

1
2

3 This chapter describes the environmental setting and study area for land use; analyzes impacts that
4 could result from construction, operation, and maintenance of the project; and provides mitigation
5 measures to reduce the effects of potentially significant impacts. This chapter also analyzes the
6 impacts that could result from implementation of compensatory mitigation required for the project
7 and describes any additional mitigation necessary to reduce those impacts, and analyzes the impacts
8 that could result from other mitigation measures associated with other resource chapters in this
9 Draft Environmental Impact Report (Draft EIR).

10 **14.0 Summary Comparison of Alternatives**

11 Table 14-0 provides a summary comparison of important impacts on land use by alternative. The
12 table presents the CEQA findings after all mitigation is applied. If applicable, the table also presents
13 quantitative results after all mitigation is applied. This table provides information about the
14 magnitude of the most pertinent and quantifiable impacts on land use that are expected to result
15 from implementation of the alternatives. Important impacts to consider include conflicts with
16 existing land uses as a result of constructing the proposed water conveyance facility. As shown in
17 Table 14-0, each project alternative would result in incompatibilities with applicable land use
18 designations, goals, and policies as a result of constructing the proposed water conveyance facilities.
19 Alternative 2a would result in the most acreage with incompatibilities, with nearly 4,753 acres.
20 Alternative 5 would result in the fewest acres with incompatibilities, with 2,667 acres. Although
21 changes in land use could result in a conflict with policies adopted to avoid or mitigate
22 environmental effects, these conflicts would be unlikely to result in a significant physical effect;
23 therefore, this impact would be less than significant.

24 Table ES-2 in the Executive Summary provides a summary of all impacts disclosed in this chapter.

1 **Table 14-0. Comparison of Impacts on Land Use by Alternative**

Chapter 14 – Land Use	Alternative								
	1	2a	2b	2c	3	4a	4b	4c	5
Impact LU-1: Displacement of Existing Structures and Residences and Effects on Population and Housing	NI	NI	NI	NI	NI	NI	NI	NI	NI
Impact LU-2: Incompatibility with Applicable Land Use Designations, Goals, and Policies, Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect as a Result of the Project (total acres)	4,340/ LTS	4,753/ LTS	3,828/ LTS	4,207/ LTS	3,909/ LTS	4,342/ LTS	3,361/ LTS	3,761/ LTS	2,667/ LTS
Impact LU-3: Create Physical Structures Adjacent to and through a Portion of an Existing Community That Would Physically Divide the Community as a Result of the Project	NI	NI	NI	NI	NI	NI	NI	NI	NI

2 LTS = less than significant; NI = no impact.

14.1 Environmental Setting

This section describes existing land uses and planned future land uses that could be affected by construction and operation of the alternatives. Alternatives that could physically divide a community (i.e., construction of roads or other infrastructure that would change existing travel patterns or prevent access to community facilities) or would conflict with existing land use plans, policies, or regulations adopted to avoid environmental effects could have significant impacts related to land use and planning.

This section also summarizes goals, objectives, and policies from the general plans and other regulations and plans of agencies with jurisdiction over land uses in the Delta. Certain topics discussed in this section are related to topics discussed in substantially greater detail in other sections of this Draft EIR. Chapter 15, *Agricultural Resources*, examines the effects on Important Farmland, as well as land subject to Williamson Act contracts or under contract in Farmland Security Zones in the study area. Detailed information on public and private recreation facilities is provided in Chapter 16, *Recreation*. Chapter 17, *Socioeconomics*, discusses the economics of agricultural production in the Delta.

This chapter does not describe the land use setting or potential project effects in the State Water Project (SWP)/Central Valley Project (CVP) export service areas; this topic is addressed in Chapter 31, *Growth Inducement*.

14.1.1 Study Area

The study area evaluated for potential effects on land use includes portions of counties containing the “statutory Delta” - as defined in Chapter 1, *Introduction*, Section 1.4.2, *Delta Region*, as well as areas containing project infrastructure to the east and southwest of the statutory Delta boundary and areas around Bethany Reservoir for Alternative 5 (see Figure 14-1). This includes land from the following counties: Alameda, Contra Costa, Sacramento, and San Joaquin. Predominantly, the areas where land use impacts would occur coincide with the temporary and permanent footprints of disturbance associated with construction of project water conveyance and related facilities (see Table 14-4 for disturbance acreages). Other potential indirect impacts on land use stemming from the long-term operations and existence of permanent facilities in the study area are also evaluated. Although the study area includes several cities, towns, and communities within the broader geography of the statutory Delta, local land use impacts are analyzed only within and adjacent to the temporary and permanent footprints of disturbance associated with the construction of each project alternative where land use impacts have the potential to occur. Other potential impacts related to growth in these areas, as well as in cities, towns, and communities within the broader geography of the statutory Delta, are addressed in Chapter 31, *Growth Inducement*.

1 **14.1.1.1 Existing Land Uses in the Study Area**

2 Existing land uses in the study area are identified and characterized based on recent aerial imagery
3 and county and city general plans listed in Section 14.3.1, *Methods of Analysis*. Several
4 unincorporated towns are also in the study area; however, county designations, goals, and policies
5 guide land use in these communities.

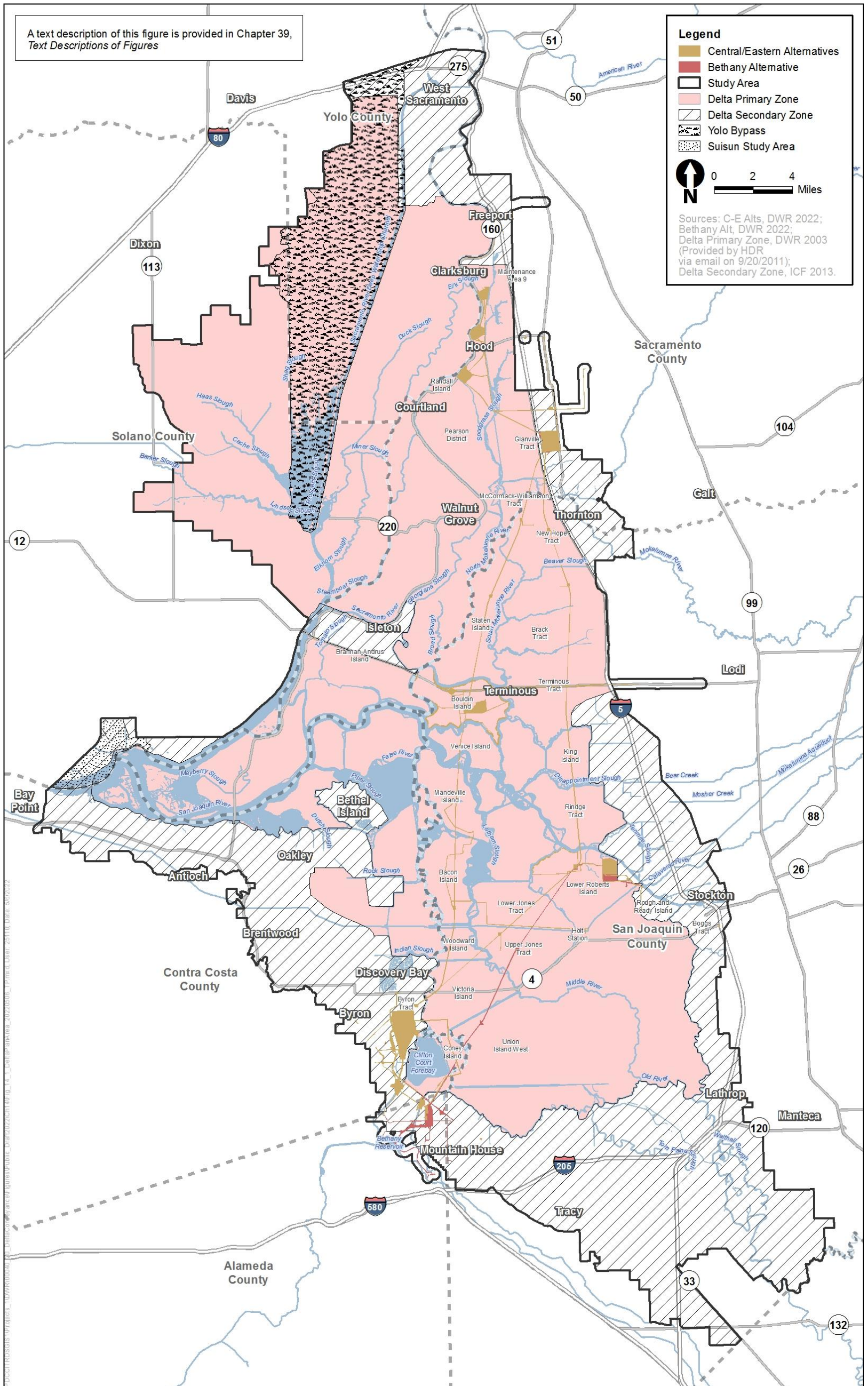
6 **The Delta**

7 The statutory Delta, which is similar to but not precisely the same as the study area, encompasses
8 738,000 acres, most of which is devoted to agricultural land uses with some open water and urban
9 land uses. The remainder of the statutory Delta presently consists of open space and wildlife habitat.

10 As part of the Johnston-Baker-Andal-Boatwright Delta Protection Act of 1992 (Delta Protection Act),
11 the Delta Protection Commission designated primary and secondary land management zones within
12 the Delta region.

13 The Primary Zone of the Delta encompasses approximately 780 square miles, or 500,000 acres,
14 primarily used for farming (Pub. Resources Code § 29728; Delta Protection Commission 2010:7).
15 This zone encompasses the city of Rio Vista and portions of Alameda, Contra Costa, Sacramento, San
16 Joaquin, Solano, and Yolo Counties. Unincorporated towns lying along the Sacramento River in the
17 Primary Zone include Clarksburg, Courtland, Freeport, Hood, Locke, Walnut Grove, and Ryde. Within
18 agricultural areas in the Primary Zone are natural preserve areas, such as Stone Lakes National
19 Wildlife Refuge in Sacramento County. Stone Lakes National Wildlife Refuge encompasses 17,640
20 acres, of which 6,550 acres are managed by the U.S. Fish and Wildlife Service (USFWS) and is located
21 along the Pacific Flyway (U.S. Fish and Wildlife Service 2007:25, 180). See Chapter 13, *Terrestrial*
22 *Biological Resources*, for descriptions of the habitat and land cover types found in the Stone Lakes
23 National Wildlife Refuge, and Chapter 16, *Recreation*, for a description of recreational uses at the
24 Stone Lakes National Wildlife Refuge.

25 The Secondary Zone of the Delta consists of approximately 247,000 acres and is defined as all the
26 land and water area within the boundaries of the statutory Delta that is not in the Primary Zone
27 (Pub. Resources Code § 29731; Delta Stewardship Council 2019:170). The city of Isleton and
28 portions of the cities of Stockton, Rio Vista, Antioch, Oakley, Sacramento, West Sacramento, Elk
29 Grove, Tracy, Lathrop, and Pittsburg are in the Secondary Zone. Waterfront communities in the
30 Secondary Zone, such as Discovery Bay and parts of Bethel Island, enjoy water-related recreational
31 activities and have several marinas and yacht clubs. Bethel Island is approximately 3,500 acres
32 (Delta Stewardship Council 2019:172). Although the land use designations on Bethel Island are
33 predominantly agricultural and residential, the land use designation on the eastern shore is
34 primarily commercial recreation, a county land use designation that allows a range of privately
35 operated recreational uses of commercial importance, including marinas and similar facilities,
36 campgrounds, and outdoor sports (County of Contra Costa 2005:3-16, 3-12-3-15). Discovery Bay is
37 a small, unincorporated community of approximately 277 acres (County of Contra Costa 2014:9)
38 generally surrounded by water. Land uses in Discovery Bay are primarily residential and
39 recreational, including schools, grocery stores, and water access, but also include some commercial
40 uses, such as commercial recreation.



1
2 **Figure 14-1. Land Use Study Area**

This page intentionally left blank

1 **Alameda County**

2 A portion of the study area includes approximately 6,348 acres of the extreme northeastern corner
3 of Alameda County. This portion of the county is primarily characterized by agricultural land uses,
4 open space, and the Bethany Reservoir.

5 Land use types for the Alameda County portion of the study area are described in the *East County*
6 *General Plan*; they include residential, commercial, industrial, mixed use, major public, major parks,
7 agricultural, resource management, and water management (County of Alameda 2000:45–48).

8 **Contra Costa County**

9 The study area includes approximately 105,975 acres of eastern Contra Costa County including
10 portions of the cities of Antioch, Brentwood, Oakley, and Pittsburg. The city of Oakley is in eastern
11 Contra Costa County, with approximately 9,102 acres within the study area. Additionally,
12 unincorporated communities that are partially or completely within Contra Costa County and the
13 study area are Bay Point, Bethel Island, Byron, Discovery Bay, and Knightsen. Land uses in this part
14 of the county are primarily agricultural, rural, suburban residential, commercial, light industrial, and
15 open space. Clifton Court Forebay extends from Alameda County into Contra Costa County. The
16 Franks Tract State Recreation Area, located northeast of Bethel Island, is in this part of Contra Costa
17 County. See Chapter 16, *Recreation*, for more information on the recreational uses of Bethel Island
18 and the Franks Tract State Recreation Area.

