined in the Clean Water Act Section 404(b)(1) Guidelines.

F.2 EVALUATION OF RESERVOIR SITES FOR THE NODOS INVESTIGATION

The previously identified 52 reservoir sites were revisited during the NODOS Investigation. The reservoir sites were evaluated for their ability to address the original CALFED objectives and their ability to address the NODOS Investigation planning objectives.

The NODOS Investigation objectives are used to guide formulation of alternatives to address the problems and needs. The primary objectives for the NODOS Investigation are:

- ❖ Increasing water supplies, water supply reliability, and Sacramento Valley water management flexibility for agricultural, M&I, and environmental purposes, including CALFED programs such as Delta water quality, EWA and ERP, to help meet California's current and future water demands, with a focus on offstream storage; and
- ❖ Increasing the survival of anadromous fish populations in the Sacramento River during critical fish migration periods as well as the health and survivability of other aquatic species.

To the extent possible, through the pursuit of the primary planning objectives, include as opportunities features to help accomplish the following secondary objectives:

- ❖ Providing ancillary hydropower generation benefits to the statewide power grid; and
- ❖ Developing additional recreational opportunities in the study area.

Table F-2 summarizes the evaluation of the 52 reservoir sites.

Consistent with the CALFED screening and the NODOS Investigation primary objectives, three offstream surface storage measures being considered for further studies by the NODOS Investigation are Sites, Newville, and Colusa Reservoirs. All measures are offstream storage facilities involving diversion of water out of a major stream and transporting the water through various conveyance systems to/from a surface storage reservoir. Therefore, future actions for feasible offstream storage projects within NODOS will include further assessments of diversion and conveyance facilities to carry water to and from the reservoirs.

Following is a brief description of each potential reservoir facility being retained:

- ❖ **Sites Reservoir** – Sites Reservoir would be located about 10 miles west of the town of Maxwell and formed by constructing dams on Stone Corral Creek and Funks Creek. Evaluation of a Site Project has focused on an up to 1.8 MAF reservoir, although a 1.2 million acre-feet reservoir has been considered. A 1.8 MAF Sites Reservoir would require construction of nine saddle dams along the southern edge of Hunters Creek watershed. Floodflows from the Colusa Basin Drain, the Sacramento River, and local tributaries are potential sources of water supply for the Sites project. These water sources have been studied with 14 optional conveyance systems from the Sacramento River; and two gravity flow conveyance alternatives that include tunnels for diverting floodflows from existing upper Stony Creek reservoirs.

- ❖ **Colusa Reservoir** – Colusa is a proposed 3.0 MAF storage project that would include the area inundated by the 1.8-MAF Sites Reservoir, plus the adjacent Logan Creek and Hunter Creek watersheds to the north (called the Colusa Cell). The Colusa Cell requires four additional saddle dams along Logan ridge. Colusa Reservoir requires seven saddle dams. Water supply source and conveyance options are essentially the same as for Sites Reservoir, although capacities would likely be greater for the Colusa Project.
- ❖ **Newville Reservoir** – Newville would be located upstream of Black Butte Lake, 18 miles west of Orland. Constructing a dam on North Fork Stony Creek and a small saddle dam at Burrows Gap would form the proposed reservoir. The alternative reservoir sizes being evaluated are 1.9 and 3.0 MAF. Up to five additional saddle dams are required for a 3.0 MAF reservoir alternative. Current study challenges include investigating a diversion facility that would allow anadromous fish migration in Thomes Creek while allowing the creek's floodflows to be diverted to Newville Reservoir.

Following is a brief description of each the reservoir facility dismissed from further consideration:

- ❖ **Red Bank Project** – After review by the study team, the Red Bank Project offstream storage measure is hereby discontinued from further consideration under this investigation. The Red Bank Project alternative is being discontinued primarily because of significant fishery and environmental impacts. A California red-legged frog was found in the reservoir footprint. This alternative would block a portion of the Cottonwood Creek watershed in order to provide water supply to the reservoir. The Cottonwood Creek watershed is a known anadromous fishery for fall-run and late-fall-run chinook salmon. Additionally this creek is the largest un-dammed tributary to the Upper Sacramento River and is the Sacramento River's most important source of sediment. In addition, constructing this facility would require the removal and destruction of blue oaks, mixed oak and pine trees, as well as chaparral. Hydrologic conditions disfavor the Red Bank Project, without constructing a diversion dam across Cottonwood Creek to divert flow necessary to fill the Schoenfield site which would impede anadromous fish passage and spring-run salmon and steelhead. Additionally, initial investigations indicate the potential for excessive leakage of this project compared to other viable measures considered in this study. (As previously stated, the discontinuation of this measure at this time does not preclude it from future reconsideration under other circumstances, objectives and/or selection criteria.)