19 Land use types are categorized in the Land Use Element of the *Contra Costa County General Plan*
20 *2005–2020*. The land use designations include residential, commercial, office, industrial, recreational
21 (public and private), airport commercial, mixed-use, public and semi-public, landfill, agricultural,
22 open space, parks and recreation, water, and watershed (County of Contra Costa 2005:3-17).

23 **Sacramento County**

24 Approximately 120,304 acres in the southwestern portion of Sacramento County are in the study
25 area. The cities of Sacramento, Elk Grove, and Isleton within Sacramento County are either located
26 partially or completely within the study area, along with the unincorporated communities of
27 Courtland, Freeport, Hood, Ryde, Locke, and Walnut Grove. Land uses in the southwestern portion of
28 the county and within the study area are agricultural, rural, suburban residential, commercial, light
29 industrial, and open space. This portion of Sacramento County also contains the Stone Lakes
30 National Wildlife Refuge, the Brannan Island State Recreation Area, and the Lower Sherman Island
31 Wildlife Management Area. Brannan Island State Recreation Area is just south of the city of Rio Vista
32 and occupies 336 acres (California State Parks 2022). The Lower Sherman Island Wildlife Area is
33 approximately 3,100 acres of riparian marshland at the confluence of the Sacramento and San
34 Joaquin Rivers (California Department of Fish and Wildlife 2020) and only accessible by boat. See
35 Chapter 16, *Recreation*, for a more detailed description of Brannan Island State Recreation Area and
36 Lower Sherman Island Wildlife Area.

37 Sacramento County's General Plan Land Use Designation Diagram includes residential, mixed-use
38 and transit-oriented development, commercial, offices, and industrial uses, combined land uses
39 (general for aggregate and resource conservation areas), public and quasi-public, agriculture, and
40 recreation land use designations (County of Sacramento 2018).

1 San Joaquin County

2 The study area includes about 313,997 acres of the western portion of San Joaquin County, the
3 jurisdiction with the most land in the study area. This portion of the county is primarily agricultural,
4 but also encompasses areas of open space, particularly along riparian corridors, as well as some
5 rural residential land uses. This area includes portions of the cities of Lathrop, Lodi, Stockton, and
6 Tracy. Unincorporated towns with at least some land in San Joaquin County and the study area are
7 Country Club, Discovery Bay, Lincoln Village, Mountain House, Terminous, and Thornton.

8 The San Joaquin County General Plan utilizes the following general plan designations: residential,
9 commercial, industrial, agricultural, open space (which includes parks and recreation and resource
10 conservation), public, mixed use, and other categories (roads and incorporated cities) (County of
11 San Joaquin 2016a).

12 Solano County

13 Nearly 92,388 acres of southeastern Solano County are in the study area. This portion of the county
14 is characterized primarily by agricultural land uses and open space, but the southern portion of this
15 area also contains some suburban residential development. Rural residential land use is sparse, but
16 scattered throughout this portion of the county, as well. Solano County contains Suisun Marsh, the
17 largest contiguous brackish water marsh remaining on the west coast of North America.
18 Approximately 4,290 acres of Suisun Marsh are located within the study area.

19 The Solano County General Plan Land Use Diagram utilizes the following land use designations: park
20 and recreation, marsh, watershed, agriculture, public/quasi-public, residential, commercial,
21 industrial, and special purpose areas (County of Solano 2008:LU-7).

22 Yolo County

23 The study area includes approximately 88,490 acres in the southeastern portion of Yolo County.
24 This area of the county consists primarily of agricultural land uses. Much of the city of West
25 Sacramento is in the study area, as well as the unincorporated community of Clarksburg.
26 Approximately 16,025 acres of the Yolo Bypass Wildlife Area are found in the study area in the
27 northern and north-central portions of this part of the county. The Yolo Bypass Wildlife Area
28 consists of a total of 16,770 acres of wildlife habitat and agricultural land managed by the California
29 Department of Fish and Wildlife (CDFW) (California Department of Fish and Game 2008:2-1).

30 Yolo County's *2030 Countywide General Plan* contains the following land use designations: open
31 space, agriculture, recreation, residential, commercial, industrial, public, mixed use, and other
32 (County of Yolo 2018:LU-5).

33 14.2 Applicable Laws, Regulations, and Programs

34 Generally, state and federal agencies, as well as some local or regional agencies involved with the
35 location or construction of facilities for the production, generation, storage, treatment, or delivery of
36 water, are not subject to local land use regulations, and inconsistency with a specific local land use

1 regulation is not by itself a significant impact on the environment.¹ However, this Draft EIR, in
2 assessing whether particular categories of environmental effects are significant, considers relevant
3 local land use regulations that are adopted for the purpose of avoiding or mitigating an
4 environmental impact.

5 The applicable laws, regulations, and programs considered in the assessment of project impacts on
6 land use are indicated in Section 14.3.1, *Methods for Analysis*, or the impact analysis, as appropriate.
7 Applicable laws, regulations and programs associated with state and federal agencies that have a
8 review or potential approval responsibility have also been considered in the development CEQA
9 impact thresholds or are otherwise considered in the assessment of environmental impacts. A listing
10 of some of the agencies and their respective potential review and approval responsibilities, in
11 addition to those under CEQA, is provided in Chapter 1, *Introduction*, Table 1-1. A listing of some of
12 the federal agencies and their respective potential review, approval, and other responsibilities, in
13 addition to those under NEPA, is provided in Chapter 1, Table 1-2.

14 **14.3 Environmental Impacts**

15 This section describes the land use impacts that would result from activities related to project
16 construction, operations, and maintenance, and implementation of mitigation, including
17 compensatory mitigation. It describes the methods used to determine the impacts of the project and
18 lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate
19 (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts are provided.
20 The potential to induce substantial unplanned population growth and the potential to displace
21 substantial numbers of people and housing are also discussed. Indirect impacts related to growth
22 are also discussed in Chapter 31, *Growth Inducement*, which includes analysis of the direct growth
23 inducement on employment, the extent of indirect growth inducement associated with construction
24 of access roads which may remove an obstacle to growth of lack of roadway infrastructure, and
25 indirect growth inducement associated with increased water supply reliability.

26 **14.3.1 Methods for Analysis**

27 **14.3.1.1 Process and Methods of Review for Land Use**

28 Potential temporary, permanent, direct, and indirect land use effects associated with each
29 alternative were assessed based on the compatibility of constructing, operating, and maintaining the
30 alternatives with the existing and planned land uses in the study area. Any incompatibility was then
31 assessed to determine whether it would lead to a potential adverse indirect effect on the physical
32 environment.

33 For purposes of determining the potential acreages of land uses affected, a base map of designated
34 land uses within the study area was generated from an aggregate of generalized land use
35 designations from county and city general plans (Figure 14-2). Although general plan land use
36 designation nomenclature varies between agencies (e.g., agriculture vs. agricultural lands or
37 agricultural cropland), within each generalized land use category the overall land uses remain

¹ See, e.g., *Hall v. Taft* (1956), 47 Cal.2d 177, 183; *Town of Atherton v. Superior Court* (1958) 159 Cal.App.2d 417 and *Lawler v. City of Redding* (1992) 7 Cal. App.4th 778, 784.

1 largely consistent between agencies. For each alternative, the acreages of the generalized land uses
2 within each local jurisdiction affected by the physical disturbance footprint resulting from planned
3 aboveground temporary and permanent water conveyance structures, with, has been quantified. An
4 overview of this is presented in Table 14-4, with more information presented in Mapbook Figures
5 M14-1, M14-2, and M14-3.

6 For purposes of determining land use compatibility, aerial imagery was used to identify existing
7 structures in the study area. Structures include residences, storage or support facilities relating to
8 agricultural operations, recreational (both public and private) facilities, and other types of
9 infrastructure.

- 10 ● **Permanent effects** are those resulting from the physical footprints of project facilities; that is,
11 land is made unsuitable for its designated land use because it now contains a project feature
12 such as a pump station, intake, forebay, or sedimentation basin or has been permanently
13 modified in some manner such that it can no longer function for its designated use, and
14 additional land would have to be converted to serve the purpose of the affected land.
- 15 ● **Temporary effects** are defined as those land use effects that would occur during the duration of
16 construction activities at any given site. Temporary land use effects would occur predominantly
17 during the construction period and would likely not persist beyond the construction period. As
18 described in Chapter 3, *Description of the Proposed Project and Alternatives*, the construction
19 period would last between 12 and 14 years depending on alternative. However, the duration of
20 some temporary impacts may be as brief as a few days (e.g., access roads) and most are not
21 anticipated to continue substantially beyond the end of the construction period.² Some areas
22 that are considered temporarily affected would likely be returned to a condition suitable for
23 their designated land uses immediately after work activities are finished, such as areas used for
24 parking light construction vehicles. Some construction areas, such as materials staging or
25 stockpile areas, may take up to 3 years to be returned to a condition suitable for the designated
26 land use. See Chapter 11, *Soils*, and Chapter 3, Section 3.4.14, *Land Reclamation*, for a full
27 discussion.

28 Generally, state and federal agencies, as well as some local or regional agencies involved with the
29 location or construction of facilities for the production, generation, storage, treatment, or delivery of
30 water, are not subject to local land use regulations, and inconsistency with a specific local land use
31 regulation is not by itself a significant impact on the environment.³ However, as stated above, this
32 Draft EIR considers relevant local land use regulations that are adopted for the purpose of avoiding
33 or mitigating an environmental impact. Project compatibility and potential effects on planned future
34 land uses were assessed by reviewing land use designations, goals, and policies listed as follows.

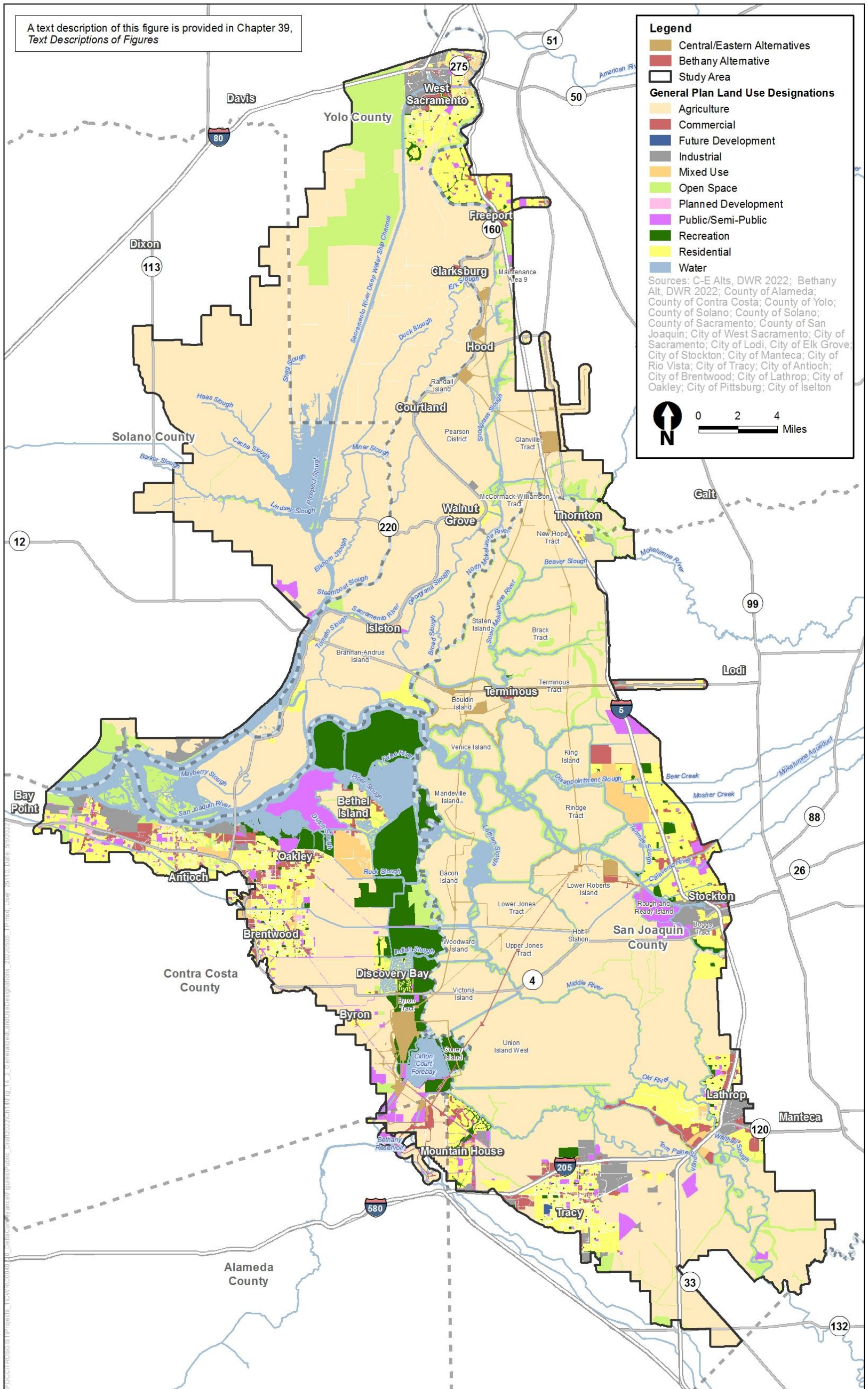
- 35 ● USFWS, *Stone Lakes National Wildlife Refuge Comprehensive Conservation Plan*
- 36 ● Delta Protection Commission, *Land Use and Resource Management Plan for the Primary Zone of*
37 *the Delta* (LURMP)

² In some cases, temporary land use effects created during the construction period could last beyond the completion of construction activities, as in the cases of reestablishing natural communities or agricultural production; however, this delay should be relatively brief. See Chapter 11, *Soils*, for a discussion of how sites would be reclaimed.

³ See, e.g., *Hall v. Taft* (1956), 47 Cal.2d 177, 183; *Town of Atherton v. Superior Court* (1958) 159 Cal.App.2d 417, and *Lawler v. City of Redding* (1992) 7 Cal.App.4th 778, 784.

- 1 • California Department of Parks and Recreation, *Recreation Proposal for the Sacramento–San*
- 2 *Joaquin Delta and Suisun Marsh*
- 3 • Sacramento Area Council of Governments, *Borges-Clarksburg Airport Comprehensive Land Use*
- 4 *Plan*

This page intentionally left blank



1
2 **Figure 14-2. Generalized Land Use Designations in the Study Area**

This page intentionally left blank

- 1 • Contra Costa County, *Byron Airport Master Plan*
- 2 • San Joaquin County, *Aviation System Airport Land Use Compatibility Plan*
- 3 • Alameda County, *East County Area Plan*
- 4 • Contra Costa County, *General Plan 2005–2020*
- 5 • Sacramento County, *General Plan of 2005–2030*
- 6 • Sacramento County, Courtland Special Planning Area Ordinance
- 7 • Sacramento County, Locke Special Planning Area Ordinance
- 8 • San Joaquin County, *San Joaquin General Plan Policy Document*
- 9 • Solano County, *Solano County General Plan*
- 10 • Yolo County, *2030 Countywide General Plan*
- 11 • Yolo County, *Clarksburg Area Community Plan*
- 12 • General plans for the cities of Brentwood, Lodi, Sacramento, and Stockton

13 The land use designations, plans, policies, and goals identified above represent a list of those
 14 applicable to the broad study area. If a conflict or incompatibility is expected to occur as a result of
 15 the construction and operation of the project, it is described in Section 14.3.3, *Impacts and*
 16 *Mitigation Approaches*.

17 **14.3.1.2 Evaluation of Construction Activities**

18 The evaluation of impacts of construction activities below looks at all construction activities
 19 together, as the impacts of specific construction activities would not have substantially different
 20 impacts. Specific impact mechanisms are identified by project component in Table 14-1.

21 **Table 14-1. Land Use Impact Mechanisms**

Alternative Components	Land Use Impact Mechanisms
North Delta intakes	Location of intake facilities if such land uses would be inconsistent with plans and policies protecting the environment.
Tunnels	None – Tunnel depth and design would be such that surface land uses would not be restricted or otherwise affected.
Tunnel shafts	Construction activity at shaft locations if it has the potential to divide existing communities.
RTM	Stockpiles could be inconsistent with land use designations and policies. Temporary RTM stockpiles would occur at all tunnel launch shafts. Permanent RTM stockpiles would occur at Twin Cities Complex, Bouldin Island, Lower Roberts Island, and, under some alternatives, at the Southern Complex. Material transport would utilize road and rail and would not have the potential to divide existing communities. Disposal of spoils and RTM is described in detail in Chapter 3, <i>Description of the Proposed Project and Alternatives</i> .
Southern Complex on Byron Tract	Change in land use of sites due to construction. During operations, land use would change due to the South Delta Pumping Plant and Southern Forebay facilities.

Alternative Components	Land Use Impact Mechanisms
Southern Complex west of Byron Highway	Change in land use of sites due to construction. During operations, land use would change due to the South Delta Conveyance Facilities.
Bethany Complex	Change in land use of sites due to construction. During operations, land use would change due to the Bethany Reservoir Pumping Plant and Surge Basin, Bethany Reservoir Aqueduct, and Bethany Reservoir Discharge Structure.
Access roads	Potential to divide existing communities.
Rail-served materials depots	Change in land use of sites to rail depots could be inconsistent with land use designations and policies.
Earthwork balance	Stockpiles and soil transport could be inconsistent with land use designations and policies, and, while temporary, could be long term.
Electric power transmission	Overhead transmission lines could have the potential to divide existing communities or restrict land uses within transmission corridors.
SCADA facilities	None – Most would be located within maintenance facilities, with most being underground; however, some would be overhead. In either case, there would be no impact for this project component.
Fencing and lighting	None – compatibility impacts regarding adjacent land uses are addressed in Chapter 18, <i>Aesthetics and Visual Resources</i> .
Other construction support facilities	Location of construction support facilities if such land uses would be inconsistent with plans and policies protecting the environment.
Land reclamation	While temporarily disturbed areas would be reclaimed depending on site specific assessment, the land may or may not be restored to the pre-disturbance land use. For example, agricultural lands may be restored to natural habitat. Further, some minor delay (up to 3 years) may occur as land is remediated from construction to establish appropriate conditions for reuse (see Chapter 11, <i>Soils</i>).
Field investigations	Potential for temporary interference with land use, particularly agriculture.
Facility operations and maintenance	To occur at facility sites, so this alternative component would not have impacts other than those of the facility site.

RTM = reusable tunnel material; SCADA = supervisory control and data acquisition.

- 1
2
3 Features of the project facilities that would remain following the completion of construction
4 activities, such as the intake sites (e.g., sedimentation basin), shaft pad sites, transportation
5 infrastructure improvements (e.g., roadway widenings, new/expanded roadway interchanges), the
6 Southern Complex (e.g., pumping plant, forebay embankments, the forebay proper), and the Bethany
7 Complex (e.g., pumping plant, surge basin, aqueduct, discharge structure), are evaluated for
8 permanent direct impacts on land use because changes in land use occurring as a result of
9 construction and operation of these facilities would last the lifetime of the operation of the project
10 and, in some cases (e.g., roadway improvements), beyond it.
- 11 Activities or physical footprints resulting in impacts that are limited to the period of active
12 construction at a given site are considered to be temporary or short-term land use impacts.
13 *Temporary impacts* may include the contractor staging areas and temporary stockpile areas.
14 Stockpiles of RTM are considered to be permanent impacts.

14.3.1.3 Evaluation of Operations and Maintenance

Most potential impacts resulting from the implementation of the project alternatives are associated with the construction of the project facilities. Project operation and maintenance is generally not anticipated to result in additional land use impacts in the study area as operations are not anticipated to result in changes in land use beyond those that would occur during and as a result of project construction. The operation of the project may result in changes in water quality; however, they are not expected to affect agricultural irrigation water quality, and changes in water quality in the western Delta are not expected to result in exceedance of any significance thresholds for impacts on agricultural land use. See Chapter 15, *Agricultural Resources*, and Chapter 9, *Water Quality*, for a detailed evaluation of this potential impact.

14.3.1.4 Evaluation of Compensatory Mitigation and Other Mitigation Measure Impacts

Although the Compensatory Mitigation Plan (CMP) described in Appendix 3F, *Compensatory Mitigation Plan for Special-Status Species and Aquatic Resources*, does not act as mitigation for impacts on land use from the project, the CMP could conflict with existing land uses or could have a land use impact, as defined below.

Initial compensatory mitigation actions for the project are focused on lands owned by California Department of Water Resources (DWR) (Interstate [I]-5 Ponds 6, 7, and 8) or partners (Bouldin Island is owned by the Metropolitan Water District of Southern California). Because most of the Delta is currently in active agricultural production, it is anticipated that many of these mitigation actions to address project impacts to special-status species habitat, as well as to aquatic resources, could result in conversion of agricultural land to nonagricultural uses. Although certain mitigation actions that are available to address special-status species impacts are compatible with long-term preservation of agricultural land (e.g., placement of conservation easements to ensure lands remain in alfalfa or pasture to benefit Swainson's hawk [*Buteo swainsoni*] foraging habitat), other actions, such as restoration of farmland to intertidal marsh, would result in the permanent conversion of agricultural land. Impacts related to agriculture and conversion of farmland are addressed in Chapter 15, *Agricultural Resources*.

Other mitigation measures identified in this Draft EIR were also reviewed to evaluate whether any would result in changes to land uses, or conflict with any plan or policy adopted to avoid or mitigate environmental impacts.

14.3.2 Thresholds of Significance

CEQA directs a lead agency to focus on the potential for the proposed project to cause significant impacts on the *physical environment* (CEQA Guidelines § 15382). Those effects typically associated with land use relate to conflicts with existing or designated uses that do not necessarily, by themselves, equate to an adverse effect on the physical environment. Appendix G of the CEQA Guidelines for issues related to "land use and planning" provides areas of assessment to determine if a project alternative would result in a significant effect under CEQA by analyzing if the project results in the following conditions.

- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.

- 1 • Physically divide an established community.

2 For the purpose of this analysis, it was determined: (1) if the project results in a conflict with any
3 applicable land use plan, policy, or regulation that consequently has an adverse effect on the
4 physical environment, this would be considered a significant effect on land use; (2) any activities
5 lasting longer than 1 year that would cross a community or create physical structures and be
6 considered an adverse effect on the physical environment would also be a significant effect on land
7 use.

8 DWR, in preparing this assessment, has framed its conclusions first in terms of whether proposed
9 alternatives are *compatible* or *incompatible* with land use policies, regulations, or plans, and then in
10 terms of whether that incompatibility (also referred to as an effect) would result in environmental
11 impacts and then whether those impacts are *significant* or *less than significant*. This approach is
12 being taken because conflicts with land use policies, regulations, or plans, even those that are
13 applicable to DWR as a state agency, do not by themselves constitute adverse alterations of, or
14 effects on, the physical environment.

15 Constructing the proposed Delta Conveyance Project or any of the proposed project alternatives
16 could potentially result in incompatibilities with plans and policies related to land use and listed in
17 Section 14.3.1, *Methods of Analysis*. This section summarizes ways in which the alternatives are
18 compatible or incompatible with those federal, state, regional and agency-specific plans and policies.
19 Potential incompatibilities with local plans or policies do not necessarily translate into significant
20 environmental effects under CEQA. Therefore, after assessing compatibility, the potential of the
21 incompatibility to cause an adverse impact on the physical environment is assessed.

22 If an incompatibility relates to a relevant plan, policy, or regulation adopted to avoid or mitigate
23 environmental effects, then an incompatibility might be indicative of a related significant effect
24 under CEQA. However, even where an incompatibility exists “on paper,” it does not by itself
25 constitute an adverse physical effect on the environment, but rather may indicate the potential for a
26 proposed activity to have an indirect physical effect on the environment. If a physical effect is
27 determined to potentially occur, then significance is assessed. Effects on Important Farmland, land
28 subject to Williamson Act contracts, and land under contract in Farmland Security Zones are
29 addressed in Chapter 15, *Agricultural Resources*. Effects on public parks, open space areas, and
30 private recreation facilities are addressed in Chapter 16, *Recreation*. Effects on the economics of
31 agricultural production and community character are addressed in Chapter 17, *Socioeconomics*,
32 along with physical effects resulting from the potential relocation of residents. Potential conflicts
33 with traditional cultural properties or unique archaeological resources are addressed in Chapter 19,
34 *Cultural Resources*. Effects on public transportation are addressed in Chapter 20, *Transportation*.
35 Effects resulting from the relocation of public utilities are discussed in Chapter 21, *Public Services*
36 *and Utilities*. Effects on air transportation involving the risk of increased aircraft-bird strikes as a
37 result to proposed restoration activities and potential effects from hazardous materials associated
38 with the removal of existing structures are addressed in Chapter 25, *Hazards, Hazardous Materials,*
39 *and Wildfire*. Potential temporary or permanent direct or indirect impacts on land use in the
40 SWP/CVP export service areas are evaluated in Chapter 31, *Growth Inducement*.

41 Discussion of the potential for the project to conflict with existing HCPs/NCCPs is included in
42 Chapter 13, *Terrestrial Biological Resources*, and is not evaluated in this chapter.

1 Because of the inter-related nature with land use, the potential for population and housing impacts
2 are also addressed. CEQA Guidelines (CEQA Guidelines, Appendix G) suggest that a significant
3 impact on population and housing could occur under the following conditions.