TABLE F-2
CALFED Surface Water Storage Alternatives Evaluation with NODOS Investigation Objectives

No.	Component	Region	Type	Gross Storage Capacity	CALFED Objectives				NODOS Investigation Primary Objectives		NODOS Investigation Secondary Objectives		Status/Rationale
					Minimum Storage Capacity (<200 TAF)	CALFED Objectives, Principles, or Policy Conflicts	Location	Environmental Impacts	Objective #1	Objective #2	Objective #3	Objective #4	
1	Allen Camp Reservoir	East Side Sacramento Valley	On-Stream Storage	196 TAF	✘				✘				Deleted – Although likely high potential for local project support, very low system contribution potential.
2	Auburn Reservoir	East Side Sacramento Valley	On-Stream Storage	315 to 2,300 TAF		✘			✘				Deleted – Project would have significant environmental impacts and low local support.
3	Bella Vista Reservoir	East Side Sacramento Valley	On-Stream Storage	146 TAF	✘				✘				Deleted – Project would not supply sufficient water supply and reliability for CALFED programs.
4	Lake Berryessa Enlargement	West Side Sacramento Valley	Off-Stream Storage	Additional 4.4 to 11.7 TAF		✘			✘				Deleted – Project would have significant environmental impacts. Project would result in a significant loss of habitat.
5	Chain of Lakes Facility	In-Delta	Island Storage in Delta	300 to 600 TAF		✘			✘				Deleted – Project would adversely affect the quality of Delta export water supplies.
6	Trinity Lake Enlargement	West Side Sacramento Valley	Enlarged Existing On-Stream Storage	Additional 4,800 TAF		✘			✘	✘			Deleted – Small potential to increase water supply in the Sacramento Valley, minimum flow releases to the Trinity River have been increasing due to severe decline in Trinity River salmon and Steelhead trout runs.
7	Clay Station	San Joaquin Valley	Off-Stream Storage	170 TAF	✘				✘				Deleted – Project would not supply sufficient water supply and reliability for CALFED programs.
8	Coloma Reservoir	East Side Sacramento Valley	On-Stream Storage	710 TAF		✘							Deleted – Project would violate California Water Code 10001.5 due to inundation of Gold Discovery Site State Park.
9	Colusa Reservoir Complex	West Side Sacramento Valley	Off-Stream Storage	3,300 TAF				✘					Retained – Although potentially feasible sites/projects exist that could increase water supply, significant overriding environmental and socioeconomic issues may restrict implementation at this time. Project warrants further investigation.
10	Cooperstown Reservoir	San Joaquin Valley	Off-Stream Storage	609 TAF		✘			✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River.
11	Cottonwood Creek Reservoir Complex	West Side Sacramento Valley	Combined On-Stream and Off-Stream Storage	1,600 TAF		✘			✘	✘			Deleted – Project would not support environmental purposes. Project would inundate 28 miles of stream and riparian habitat. Cottonwood Creek is essential to Sacramento River health and fishery production.
12	Deer Creek Meadows Reservoir	East Side Sacramento Valley	On-Stream Storage	200 TAF		✘			✘	✘			Deleted – Project would not support environmental purposes. Creek supports important population of spring-run Chinook salmon and is a priority watershed for early implementation of the ERP.
13	Deer Creek Reservoir	San Joaquin Valley	Off-Stream Storage	600 TAF		✘			✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River. Reservoir could jeopardize opportunity to provide cold water to the Lower American River.
14	In-Delta Storage	In-Delta	Island Storage in Central or Southern Delta	230 TAF					✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River.
15	Duck Creek Reservoir	San Joaquin Valley	Off-Stream Storage	100 TAF	✘				✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River. Project would not supply sufficient water supply and reliability for CALFED programs.
16	Farmington Reservoir Enlargement	San Joaquin Valley	Off-Stream Storage	100 TAF	✘				✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River. Project would not supply sufficient water supply and reliability for CALFED programs.
17	Fiddlers Reservoir	West Side Sacramento Valley	On-Stream Storage	310 to 545 TAF		✘			✘	✘			Deleted – Project would not support environmental purposes. Reservoir would block important sediment flow to the Sacramento River and would conflict with CALFED's ecosystem restoration objectives.
18	Folsom Reservoir Enlargement	East Side Sacramento Valley	Enlarged Existing On-Stream Storage	Additional 365 TAF		✘			✘				Deleted – Low potential for increasing water supply and reliability due to flood control operations.