- 4 • Induce substantial unplanned population growth in an area, either directly or indirectly.
- 5 • Displace substantial numbers of people or housing, necessitating the construction of
6 replacement housing elsewhere.

7 CEQA Guidelines Appendix G explains that population growth could be induced directly by
8 proposing new homes and businesses and indirectly through extension of roads and other
9 infrastructure.

10 **14.3.2.1 Evaluation of Mitigation Impacts**

11 CEQA also requires an evaluation of potential impacts caused by the implementation of mitigation
12 measures. Following the CEQA conclusion for each impact, the chapter analyzes potential impacts
13 associated with implementing both the Compensatory Mitigation Plan and the other mitigation
14 measures required to address with potential impacts caused by the project. Mitigation impacts are
15 considered in combination with project impacts in determining the overall significance of the
16 project. Additional information regarding the analysis of mitigation measure impacts is provided in
17 Chapter 4, *Framework for the Environmental Analysis*.

18 **14.3.3 Impacts and Mitigation Approaches**

19 **14.3.3.1 No Project Alternative**

20 As described in Chapter 3, *Description of the Proposed Project and Alternatives*, CEQA Guidelines
21 Section 15126.6 directs that an EIR evaluate a specific alternative of “no project” along with its
22 impact. The No Project Alternative in this Draft EIR represents the circumstances under which the
23 project (or project alternative) does not proceed and considers predictable actions, such as projects,
24 plans, and programs, that would be predicted to occur in the foreseeable future if the Delta
25 Conveyance Project is not constructed and operated. This description of the environmental
26 conditions under the No Project Alternative first considers how land use could change over time and
27 then discusses how other predictable actions could affect land use.

28 **Future Land Use Conditions**

29 For land use, future conditions are not anticipated to substantially change compared to existing
30 conditions because land policies and resulting land uses are not expected to change if the project (or
31 project alternative) does not proceed. However, indirect impacts on land uses in the Delta may occur
32 under the No Project Alternative as the result of changes in upstream hydrologic conditions, sea
33 level rise, and continuing seismic risk to Delta levees. Also, changes in the quality of Delta water may
34 occur as result of sea level rise and upstream hydrologic conditions. Changes in water quality may
35 affect crop production on agricultural lands by reducing the quantity and quality of water suitable
36 for irrigation. In addition, immediate, and potentially long-term, changes in land use could occur
37 under the No Project Alternative because of seismic events, levee failure, and the inundation of Delta
38 lands. Depending on the location, area, and value of the lands inundated, landowners may opt not to
39 restore inundated lands, resulting in a permanent land use change. Other land uses, such as
40 recreation facilities (e.g., marinas, boat launches, parks), rural residential, and agricultural support

1 facilities, could also be subject to disruption in the event of a levee failure and, similar to agricultural
2 lands, may not be economically viable to be placed back in use if a severe inundation event were to
3 occur.

4 **Predictable Actions by Others**

5 A list and description of actions included as part of the No Project Alternative are provided in
6 Appendix 3C, *Defining Existing Conditions, No Project Alternative, and Cumulative Impact Conditions*.
7 As described in Chapter 4, *Framework for the Environmental Analysis*, the No Project Alternative
8 analyses focus on identifying the additional water supply-related actions public water agencies may
9 opt to follow if the Delta Conveyance Project does not occur.

10 Public water agencies participating in the Delta Conveyance Project have been grouped into four
11 geographic regions. The water agencies within each geographic region would likely pursue a similar
12 suite of water supply projects under the No Project Alternative (see Appendix 3C). Construction of
13 water supply projects under the No Project Alternative would result in construction of new or
14 expanded facilities (e.g., desalination plants, water recycling facilities, groundwater recharge and
15 recovery systems, etc.) that could result in the construction and operation of facilities in locations
16 where the existing land use plans, policies, and designations may not be compatible with the new
17 water-supply project. See Appendix 3C for further details regarding likely water supply projects
18 under the No Project Alternative. However, as discussed below, none of these new or expanded
19 facilities would be expected to occur within the study area.

20 Desalination projects would most likely be pursued in the northern and southern coastal regions.
21 These projects are anticipated to require land conversion for the construction and operation of the
22 facilities. The southern coastal regions would likely require larger and more numerous desalination
23 projects than the northern coastal region to replace the water yield that otherwise would have been
24 received through the Delta Conveyance Project. Therefore, due to their larger anticipated size and
25 number, desalination projects in the southern coastal region would have the potential to result in
26 greater land use impacts than those in the northern region. However, the land use impacts of the
27 project would vary greatly depending on their precise location.

28 Groundwater recovery (treatment of high salinity or contaminated groundwater) would also involve
29 similar types of land conversion but could occur across the northern inland, southern coastal,
30 southern inland regions and in both coastal and inland areas, such as the San Joaquin Valley. In
31 addition to land conversion for the physical footprint of desalination and groundwater recovery
32 plants, these projects would require trenching for installation of water delivery pipelines and
33 utilities. Surface water intakes and diversion intake facilities would generally be expected to have
34 minimal impacts on existing land uses, since they would generally be located along large riverine
35 channels, not within areas under agricultural, residential, commercial, industrial, or other developed
36 land uses, and conveyance infrastructure would likely not result in a permanent land use impact
37 beyond the construction period.

38 The northern and southern coastal regions are also most likely to explore constructing groundwater
39 management projects; however, the southern coastal region would require more projects than the
40 northern coastal region under the No Project Alternative. Groundwater management projects would
41 occur in association with an underlying aquifer but could occur in a variety of locations and
42 therefore affect a wide variety of land uses depending on their final location. Construction activities
43 would include site clearing; excavation and backfill; and construction of basins, conveyance canals,
44 pipelines, pump stations, and the turnout and would result in temporary impacts on land uses due to

1 the physical footprint of the disturbance areas as well as potential effects on adjacent land uses via
2 restrictions and changes in transportation routes and access.

3 Construction activities for each project could require excavation for the construction of the recharge
4 basins, pumping, and conveyance facilities. Water conveyance infrastructure required to connect
5 these facilities to existing distribution and conveyance systems would likely be constructed using
6 typical open trench construction methods, which could result in temporary loss of existing use of
7 land for the segments of the canal or pipeline alignment limited to the construction period.

8 Water recycling projects could be pursued in all four regions. The northern inland region would
9 require the fewest number of wastewater treatment/water reclamation plants, followed by the
10 northern coastal region, followed by the southern coastal region. The southern inland region would
11 require the greatest number of water recycling projects to replace the anticipated water yield that it
12 would receive through Delta Conveyance. These projects would be located near water treatment
13 facilities and therefore, are likely to be constructed and operated in locations where they are largely
14 compatible with the existing land use. In the southern inland region where a greater number of
15 projects would be needed as a substitute for the Delta Conveyance Project, the potential for impact
16 would be increased.

17 Water efficiency projects could be pursued in all four regions and involve a wide variety of project
18 types, such as flow measurement or automation in a local water delivery system, lining of canals, use
19 of buried perforated pipes to water fields, and additional detection and repair of commercial and
20 residential leaking pipes. Since these activities would occur within already developed areas, they
21 would be expected to result in minimal to no impacts on land use.

22 These projects are examples of water reliability projects that could occur if the project is not
23 constructed and operated. While it cannot be anticipated what ultimate suite of projects would be
24 chosen by each of the regions, it would likely be a mix of various types of projects reasonably
25 feasible within that region, as outlined in Chapter 3 and Appendix 3C, *Defining Existing Conditions,*
26 *No Project Alternative, and Cumulative Impact Conditions.* However, whether the construction and
27 operation of the facilities would result in conflicts with existing land uses and the extent of the
28 potential conflicts would vary widely depending on the footprint and geographic location of these
29 new or expanded water supply facilities, and the nature of existing land uses in the locations where
30 they would be constructed and operated.

31 **14.3.3.2 Impacts of the Project Alternatives on Land Use**

32 **Impact LU-1: Displacement of Existing Structures and Residences and Effects on Population** 33 **and Housing**

34 This impact discussion addresses whether the project alternatives would result in the removal of a
35 substantial number of structures, the potential effect that removal of those structures would have on
36 land use patterns, the potential to induce population growth, and whether a substantial numbers of
37 people or housing would be displaced in the study area. Additional information about housing and
38 population effects that support this analysis is including in Chapter 17, *Socioeconomics.*

39 ***Project Construction***

40 Construction of the proposed water conveyance facility under all project alternatives could directly
41 affect land uses within the study area by both temporarily converting existing land uses during

1 construction and permanently converting existing land uses (including displacement of existing
 2 structures and residences) because of the construction of permanent features of the facility. Field
 3 investigations would not be anticipated to result in displacement of any existing structures, and
 4 most would be within the footprint of the water conveyance features being constructed; however,
 5 the West Tracy Fault Study would occur outside the footprint.

6 Temporary land use effects in the study area from construction of water conveyance features
 7 associated with all project alternatives would result from temporarily converting land currently
 8 under agricultural, commercial, industrial, open space, public/semi-public, recreation, and
 9 residential uses to temporary work areas, including staging areas and spoils areas. In those
 10 instances where land is returned to the prior existing land use, these effects would be temporary;
 11 however, most impacts are expected to be permanent because it likely will not be possible to return
 12 land to the prior existing land use.

13 Construction of water conveyance features associated with all project alternatives would also
 14 directly affect land use in the study area by permanently converting land currently under
 15 agricultural, commercial, industrial, open space, public/semi-public, recreation, or residential uses
 16 to permanent water conveyance facilities, including access roads, intakes and associated facilities,
 17 pumping plants, control structures, new forebay, RTM areas, and footings for electric transmission
 18 line towers. Although RTM areas are considered permanent surface effects, as described in the
 19 Project Description and in Chapter 3, *Description of the Proposed Project and Alternatives*, a portion
 20 of the RTM would be removed from Twin Cities Complex and Southern Complex for construction of
 21 other project features.

22 Between 61 and 93 permanent structures would be removed within the water conveyance facility
 23 footprint under the project alternatives. Table 14-2 summarizes the estimated number of structures
 24 affected by alternative, and the Mapbooks M14-1, M14-2, and M14-3 show the distribution of these
 25 effects.

26 **Table 14-2. Estimated Conflicts with Existing Structures**

Alternative	Residential	Recreational	Storage/Support	Other	Total
1	17	2	37	18	74
2a	26	6	43	18	93
2b	13	1	33	17	64
2c	17	2	37	18	74
3	18	3	37	13	71
4a	27	7	43	13	90
4b	14	2	33	12	61
4c	18	3	37	13	71
5	15	3	40	13	71
Compensatory Mitigation	0	0	0	0	0

27 Source: Appendix 23B, *Air Quality and GHG Analysis Activity Data*.

28
 29 Alternatives 2a and 4a would result in the removal of the greatest number of permanent structures
 30 overall, and Alternative 4b would result in the least number. In terms of residential displacement,
 31 Alternatives 4a and 2a would affect the greatest number of residences (27 and 26, respectively).
 32 Alternative 2b would affect the least number of residences. Given the relatively small number of

1 residences that would be removed, it is anticipated existing housing stock within the Delta or
2 surrounding Central Valley - estimated at 79,000 vacant housing units available - would be used and
3 new replacement housing would not be specifically built or be needed (California Department of
4 Finance 2020). For all alternatives, residential structures that would be removed are in areas of
5 scattered residences in agricultural areas; therefore, removal of these structures would not divide
6 an established community. The social and economic effects of displacing existing residents are also
7 addressed in Chapter 17, *Socioeconomics*.

8 The project alternatives would not induce substantial unplanned population growth either directly
9 or indirectly, because the Delta Conveyance Project does not propose to develop new homes or
10 businesses and proposed roadways are provided to construct project facilities and access
11 conveyance facilities. The location of project alternatives in the Delta Primary Zone further restricts
12 residential and business development in the study area. Please also refer the Chapter 31, *Growth*
13 *Inducement*.

14 Temporary effects on existing land uses would occur because of various field investigations
15 conducted during the preconstruction and construction phases. These field investigations include
16 geotechnical and hydrogeologic sampling and other construction test projects supporting
17 geotechnical analysis. These investigations would be used to identify more specifically the
18 appropriate construction methodologies, given existing site conditions and guide the development
19 of any geological and groundwater monitoring programs for the project. Although these field
20 investigations may temporarily interfere with the existing land uses, such as agricultural operations,
21 in the vicinity where sampling is taking place, field investigation work is not expected to result in a
22 change to the underlying land use of any properties, because all affected areas would be returned to
23 as close to pre-activity conditions as possible.

24 ***Operations and Maintenance***

25 Operation and maintenance of facilities established by the project would entail operation, repair,
26 cleaning, and inspection of new surface water diversions, fish screens, and water conveyance
27 infrastructure. Operation and maintenance of these structures and facilities would not result in
28 effects on existing land uses, nor would it result in the removal or relocation of additional
29 permanent structures, including residences, beyond the effects anticipated to occur during
30 construction.

31 ***CEQA Conclusion—All Project Alternatives***

32 Construction of the proposed water conveyance facility would necessitate the removal of some
33 existing permanent structures, including residences. Most of the structures to be removed are not
34 located in existing communities but are in open space and agricultural areas. Because relatively few
35 structures would be removed, the project would not result in displacement of a substantial number
36 of people or housing or result in changes in land use patterns in the area. Where applicable, DWR
37 would provide compensation to property owners for losses due to implementation of the project.
38 This compensation would not constitute mitigation for any related physical impact under CEQA;
39 however, it would offset the economic effects. Potential population and housing impacts are
40 considered less than significant because substantial population growth would not be induced by
41 constructing and operating water conveyance facilities and substantial numbers of people or
42 housing would not be displaced such that the construction of replacement housing would be
43 necessary elsewhere (Chapter 31, *Growth Inducement*). Please also refer to Chapter 17,

1 *Socioeconomics*, for a discussion of the social and economic effects related to population, housing,
2 and displacement. No mitigation is required.

3 The removal of some of the existing structures could be considered an environmental impact in
4 other resource areas and might result in economic impacts. Environmental impacts from the
5 removal of structures would only be considered significant if the structures qualified as historical
6 resources or if the removal of structures would lead to physical effects on other resources. These
7 effects and potential impact assessments (e.g., impacts related to agriculture, terrestrial biological
8 resources, noise, cultural resources) are discussed in the respective resource chapters. Project
9 conflicts with existing public structures are addressed in Chapter 21, *Public Services and Utilities*.
10 Potential impacts on the public and environment related to the potential release of hazardous
11 materials contained in structures to be demolished are addressed in Chapter 25, *Hazards, Hazardous*
12 *Materials, and Wildfire*. And potential impacts on historical resources (including qualifying
13 structures) and archaeological resources are addressed in Chapter 19, *Cultural Resources*. As stated
14 above, displacement of existing residents is addressed in Chapter 17, *Socioeconomics*.

15 ***Mitigation Impacts***

16 *Compensatory Mitigation Impacts*

17 The CMP is designed to compensate for several types of wetlands, other waters, and upland habitats
18 that may be affected by the project. Restoration actions would result in the creation of wetlands and
19 other habitats on Boudin Island, the I-5 ponds (Ponds 6, 7, and 8), and tidal wetland and channel
20 margin habitat within the North Delta Arc, as described in appendix 3F. Much of the potential land
21 area is existing open space or agricultural land, or recreational land uses occurring in open space
22 areas. The current design for the CMP on Boudin Island, the I-5 ponds, and the North Delta Arc
23 results in changes from existing landcover to the following proposed mitigation landcover types,
24 shown in Table 14-3.

25 **Table 14-3. Landcover Conversions Due to Proposed Compensatory Mitigation**

Landcover	Acres Converted due to Mitigation (up to)
Existing Agricultural	477.65
Existing Developed (Semi-Agricultural/ROW) I	13.93
Existing Grassland	57.65
Existing Nontidal Freshwater Perennial Emergent Wetland	36.36
Existing Nontidal Perennial Aquatic	63.64
Existing Other Seasonal Wetlands I	33.59
Existing Valley/Foothill Riparian	38.61

26
27 The compensatory mitigation would not conflict with any structures (Table 14-2) and would not
28 result in a displacement of people or structures. Therefore, the project alternatives combined with
29 compensatory mitigation implemented would not change the overall impact conclusion of less than
30 significant.

1 Other Mitigation Measures

2 Other proposed mitigation measures would not have impacts on land use because they would not
3 result in any additional effects on existing structures.

4 Overall, the impacts on existing structures from construction of compensatory mitigation and other
5 mitigation measures, combined with project alternatives, would not result in an impact.

6 **Impact LU-2: Incompatibility with Applicable Land Use Designations, Goals, and Policies,**
7 **Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect as a Result of the**
8 **Project**

9 *All Project Alternatives*

10 Incompatibility with Land Use Designations

11 Table 14-4 presents the area of temporary and permanent surface disturbance from the
12 construction of the water conveyance facilities, the general land designations on which they would
13 occur, and the number of acres that would be affected. Acres affected are presented by county.
14 Mapbook M14-1, M14-2, and M14-3 display relevant generalized land use designations of lands
15 where proposed water conveyance structures and temporary work areas would occur. Note that not
16 all these structures would be built under any individual alternative. For further discussion of the
17 locations of various structures for each alternative, please refer to Chapter 3.

18 Temporary impacts on land use would occur during construction of all project alternatives. Tunnel
19 alignments are predominantly located underground, and as discussed in Chapter 3 are designed
20 such that land uses on the surface above them would be minimally restricted (i.e., buildings
21 requiring deep foundations would be prohibited above tunnel alignments).

22 The central alignment alternatives (Alternatives 1, 2a, 2b, and 2c) would consist of a tunnel routing
23 from the Sacramento River intakes under central Delta islands to the south Delta water facilities.

24 The eastern alignment alternatives (Alternatives 3, 4a, 4b, and 4c) use a tunnel that would extend
25 closer to Stockton and I-5, nearer to the eastern margin of the Delta boundary. Alternative 5, the
26 Bethany Reservoir alignment, follows the pathway of the eastern alignment alternatives for the
27 northern portion of the tunnel down to Lower Roberts Island, but from there takes a different route
28 that extends to Bethany Reservoir and would not involve construction of a new forebay.

29 Because the Bethany Reservoir alignment (Alternative 5) involves the same intake locations as the
30 other 6,000 cfs capacity alternatives (Alternatives 1 and 3) and the 4,500 cfs capacity alternatives
31 (Alternatives 2c and 4c), the extent of potential temporary land use incompatibilities in Sacramento
32 County is similar (Table 14-4) across all these alternatives (Alternatives 1, 2c, 3, 4c and 5). The other
33 alternatives (Alternatives 2a, 2b, 4a, and 4b) use the same intakes in different configurations and
34 would have the same or fewer land use impacts. Most temporary impact areas throughout the
35 project area for the alternatives that would be reclaimed would occur at the Sacramento River
36 intake work areas, tunnel launch shaft work areas, and the Southern Complex or Bethany Complex
37 work areas. These temporary impacts are associated with areas utilized during the construction
38 work period for functions such as material and equipment laydown, material stockpiles, stormwater
39 retention basins, parking areas, bus drop-off/pick-up areas, temporary access pathways, and areas
40 to accommodate construction contractor trailers or portable buildings.

1 The central alignment alternatives (Alternatives 1, 2a, 2b, and 2c), the eastern alignment
2 alternatives (Alternatives 3, 4a, 4b, and 4c), and the Bethany Reservoir alignment (Alternative 5)
3 differ mainly in the siting of the tunnel alignment, thereby shifting the position of the tunnel shafts
4 and other project components. Because most of the land in the study area and in the Delta is
5 agricultural, the different shaft locations are predominantly located in land used for agriculture, and
6 compatibility with designated land use is anticipated to be largely similar between alternatives.

1 **Table 14-4. Land Use Designations (acres) inside the Water Conveyance Footprints by Alternative**

County	Temporary Impacts								Permanent Impacts							
	Agriculture	Commercial	Industrial	Open Space	Public/ Semi-Public	Recreation	Residential	Subtotal	Agriculture	Commercial	Industrial	Open Space	Public/ Semi-Public	Recreation	Residential	Subtotal
Alternative 1. Central Alignment, 6,000 cfs, Intakes B and C																
Alameda	-	-	-	-	4	-	-	4	41	-	-	-	18	-	-	58
Contra Costa	184	0	-	1	35	185	-	406	143	0	-	20	104	1,237	-	1,504
Sacramento	694	0	-	3	-	-	7	705	431	0	-	0	0	0	15	446
San Joaquin	224	3	0	75	-	-	-	302	641	4	2	269	-	-	0	917
Subtotal	1,102	3	0	79	39	185	7	1,416	1,255	4	2	289	122	1,237	15	2,924
Alternative 2a. Central Alignment, 7,500 cfs, Intakes A, B, C																
Alameda	1	-	-	-	17	-	-	17	58	-	-	-	79	-	-	137
Contra Costa	187	0	-	20	36	185	-	428	143	0	0	20	111	1,237	0	1,512
Sacramento	832	0	-	3	-	-	8	843	537	0	-	0	0	0	19	556
San Joaquin	227	3	0	75	-	-	-	306	678	4	2	269	-	-	0	954
Subtotal	1,248	3	0	97	52	185	8	1,595	1,416	4	2	290	190	1,237	19	3,158
Alternative 2b. Central Alignment, 3,000 cfs, Intake C																
Alameda	-	-	-	-	4	-	-	4	40	-	-	-	18	-	-	58
Contra Costa	184	0	-	1	35	185	-	406	143	0	0	20	104	1,237	0	1,504
Sacramento	520	0	-	3	-	-	5	528	179	0	-	0	0	0	6	185
San Joaquin	220	3	0	75	-	-	-	298	571	4	2	269	-	-	0	846
Subtotal	924	3	0	79	39	185	5	1,235	933	4	2	289	122	1,237	6	2,593
Alternative 2c. Central Alignment, 4,500 cfs, Intakes B and C																
Alameda	-	-	-	-	4	-	-	4	40	-	-	-	18	-	-	58
Contra Costa	184	0	-	1	35	185	-	406	143	0	0	20	104	1,237	0	1,504
Sacramento	691	0	-	3	-	-	7	702	331	0	-	0	0	0	14	345
San Joaquin	222	3	0	75	-	-	-	300	613	4	2	269	-	-	0	889
Subtotal	1,097	3	0	79	39	185	7	1,411	1,128	4	2	289	122	1,237	14	2,796

County	Temporary Impacts								Permanent Impacts							
	Agriculture	Commercial	Industrial	Open Space	Public/ Semi-Public	Recreation	Residential	Subtotal	Agriculture	Commercial	Industrial	Open Space	Public/ Semi-Public	Recreation	Residential	Subtotal
Alternative 3. Eastern Alignment, 6,000 cfs, Intakes B and C																
Alameda	-	-	-	-	4	-	-	4	41	-	-	-	18	-	-	58
Contra Costa	184	0	-	1	35	185	-	406	146	0	0	20	104	1,265	0	1,535
Sacramento	663	0	-	4	-	-	7	674	460	0	-	0	0	0	12	472
San Joaquin	338	1	0	30	3	-	-	373	326	2	2	48	7	-	0	386
Subtotal	1,185	2	-	35	42	185	7	1,457	973	3	2	68	129	1,265	12	2,452
Alternative 4a. Eastern Alignment, 7,500 cfs, Intakes A, B, C																
Alameda	1	-	-	-	17	-	-	17	58	-	-	-	79	-	-	137
Contra Costa	187	0	-	20	36	185	-	428	148	0	0	20	111	1,287	0	1,567
Sacramento	697	0	-	4	-	-	7	708	671	0	-	0	0	0	16	688
San Joaquin	345	1	0	30	3	-	-	380	356	2	2	48	7	-	0	417
Subtotal	1,230	2	0	54	55	185	7	1,534	1,235	2	2	69	197	1,287	16	2,808
Alternative 4b. Eastern Alignment, 3,000 cfs, Intake C																
Alameda	-	-	-	-	4	-	-	4	41	-	-	-	18	-	-	58
Contra Costa	184	0	-	1	35	185	-	406	143	0	0	20	104	1,237	0	1,504
Sacramento	519	0	-	4	-	-	4	527	179	0	-	0	0	0	3	182
San Joaquin	299	1	0	30	3	-	-	334	286	2	2	48	7	-	0	346
Subtotal	1,001	2	0	35	42	185	4	1,271	648	2	2	68	129	1,237	3	2,090
Alternative 4c. Eastern Alignment, 4,500 cfs, Intakes B and C																
Alameda	-	-	-	-	4	-	-	4	40	-	-	-	18	-	-	58
Contra Costa	184	0	-	1	35	185	-	406	144	0	0	20	104	1,254	0	1,522
Sacramento	658	0	-	4	-	-	6	669	363	0	-	0	0	0	11	374
San Joaquin	326	1	0	30	3	-	-	361	308	2	2	48	7	-	0	368
Subtotal	1,168	2	0	36	42	185	6	1,439	856	2	2	68	129	1,254	11	2,322

County	Temporary Impacts								Permanent Impacts							
	Agriculture	Commercial	Industrial	Open Space	Public/ Semi-Public	Recreation	Residential	Subtotal	Agriculture	Commercial	Industrial	Open Space	Public/ Semi-Public	Recreation	Residential	Subtotal
Alternative 5. Bethany Reservoir Alignment, 6,000 cfs, Intakes B and C																
Alameda	159	0	-	-	8	-	7	174	226	0	-	-	93	-	5	323
Contra Costa	24	-	-	1	5	24	-	53	-	-	-	-	0	-	-	0
Sacramento	700	0	-	4	-	-	7	711	514	0	-	0	0	0	12	526
San Joaquin	410	1	-	29	11	-	1	451	385	2	-	30	11	-	0	427
Subtotal	1,293	2	-	33	24	24	14	1,390	1,125	2	-	30	103	0	17	1,277

1 Sources: City of Antioch 2003; City of Brentwood 2014; City of Elk Grove 2021; City of Isleton 2000; City of Lathrop 2017; City of Lodi 2021; City of Manteca 2021; City of
 2 Oakley 2015; City of Pittsburg 2021; City of Rio Vista 2021; City of Sacramento 2021; City of Stockton 2021; City of Tracy 2021; City of West Sacramento 2021; County of
 3 Alameda 2021; County of Contra Costa 2021; County of Sacramento 2021a; County of San Joaquin 2021; County of Solano 2021; County of Yolo 2021.
 4 Notes: Acreages are rounded; acreage less than 0.5 but more than 0.0 have been rounded to 0. Land use designations are derived from GIS data from each county; each
 5 county classifies land use differently, and land uses have been grouped together in the seven categories presented in Table 14-3. Additional information about land use
 6 designations by county can be found in Section 14.1.1.1, *Existing Land Uses in the Study Area*.
 7 cfs = cubic feet per second.