TABLE F-2
(Continued)

No.	Component	Region	Type	Gross Storage Capacity	Minimum Storage Capacity (<200 TAF)	CALFED Objectives			NODOS Investigation Primary Objectives		NODOS Investigation Secondary Objectives		Status/Rationale
						CALFED Objectives, Principles, or Policy Conflicts	Location	Environmental Impacts	Objective #1	Objective #2	Objective #3	Objective #4	
19	Freemans Crossing Reservoir	East Side Sacramento Valley	On-Stream Storage	300 TAF		✘			✘				Deleted – Lack of water in the project area due to current diversions.
20	Gallatin Reservoir	West Side Sacramento Valley	On-Stream Storage	183 TAF	✘				✘				Deleted – Project would not supply sufficient water supply and reliability for CALFED programs.
21	Garden Bar Reservoir	East Side Sacramento Valley	On-Stream Storage	245 TAF		✘			✘	✘			Deleted – Project would not support environmental purposes. Project would negatively impact anadromous fish.
22	Garzas Reservoir	South-of-Delta Aqueduct Storage	Off-Stream Storage	139 to 1,754 TAF		✘			✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River. Project would not support environmental purposes.
23	Glenn Reservoir	West Side Sacramento Valley	Off-Stream Storage	8,206 TAF		✘			✘	✘			Deleted – Project would not support environmental purposes. Project would have significant impact on migration routes and spawning habitat.
24	Hulen Reservoir	West Side Sacramento Valley	On-Stream Storage	Up to 244 TAF		✘			✘	✘			Deleted – Project would not support environmental purposes. Reservoir would block important sediment flow to the Sacramento River and would conflict with CALFED's ecosystem restoration objectives.
25	Ingram Canyon	South-of-Delta Aqueduct Storage	Off-Stream Storage	333 to 1,201 TAF			✘		✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River.
26	Kettleman Plain	South-of-Delta Aqueduct Storage	Off-Stream Storage	133 to 283 TAF		✘			✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River.
27	Kosk Reservoir	East Side Sacramento Valley	On-Stream Storage	800 TAF		✘							Deleted – Reservoir was investigated as part of the SLWRI and was determined to have a very high unit cost per acre-foot of yield.
28	Little Salado-Crow Reservoir	South-of-Delta Aqueduct Storage	Off-Stream Storage	132 to 250 TAF		✘			✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River.
29	Los Banos Grandes	South-of-Delta Aqueduct Storage	Off-Stream Storage	275 to 2,030 TAF		✘			✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River.
30	Los Vaqueros Enlargement	South-of-Delta Aqueduct Storage	Off-Stream Storage	Additional 965 TAF					✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River.
31	Marysville Reservoir	East Side Sacramento Valley	On-Stream Storage	916 TAF		✘			✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River.
32	Millerton Lake Enlargement		On-Stream Storage	720 TAF					✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River.
33	Millville Reservoir	East Side Sacramento Valley	On-Stream Storage	206 TAF		✘			✘	✘			Deleted – Reservoir will likely be designated an Essential Fish Habitat. Would be in conflict with CALFED's restoration objectives.
34	Montgomery Reservoir	San Joaquin Valley	Off-Stream Storage	240 TAF			✘		✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River.
35	Nashville Reservoir	San Joaquin Valley	Combined Off-Stream and On Stream Storage	1,155 TAF		✘			✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River.
36	Orestimba Reservoir	South-of-Delta Aqueduct Storage	Off-Stream Storage	380 to 1,140 TAF		✘			✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River.