1 In addition to the land use designations discussed above, project alternatives would also be
2 constructed within areas covered by airport land use plans. A full discussion of potential hazards
3 associated construction in proximity to airports is provided in Chapter 25, *Hazards, Hazardous*
4 *Materials, and Wildfire*. As discussed in that chapter, 11 public and private airports/heliports are
5 within 2 miles of project facilities (Figure 25-5) including: Funny Farm Airport, Las Serpientes
6 Airport, Lodi Memorial Hospital Heliport, Kingdon Airpark, Kaiser Permanente South Sacramento
7 Heliport, Borges-Clarksburg Airport, Flying B Ranch Airport, Franklin Field, Lost Isle Seaplane Base,
8 Heritage Field, and Byron Airport.

9 *Incompatibility with Land Use Goals and Policies*

10 *Field Investigations*

11 As part of the project and project alternatives, DWR would conduct various field investigations
12 during the preconstruction and construction phases for all alternatives. These field investigations
13 include geotechnical and hydrogeologic sampling and other construction test projects. These
14 investigations would be used to identify more specifically the appropriate construction
15 methodologies given existing site conditions and guide the development of any geological and
16 groundwater monitoring programs for the project. These field investigations would likely be short
17 in duration, and although these field investigations may temporarily interfere with existing land
18 uses, such as agriculture, in the sampling vicinity, field-investigation work would not result in
19 permanent incompatibilities with land use plans, policies, or designations, nor would investigations
20 result in the permanent conversion of lands to another land use. Activities such as these field
21 investigations are generally allowed in all land use designations by policy and regulation. This is also
22 true of activities in areas covered by airport land use plans. They also would be compatible with the
23 applicable land use policies in the study area that have been adopted to avoid and mitigate
24 environmental effects.

25 *Tunnels*

26 The primary conveyance component for the proposed project and all project alternatives would be
27 an underground tunnel, designed such that there would be no physical changes on the land uses
28 above the tunnels, and restrictions on the uses of the land above the tunnels would be minimal (i.e.,
29 buildings requiring deep foundations would be prohibited above tunnel alignments). The project
30 alternatives also would be compatible with the applicable land use policies in the study area that
31 have been adopted to avoid and mitigate environmental effects. There would be no changes in land
32 uses, and therefore no direct permanent incompatibilities with land use designations including
33 those in airport land use plans due to these subsurface features. As such, with the exception of
34 surface construction activities potentially occurring over the construction period (e.g., tunneling)
35 and surface features related to the tunnels (e.g., RTM areas, shafts, access roads), as discussed below
36 under Construction Activities, permanent incompatibilities with land use goals and policies as they
37 pertain to the proposed tunnel are not discussed further.

38 *Construction Activities*

39 Chapter 3 describes the screening process and criteria used to develop the final range of alternatives
40 to be considered for the conveyance facilities. This process is described in detail in Appendix 3A,
41 *Identification of Water Conveyance Alternatives*. A detailed description of the process and steps used
42 in identifying and refining proposed intake locations is described in the Engineering Project Report

1 for the central and eastern alignment alternatives (C-E EPR) Attachment A Technical Memorandum,
2 *Intake Site Identification and Evaluation* (Delta Conveyance Design and Construction Authority
3 2022a). The C-E EPR includes numerous technical memoranda that detail the engineering
4 considerations that support project alternative design decisions. The EPR for the Bethany Reservoir
5 alignment (Alternative 5) was developed, in part, to address potential impacts associated with the
6 Southern Complex facilities. The Bethany EPR contains a detailed description of Alternative 5 and
7 the engineering studies that informed the design of that alternative (Delta Conveyance Design and
8 Construction Authority 2022b). Additionally, the Delta Conveyance Design and Construction
9 Authority's (DCA) technical memoranda titled *Efforts to Minimize Delta Community Effects* is
10 included in both the C-E EPR and Bethany EPR and details the DCA's efforts to minimize effects of
11 the project on Delta communities, including engagement of interested parties and design
12 considerations.

13 As discussed in this section, most affected land is agricultural land. Impacts on agricultural land are
14 assessed in Chapter 15, *Agricultural Resources*.

15 The LURMP land use policies that apply to the proposed alternatives include Land Use P-7 and P-14
16 and Agriculture P-2. Land Use P-7 declares that new structures should be set back from levees
17 consistent with local reclamation district regulations. Intake structures require contact with water
18 and cannot feasibly be set back from levees. Additionally, Land Use P-14 states that agricultural
19 lands converted to water impoundment may not result in seepage of water and that such
20 conversions must mitigate associated risks and effects. The Southern Forebay constructed for all
21 alternatives except the Bethany Reservoir alignment (Alternative 5) would avoid and mitigate the
22 effects of seepage, as described in Chapter 8, *Groundwater*, which presents impacts and mitigation
23 measures related to forebay design that would require compatibility with this policy. Agriculture P-
24 2 suggests that agricultural land conversion should occur first where productivity and values are
25 lowest. As discussed in Chapter 15, *Agricultural Resources*, some higher-value agricultural land
26 would be converted by construction of proposed water conveyance facilities. While incompatibilities
27 with LURMP policies Land Use P-7 and Agriculture P-2 could occur, actions taken by the state are
28 not subject to consistency with the LURMP.

29 Indirect effects on land use may also arise through incompatibilities with land subject to Williamson
30 Act contracts or under contract in Farmland Security Zones. Chapter 15 discusses the potential for
31 conflicts with Williamson Act contracts or land under contract in Farmland Security Zones.

32 Some of the construction activities may also result in incompatibilities with airport land use plans,
33 as discussed in Chapter 25, *Hazards, Hazardous Materials, and Wildfire*.

34 SACRAMENTO COUNTY

35 Permanent and temporary surface impacts in Sacramento County would occur as a result of the
36 construction of water conveyance facilities for all project alternatives (see Table 14-4). These
37 features would result in the permanent conversion of between 182 acres and 688 acres of land
38 (depending on alternative), predominantly designated for agricultural use in the Sacramento County
39 General Plan. Depending on alternative, between 179 acres and 671 acres designated by the county
40 as agricultural cropland and between 3 and 19 acres of medium- and low-density residential land
41 would be permanently converted.

42 Conversion of agricultural lands and project conflicts with agricultural land are described in
43 Chapter 15, *Agricultural Resources*. The conversion of agricultural and residential land would be

1 incompatible with the *Sacramento County General Plan of 2005–2030*, including Policy AG-5,
2 regarding the conversion of farmland, and conversion of land presently designated for residential
3 use would be incompatible with strategy HE 3 of the *Sacramento County General Plan of 2005–2030*
4 (County of Sacramento 2021b:31–34, 2019:9). However, public water supply and treatment
5 facilities are exempt from local land use policies.

6 Temporary surface impacts in Sacramento County would occur on between 527 acres and 843 acres
7 of land. Depending on alternative, this would include between 519 acres and 832 acres of
8 agricultural land, between 3 acres and 4 acres of land generally designated as open space, and
9 between 4 acres and 8 acres of residential land.

10 Temporary project features in Sacramento County associated with the construction of project
11 alternatives would likely be in place for the first 13 or more years of project implementation (i.e.,
12 during the near-term implementation or the 13-year project construction period). During that
13 period, lands designated as agriculture would be temporarily converted to nonagricultural use, as
14 described in Chapter 15. Construction of these temporary project features on agricultural land
15 would be incompatible with the general plan, including Policy AG-5. However, as noted above, public
16 water supply and treatment facilities are exempt from local land use policies.

17 The airports that could be affected by project activities in Sacramento County are Kaiser
18 Permanente South Sacramento Heliport, the Flying B Ranch Airport, and Franklin Field. Borges-
19 Clarksburg Airport is located in Yolo County but is discussed here because of its proximity to
20 Sacramento County. Kaiser Permanente South Sacramento Heliport, Flying B Ranch Airport, and
21 Borges-Clarksburg Airport are located within 2 miles of proposed access roads and SCADA fiber
22 optic routes. Neither access roads nor fiber optic lines would be incompatible with the airport land
23 use plans for these airports.

24 Franklin Field is approximately 0.8 mile east of the Twin Cities Complex under all project
25 alternatives. The project alternatives would comply with the policies in the *Franklin Field*
26 *Comprehensive Land Use Plan* (Sacramento Area Council of Governments 1988). The plan designates
27 different land use and development policies based on proximity to the airport within three safety
28 zones: a Clear Zone that covers the runway and extends outward 1,000 feet from the ends, an
29 Approach/Departure Zone located under the takeoff and landing slopes, and an Overflight Zone that
30 generally coincides with normal air traffic patterns. Project components near these zones include
31 intakes, launch shaft, access roads, underground utilities, and rail spur. DWR will continue to
32 coordinate with Sacramento County prior to initiating construction to ensure that the project would
33 not interfere with airport land uses.

34 SAN JOAQUIN COUNTY

35 Permanent and temporary surface impacts in San Joaquin County would occur as a result of the
36 construction of water conveyance facilities for all project alternatives (see Table 14-4). These
37 features would result in the permanent conversion of between 346 acres and 954 acres of land
38 (depending on alternative), predominantly designated for agricultural use under the *San Joaquin*
39 *General Plan Policy Document*. Depending on alternative, between 286 acres and 678 acres
40 designated by the county as agricultural cropland and between 30 and 269 acres of land generally
41 designated by the county as open space would be permanently converted. A limited amount of land
42 designated for other uses would also be permanently converted by the water conveyance facilities,
43 including up to 11 acres of land designated for public/semi-public use and 2 acres of industrial land.

1 Conversion of agricultural lands and project conflicts with agricultural land are described in
2 Chapter 15, *Agricultural Resources*. The conversion of agricultural lands would conflict with some
3 general plan goals and policies, including Goal LU-7.1, to protect agricultural land (County of San
4 Joaquin 2017:3.1-60). The placement of these project features on or adjacent to lands designated as
5 open space would be incompatible with this land use designation and related policies, including
6 open space policies, and because it would diminish the amount of land dedicated to open space and
7 conservation of natural habitat and resources.

8 Temporary surface impacts in San Joaquin County would occur on between 298 acres and 451 acres
9 of land. Depending on alternative, this would include between 220 acres and 410 acres of
10 agricultural land, between 29 acres and 75 acres of land generally designated as open space, and up
11 to 1 acre of residential land.

12 Temporary project features in San Joaquin County associated with the construction of the water
13 conveyance structures would likely be in place for the first 13 or more years of project
14 implementation (i.e., during the near-term implementation or the 13-year project construction
15 period). During that period, lands designated as agriculture would be converted to nonagricultural
16 use, as described in Chapter 15.

17 The airports that could be affected by project activities in San Joaquin County are Lodi Memorial
18 Hospital Heliport, Kingdon Airpark, Lost Isle Seaplane Base, and Heritage Field. Lodi Memorial
19 Hospital Heliport and Kingdon Airpark are located within 2 miles of proposed access roads and
20 SCADA fiber optic routes. Lost Isle Seaplane Base is within 1.4 miles west of proposed tunnels of the
21 eastern and Bethany Reservoir alignments under Alternatives 3, 4a, 4b, 4c, and 5. Heritage Field is
22 1.3 miles west of proposed levee improvements of the eastern and Bethany Reservoir alignments
23 under Alternatives 3, 4a, 4b, 4c, and 5. Construction, operations, and maintenance would not include
24 equipment or structures that would conflict with the airport land use plan (County of San Joaquin
25 2016b:3.1-68-3.1-70). However, DWR will coordinate with the Airport Land Use Commissions and
26 private airport owners prior to initiating construction to ensure that the project would not interfere
27 with airport land uses.

28 CONTRA COSTA COUNTY

29 Temporary surface impacts in Contra Costa County would occur as a result of the construction of
30 water conveyance facilities for all project alternatives. Permanent surface impacts in Contra Costa
31 County would occur as a result of the construction of water conveyance facilities for all project
32 alternatives, with the exception of the Bethany Reservoir alignment (Alternative 5; see Table 14-4).
33 These features would result in the permanent conversion of between 1,504 acres and 1,567 acres of
34 land (depending on alternative) predominantly designated for recreational use in the *Contra Costa*
35 *County General Plan*. Except for the Bethany Reservoir alignment (Alternative 5), all alternatives
36 would result in the permanent conversion of between 1,237 and 1,287 acres of land designated by
37 the county for recreational use, between 143 and 148 acres designated for agricultural use, between
38 104 acres and 111 acres designated by the county as public-semi-public, and 20 acres of open space.
39 Conversion of agricultural lands and project conflicts with agricultural land are described in Chapter
40 15, *Agricultural Resources*.

41 The recreational land affected by the alternatives is designated under the *Contra Costa County*
42 *General Plan 2005-2020* as Delta Recreation and Resources. Constructing features on these lands
43 would be incompatible with the goals of the plan related to this land use designation, which
44 prioritizes the preservation of land for recreation over the placement of new infrastructure.

1 Construction would be incompatible with general plan Goal 3-G, which discourages development not
2 related to agriculture, mineral extraction, wind energy, or other appropriate rural uses on vacant
3 rural lands. The change in land use would also potentially conflict with Contra Costa County's 65/35
4 Land Preservation Standard, which was adopted to preserve open space, agricultural lands, and
5 recreation lands as well as provide for environmental benefits; the standard requires the
6 maintenance of a 65/35 ratio of open space to urban uses within the county and limits development
7 outside of urban areas.

8 Water conveyance facilities would be on land designated under the *Contra Costa County General Plan*
9 *2005–2020* as public/semi-public. Because this designation exists for large-scale infrastructure and
10 utilities, these project features would be compatible with this designation.

11 Temporary surface impacts in Contra Costa County associated with the Bethany Reservoir
12 alignment (Alternative 5) would occur on 53 acres of land, including 24 acres of land designated for
13 agricultural use and 5 acres of land designated public/semi-public. The other alternatives would
14 result in between 406 acres and 428 acres of temporary land use impact. This would include
15 temporary conversion of 185 acres of recreational land use, between 184 acres and 187 acres of
16 agricultural land, between 1 acre and 20 acres of land generally designated as open space, and
17 between 35 acres and 36 acres of land with the public/semi-public designation. These temporary
18 features would likely be in place for the first 13 years of project implementation (i.e., during the
19 near-term implementation or the project construction period). Temporary land use
20 incompatibilities would be of the same nature as the permanent incompatibilities described above;
21 however, they would occur over a shorter period.

22 The airports that could be affected by project activities in Contra Costa County are Funny Farm
23 Airport, Las Serpientes Airport, and Byron Airport. Funny Farm Airport and Las Serpientes Airport
24 are within 2 miles of proposed access roads and SCADA fiber routes. Neither access roads nor fiber
25 optic lines would be incompatible with the airport land use plans for these airports.

26 Byron Airport is within 1 mile of the Southern Complex under Alternatives 1, 2a, 2b, 2c, 3, 4a, 4b,
27 and 4c, as well as a proposed access road and a SCADA fiber optic route. Discussion of issues related
28 to hazards and compatibility with the airport land use plans related to Byron Airport can be found in
29 Chapter 25, *Hazards, Hazardous Materials, and Wildfire*.

30 ALAMEDA COUNTY

31 Permanent and temporary surface impacts in Alameda County would occur as a result of the
32 construction of water conveyance facilities for all project alternatives (see Table 14-4). These
33 features would result in the permanent conversion of between 58 acres and 323 acres of land
34 (depending on alternative), predominantly designated for agricultural use in the *Alameda County*
35 *General Plan*. Depending on alternative, between 40 acres and 226 acres designated by the county as
36 agricultural cropland and between 18 and 93 acres designated by the county as public/semi-public
37 would be permanently converted. The Bethany Reservoir alignment (Alternative 5) would also
38 result in the permanent conversion of 5 acres of land designated as residential.

39 Temporary surface impacts in Alameda County would occur on between 4 acres and 174 acres of
40 land. Depending on alternative, this would include between zero acres and 159 acres of agricultural
41 land, between 4 acres and 17 acres designated as public/semi-public, and up to 7 acres of residential
42 land.

1 Conversion of agricultural lands and project conflicts with agricultural land are described in
2 Chapter 15, *Agricultural Resources*. Construction of features on agricultural land could be
3 incompatible with *East County Area Plan* policies, including Policy 71, which seeks to conserve
4 farmland soils and Policy 53, which seeks to preserve continuous open space to provide for
5 comprehensive habitat conservation. Construction of project features on major public land would be
6 compatible with *East County Area Plan* policies, including Policy 138, which allows for development
7 and expansion of major public facilities in appropriate locations.

8 No airports in Alameda County could potentially be affected by the project.

9 *Operations and Maintenance*

10 Operation and maintenance of facilities established by the project would entail repair, cleaning, and
11 inspection of new surface water diversions, fish screens, and water conveyance infrastructure.
12 Operation and maintenance of these structures and facilities would not convert additional existing
13 designated land uses to an incompatible use or conflict with existing land use plans and policies.

14 **CEQA Conclusion—All Project Alternatives**

15 The construction of the project's water conveyance infrastructure would result in temporary and
16 permanent changes in land use in the study area, which may be incompatible with the general land
17 uses presently designated in these areas. However, an incompatibility does not by itself constitute
18 an adverse physical effect on the environment, but rather may indicate the potential for a proposed
19 activity to indirectly have a physical effect on the environment. Construction of the project may also
20 conflict with other land use policies adopted to avoid or mitigate environmental effects. Effects on
21 Important Farmland, land subject to Williamson Act contracts, and land under contract in Farmland
22 Security Zones are addressed in Chapter 15, *Agricultural Resources*. Effects on public parks, open
23 space areas, and private recreation facilities are addressed in Chapter 16, *Recreation*. Effects on the
24 economics of agricultural production and community character are addressed in Chapter 17,
25 *Socioeconomics*, along with physical effects resulting from the potential relocation of residents.
26 Potential conflicts with historical or archaeological resources are addressed in Chapter 19, *Cultural*
27 *Resources*. Effects on public transportation are addressed in Chapter 20, *Transportation*. Effects
28 resulting from the relocation of public utilities are discussed in Chapter 21, *Public Services and*
29 *Utilities*. Effects on air transportation involving the risk of increased aircraft-bird strikes as a result
30 of proposed restoration activities and potential effects from hazardous materials associated with the
31 removal of existing structures are addressed in Chapter 25, *Hazards, Hazardous Materials, and*
32 *Wildfire*. Potential temporary or permanent direct or indirect impacts on land use in the SWP/CVP
33 export service areas are evaluated Chapter 31, *Growth Inducement*.

34 The total area of temporary land use changes ranges from 1,235 acres for Alternative 2b to 1,595
35 acres for Alternative 2a. The total area of permanent land use acquisition ranges from 1,277 acres
36 for Alternative 5 to 3,158 acres for Alternative 2a. Most land that would be temporarily and
37 permanently devoted to construction of the water conveyance facilities is designated for agricultural
38 use. The area of agricultural land temporarily used for project construction ranges from 924 acres
39 for Alternative 2b to 1,293 acres for Alternative 5. The area of agricultural land permanently used
40 for water conveyance facilities ranges from 648 acres for Alternative 4b to 1,416 acres for
41 Alternative 2a. Depending on the alternative considered, impacts on agricultural land uses accounts
42 for anywhere between 75% and 93% of total temporary land used and 31% to 88% of total
43 permanent land used. See Chapter 15 for a detailed evaluation of potential impacts on agricultural
44 lands and activities in the study area.

1 A portion of all land that would be temporarily and permanently used for the construction of the
2 water conveyance facilities is generally designated for recreational use. The area of recreational land
3 use temporarily used for project construction ranges from 24 acres for Alternative 5 to 185 acres for
4 Alternative 4a. The area of recreational land permanently devoted to water conveyance facilities
5 ranges from 1 hundredth of an acre for Alternative 5 to 1,287 acres for Alternative 4a. See Chapter
6 16 for a detailed evaluation of potential impacts on recreation in the study area.

7 In addition to agricultural and recreational land use designations, project alternatives would use
8 small amounts of lands generally designated for open space, public/semi-public, residential, and
9 industrial use. However, the area of lands with these designations that would be affected by the
10 project alternatives would be a fraction of the land designated for agriculture or recreation that
11 would be affected. For the specific acreages of these land designations that would be used by the
12 project alternatives, see Table 14-4. Although some of these changes in land use could result in a
13 conflict with policies adopted to avoid or mitigate environmental effects, the conflicts would be
14 unlikely to result in a significant physical effect on the environment; therefore, this impact would be
15 less than significant.

16 ***Mitigation Impacts***

17 *Compensatory Mitigation*

18 Although the CMP described in Appendix 3F does not act as mitigation for impacts to this resource
19 from project construction or operations, its implementation could result in impacts on this resource.

20 The compensatory mitigation is designed to compensate for several types of wetlands, other waters,
21 and upland habitats that may be affected by the project. Restoration actions would result in the
22 creation of wetlands and other habitats on Boudin Island, the I-5 ponds (Ponds 6, 7, 8), and tidal and
23 channel margin habitat in the North Delta Arc. As mentioned in Appendix 3F, earthmoving, and
24 revegetation would be the primary activities for the mitigation plan. However, not all actions to be
25 undertaken by the CMP would result in incompatibilities with designated land uses. Much of the
26 potential land area where activities may take place is existing open space or agricultural land or
27 recreational land uses occurring in open space areas. Some of the proposed mitigation efforts to
28 protect terrestrial biological resources would specifically preserve existing land uses.

29 Additionally, activities included as part of the CMP would require developing temporary facilities,
30 such as staging areas, access haul roads, work areas, and borrow sites, which may result in
31 temporary incompatibilities with designated land uses. It is generally estimated that site
32 preparation work (e.g., excavation, grading, levee reinforcement) to construct the marsh and
33 seasonal wetland habitats would take 2 years, although it may take several years more for the newly
34 constructed wetland habitats to fully establish. For channel margin habitat, it is projected that
35 roughly 4,500 linear feet of improvements could be constructed annually (i.e., it would take more
36 than 6 years to improve approximately 5 miles of channel margin habitats). Operation and
37 maintenance activities of habitat restoration areas undertaken as part of the CMP could include
38 monitoring of vegetation and natural structures and various land management activities. These
39 maintenance activities would likely occur within the restored habitat footprint or in the immediate
40 vicinity within riverine channels and would not result in the permanent conversion of additional
41 land because access roads to locations requiring maintenance activities would already be
42 established during construction activities.

1 Some of the construction of the compensatory mitigation may result in incompatibilities with land
2 use plans, including earthmoving and temporary facilities such as staging areas, access haul roads,
3 work areas, and borrow sites. The resulting restored habitat is unlikely to be incompatible with
4 existing land uses. Therefore, land use impacts from compensatory mitigation would not change the
5 overall impact conclusion of less than significant.

6 Other Mitigation Measures

7 Other proposed mitigation measures would not have impacts on land use because none of the
8 mitigation measures identified in this Draft EIR would result in any additional changes to land uses
9 nor would they conflict with any plan or policy adopted to avoid or mitigate environmental impacts.

10 Overall, the impacts on land use from construction of compensatory mitigation and implementation
11 of other mitigation measures, combined with project alternatives, would not change the impact
12 conclusion of less than significant.

13 **Impact LU-3: Create Physical Structures Adjacent to and through a Portion of an Existing** 14 **Community That Would Physically Divide the Community as a Result of the Project**

15 Construction of the proposed water conveyance facility under the project and all project alternatives
16 could directly affect land uses within the study area through the construction of permanent features
17 of the facility. Impacts could occur if operation of project facilities resulted in the loss or increased
18 difficulty of access from one portion of an existing community to another. The following analysis
19 identifies the potential impact on existing communities from proposed facilities by alternative.
20 Where no facilities would be constructed in the vicinity of a community, no impact would occur.
21 Because field investigations are anticipated to be short-term, temporary activities resulting in no
22 permanent impact, compensatory mitigation sites would be located away from existing
23 communities, and tunnel construction would be subsurface, these are not anticipated to result in
24 impacts on land use. The communities described below are those where facilities would be
25 constructed in or near the community (Figure 14-1).

26 ***Potentially Affected Communities—Central Alignment (Alternative 1, 2a, 2b, and 2c)***

27 Freeport

28 Facilities to be constructed running through the community of Freeport would be overhead and
29 underground power lines and subsurface facilities. These facilities would not divide the community.

30 Hood

31 No facilities would be constructed in the community of Hood. Facilities would be east of the
32 community. Additionally, intakes would be north and south of Hood.

33 Terminous

34 Facilities to be constructed along road rights-of-way north of the community of Terminous would be
35 overhead power lines. These facilities would not divide the community.

36 Lodi

37 Facilities to be constructed along Highway 12 on the western edge of Lodi would be overhead power
38 lines. These facilities would not divide the community.

1 Regatta Park and Discovery Bay

2 Facilities to be constructed along Highway 4 on the southern edge of Regatta Park and Discovery
3 Bay would be overhead power lines. These facilities would not divide these communities.