TABLE F-2
(Continued)

No.	Component	Region	Type	Gross Storage Capacity	CALFED Objectives				NODOS Investigation Primary Objectives		NODOS Investigation Secondary Objectives		Status/Rationale
					Minimum Storage Capacity (<200 TAF)	CALFED Objectives, Principles, or Policy Conflicts	Location	Environmental Impacts	Objective #1	Objective #2	Objective #3	Objective #4	
37	Panoche Reservoir	South-of-Delta Aqueduct Storage	Off-Stream Storage	160 to 3,100 TAF			✘		✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River.
38	Pardee Reservoir Enlargement	San Joaquin Valley	On-Stream Storage	Additional 150 TAF	✘				✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River. Project would not supply sufficient water supply and reliability for CALFED programs.
39	Quinto Creek Reservoir	South-of-Delta Aqueduct Storage	Off-Stream Storage	332 to 381 TAF			✘		✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River.
40	Red Bank Project (Dippingvat-Schoenfield Project)	West Side Sacramento Valley	Off-Stream Storage - Schoenfield Reservoir On-Stream Storage - Dippingvat Reservoir	Schoenfield - 250 TAF Dippingvat - 104 TAF				✘		✘			Deleted – This project would block anadromous fishery utilization of portions of Cottonwood Creek watershed, and impede anadromous fish passage in Cottonwood Creek during spring diversions from South Fork Cottonwood Creek (Dippingvat Reservoir) into Red Bank Creek (Schoenfield Reservoir). Fishery impacts to anadromous species preclude this measure from being retained under NODOS primary objectives.
41	Romero Reservoir	South-of-Delta Aqueduct Storage	Off-Stream Storage	184 TAF	✘				✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River. Project would not supply sufficient water supply and reliability for CALFED programs.
42	Rosewood Reservoir	West Side Sacramento Valley	On-Stream Storage	155 TAF	✘				✘				Deleted – Project would not supply sufficient water supply and reliability for CALFED programs.
43	Shasta Lake Enlargement	West Side Sacramento Valley	On-Stream Storage	Up to additional 9,750 TAF					✘				Deleted – Consistent with primary planning objectives and directly contributes to secondary planning objectives. However, project does not focus on offstream storage.
44	Sites Reservoir	West Side Sacramento Valley	Off-Stream Storage	1,200 to 1,900 TAF									Retained – Consistent with primary planning objectives and directly contributes to secondary planning objectives.
45	South Gulch Reservoir	San Joaquin Valley	Off-Stream Storage	180 TAF	✘				✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River. Project would not supply sufficient water supply and reliability for CALFED programs.
46	Squaw Valley Reservoir	East Side Sacramento Valley	Combined Off-Stream and On-Stream Storage	400 TAF		✘			✘	✘		✘	Deleted – Project would reduce flows in the Upper Sacramento River. Project would inundate area of high recreational use.
47	Sunflower Reservoir	South-of-Delta Aqueduct Storage	Off-Stream Storage	360 to 600 TAF		✘			✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River.
48	Thomes-Newville Reservoir	West Side Sacramento Valley	Off-Stream Storage	1,840 to 3,080 TAF									Retained – Consistent with primary planning objectives and directly contributes to secondary planning objectives.
49	Tuscan Buttes Reservoir	East Side Sacramento Valley	Off-Stream Storage	3,675 to 5,500 TAF		✘				✘			Deleted – Would cause significant fisheries impacts. Would require large diversion from the Sacramento River.
50	Waldo Reservoir	East Side Sacramento Valley	Off-Stream Storage	60 to 300 TAF		✘			✘			✘	Deleted – Would cause significant environmental and recreational impacts.
51	Wing Reservoir	East Side Sacramento Valley	On-Stream Storage	244 TAF		✘			✘				Deleted – Reservoir will likely be designated an Essential Fish Habitat. Would be in conflict with CALFED's restoration objectives.
52	San Luis Reservoir Enlargement	South-of-Delta Aqueduct Storage	Off-Stream Storage	Additional 390 TAF		✘			✘	✘			Deleted – Project does not supply water management flexibility in the Sacramento Valley, nor does it increase anadromous fish survival on the Sacramento River.

✘ Denotes an issue for that particular screening element (see column heading).

This page intentionally
left blank.