4 Brentwood

5 Facilities to be constructed along the Chestnut Street right-of-way in Brentwood would be overhead
6 power lines. These facilities would not divide neighborhoods within Brentwood.

7 ***Potentially Affected Communities—Eastern Alignment (Alternatives 3, 4a, 4b, and 4c)***

8 Freeport

9 Facilities to be constructed running through the community of Freeport would be overhead and
10 underground power lines and subsurface facilities. These facilities would not divide the community.

11 Hood

12 No facilities would be constructed in the community of Hood. Facilities would be located east of the
13 community. Additionally, intakes would be north and south of Hood.

14 Lodi

15 Facilities to be constructed along Highway 12 on the western edge of Lodi would be overhead and
16 underground power lines. These facilities would not divide the community.

17 Regatta Park and Discovery Bay

18 Facilities to be constructed along Highway 4 on the southern edge of Regatta Park and Discovery
19 Bay would be overhead power lines. These facilities would not divide these communities.

20 Brentwood

21 Facilities to be constructed along the Chestnut Street right-of-way in Brentwood would be overhead
22 power lines. These facilities would not divide neighborhoods within Brentwood.

23 Stockton

24 Facilities to be constructed would be a park-and-ride lot along the south side of Charter Way and
25 new road and railroad bridges over Burns Cut from Port of Stockton. The land for the park-and-ride
26 lot is currently a truck parking lot and the area around the new bridges is industrial. These facilities
27 would not divide this community.

28 ***Bethany Reservoir Alignment (Alternative 5)***

29 Freeport

30 Facilities to be constructed running through the community of Freeport would be overhead and
31 underground power lines and subsurface facilities. These facilities would not divide the community.

1 Hood

2 No facilities would be constructed in the community of Hood. Facilities would be located east of the
3 community.

4 Lodi

5 Facilities to be constructed along Highway 12 on the western edge of Lodi would be overhead power
6 lines. These facilities would not divide the community.

7 Mountain House

8 Facilities to be constructed near Mountain House include the Bethany Complex, which would be
9 west of Mountain House. None of the facilities would be in the community of Mountain House and
10 would not divide the community.

11 ***CEQA Conclusion—All Project Alternatives***

12 Facilities constructed in or near existing communities would be along road rights-of-way and consist
13 of overhead or underground power lines or subsurface features. For these reasons, none of the
14 alternatives would result in a physical division of existing communities. No impact would occur.

15 ***Compensatory Mitigation Impacts***

16 Although the CMP described in Appendix 3F does not act as mitigation for impacts to this resource
17 from project construction or operations, its implementation could result in impacts on this resource.

18 The compensatory mitigation is designed to compensate for several types of wetlands, other waters,
19 and upland habitats that may be affected by the project. Restoration actions would occur in several
20 locations including the North Delta Arc, which encompasses undetermined tidal wetland or channel
21 margin restoration sites, as described in Appendix 3F. Much of the potential land area where
22 activities may take place is existing open space or agricultural land or recreational land uses
23 occurring in open space areas; further, the nature of the compensatory mitigation is such that
24 activities are unlikely to occur within existing towns, cities, or other communities. Compensatory
25 mitigation combined with the project, would not result in the division of an existing community;
26 therefore, there would be no change to the no impact conclusion.

27 Other Mitigation Measures

28 Other mitigation measures proposed in this Draft EIR would not have impacts on land use because
29 they would not include construction of any physical structure that would physically divide a
30 community.

31 Overall, the construction of compensatory mitigation and implementation of other mitigation
32 measures, combined with project alternatives, would not result in the division of an existing
33 community and there would be no impact.

1 14.3.4 Cumulative Analysis

2 This cumulative impact analysis considers projects that could affect the same resources and, where
 3 relevant, in the same timeframe as the alternatives, resulting in a cumulative impact. Land use and
 4 local communities are expected to change as a result of past, present, and reasonably foreseeable
 5 future projects, related to population growth and changes in economic activity in the study area (for
 6 discussion of effects in water delivery regions, see Chapter 31, *Growth Inducement*). It is expected
 7 that some changes related to land use, including compatibility, communities and neighborhoods,
 8 property, and environmental justice, would take place, even though it is assumed that reasonably
 9 foreseeable future projects would comply with plans, policies and regulations, and include typical
 10 design and construction practices to avoid or minimize potential impacts.

11 Table 14-5 lists other projects, including projects that could potentially permanently convert
 12 existing land uses to new uses. These cumulative projects include flood protection projects, habitat
 13 and ecosystem restoration projects, and water conveyance projects proposed in various areas
 14 within and adjacent to the Delta. The actual amount of land that may be converted from existing
 15 uses to new uses by other projects is not known.

16 **Table 14-5. Cumulative Impacts on Land Use from Plans, Policies, and Programs**

Program/Project	Agency	Status	Description of Program/Project	Effects on Land Use
CALFED Levee System Integrity Program	DWR, CDFW, USACE	Ongoing	Protection and maintenance of project and non-project levees and restoration of native vegetation and reuse of dredge material to bolster levee stability.	Potential changes in land use as part of levee improvement projects.
Central Valley Flood Protection Plan	DWR	Ongoing	This plan is a sustainable, integrated flood management plan that reflects a system-wide approach for protecting areas of the Central Valley currently receiving protection from flooding by existing facilities of the SPFC. The plan incorporates the SPFC and Flood Control System Status Update. The first plan was adopted in 2012 and is updated every 5 years. The CVFPP recommends actions to reduce the probability and consequences of flooding. Produced in partnership with federal, Tribal, local, and regional partners and other interested parties, the CVFPP also identifies the mutual goals, objectives, and constraints important in the planning process; distinguishes plan elements that address mutual flood risks; and recommends improvements to the state and federal flood protection system.	Potential changes in land use as part of flood protection actions.
Delta Dredged Sediment Long-Term Management Strategy/Pinole Shoal Management Study	USACE	Ongoing	Maintaining and improving channel function, levee rehabilitation, and ecosystem restoration.	Potential for effects on land use from construction of restoration actions.

Program/Project	Agency	Status	Description of Program/Project	Effects on Land Use
Dutch Slough Tidal Marsh Restoration Project	DWR	Construction began May 2018; next phase to begin 2021	Restoration 1,178-acre site in the south Delta to tidal marsh habitat.	The project is not expected to conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project. It would not affect other land use issues, such as physically dividing an established community.
Lookout Slough Tidal Habitat Restoration and Flood Improvement Project	DWR	Planning phase	Tidal marsh restoration.	Results in permanent conversion of existing land uses, including 1,460-acres of Prime Farmland. Would include mitigation to offset land use impacts.
Lower Cache Creek/Woodland Flood Risk Management Project	City of Woodland, USACE, DWR, CVFPB	Planning phase	Flood risk reduction program that includes secondary earthen levees and a diversion channel to redirect overland flood flows into the Yolo Bypass.	Potential for impacts on land use from construction of levees and channel.
North Delta Flood Control and Ecosystem Restoration Project	DWR	Ongoing	Consistent with objectives contained in the CALFED Record of Decision, this project is intended to improve flood management and provide ecosystem benefits in the North Delta area through actions such as construction of setback levees and configuration of flood bypass areas to create high-quality habitat for species of concern. These actions are focused on McCormack-Williamson Tract and Staten Island. The purpose of the project is to implement flood control improvements in a manner that benefits aquatic and terrestrial habitats, species, and ecological processes. Flood control improvements are needed to reduce damage to land uses, infrastructure, and the Bay-Delta ecosystem that result from overflows caused by insufficient channel capacities and catastrophic levee failures in the project study area. The project area encompasses approximately 197 square miles.	Potential for impacts on land use from construction of levees and bypass areas.

Program/Project	Agency	Status	Description of Program/Project	Effects on Land Use
Los Vaqueros Reservoir Expansion	Reclamation, DWR, and CCWD	Planning phase	<p>This project consists of enlarging the existing Los Vaqueros Reservoir and constructing related reservoir system facilities to develop water supplies for environmental water management that supports fish protection, habitat management, and other environmental needs in the Delta and tributary river systems, and to improve water supply reliability and water quality for urban users in the San Francisco Bay Area.</p> <p>Los Vaqueros Reservoir is a 100,000-acre-foot off-stream storage reservoir owned and operated by CCWD that is used to store water pumped from the Delta. This storage capacity allows CCWD to improve the water quality delivered to its customers and to adjust the timing of its Delta water diversions to accommodate the life cycles of Delta aquatic species, thus reducing species impacts and providing a net benefit to the Delta environment.</p> <p>The proposed expansion project would increase the reservoir capacity to 275,000 acre-feet and add a new 470-cfs connection that would allow the Los Vaqueros system to provide water to South Bay water agencies—Alameda County Flood Control and Water Conservation District, Zone 7; Alameda County Water District; and Santa Clara Valley Water District—that otherwise would receive all of their Delta supplies through the existing SWP and CVP export pumps. It also would include construction of a new diversion on Old River with a capacity of 170 cfs. The new and expanded facilities would be operated in coordination with Reclamation and DWR to shift Delta pumping for the three South Bay water agencies from the CVP and SWP Delta export pumps to the expanded Los Vaqueros Reservoir system.</p> <p>In August 2020, Reclamation released its Final Feasibility Report, which documents potential costs and benefits of the expansion of Los Vaqueros Reservoir. The recommended plan described in the report provides for federal cost sharing of up to 25% of project construction costs.</p>	Potential impacts on land use from expansion of reservoir.

Program/Project	Agency	Status	Description of Program/Project	Effects on Land Use
Sacramento River Deep Water Ship Channel Project	USACE and Port of Sacramento	Planning phase (on hold)	The Sacramento River Deep Water Ship Channel Project is a congressionally authorized project being implemented by USACE and the Port of Sacramento. The proposed project would complete the deepening and widening of the navigation channel to its authorized depth of 35 feet. Deepening of the existing ship channel is anticipated to allow for movement of cargo via larger, deeper draft vessels. Widening portions of the channel would increase navigational safety by increasing maneuverability. The 46.5-mile-long ship channel lies within Contra Costa, Solano, Sacramento, and Yolo Counties and serves the marine terminal facilities at the Port of Sacramento. The Sacramento River Deep Water Ship Channel joins the existing 35-foot-deep channel at New York Slough, thereby affording the Port of Sacramento access to San Francisco Bay Area harbors and the Pacific Ocean. The project has been on hold since 2014.	Potential land use impacts from widening of the channel.
Transfer-Bethany Pipeline with the Los Vaqueros Reservoir Expansion	Reclamation, DWR, and CCWD	Planning Phase	<p>The Los Vaqueros Reservoir Expansion Project includes expansion of the Los Vaqueros Reservoir from its current capacity of 160 TAF to 275 TAF, construction of a pipeline between CCWD's Transfer Pump Station and the SWP's California Aqueduct at Bethany Reservoir (the "Transfer-Bethany Pipeline"), upgrades to the existing Transfer Pump Station Facilities, and construction of the Neroly High Lift Station. The proposed project will include a regional intertie (the Transfer-Bethany Pipeline), improved pump stations and pipelines, and could increase the reservoir's capacity up to 275,000 acre-feet.</p> <p>The Transfer-Bethany Pipeline is composed of a new 300-cfs (84-inch-diameter) pipeline would deliver water from the Transfer Facility to the vicinity of Bethany Reservoir for South of Delta partners. The new Transfer-Bethany Pipeline would tie into the California Aqueduct just north of Bethany Reservoir in the Bethany Recreation Area.</p>	Potential land use impacts from construction of the pipeline and facilities and expansion of the reservoir.

Program/Project	Agency	Status	Description of Program/Project	Effects on Land Use
Twitchell Island - San Joaquin River Setback Levee	DWR	Planning phase	This project will stabilize a threatened section of levee along the San Joaquin River and in doing so, allow for several different types of waterside habitat features to be constructed. An original 2,200-foot section was completed in 2000 and is currently serving as a model for a ~23,000-foot setback spanning the entire San Joaquin River levee plus a proposed 80-acre tidal marsh restoration site on what is known as Chevron Point.	Potential land use impacts from new levees and tidal marsh restoration.
West Sacramento Levee Improvements Program	WSAFCA and USACE	Completed	This program would improve the levees protecting West Sacramento to meet local and federal flood protection criteria. The program area includes the entire WSAFCA boundary, which encompasses portions of the Sacramento River, the Yolo Bypass, the Sacramento Bypass, and the Sacramento River Deep Water Ship Channel. The levee system associated with these waterways includes more than 50 miles of levees in RD 900, RD 537, RD 811, DWR's Maintenance Area 4, and the Sacramento River Deep Water Ship Channel. These levees surround West Sacramento. For the purposes of this program, the levees have been generally divided into nine reaches: Sacramento River Levee North, Sacramento River Levee South, Port North Levee, Port South Levee, South Cross Levee, Deep Water Ship Channel Levee East, Deep Water Ship Channel Levee West, Yolo Bypass Levee, and Sacramento Bypass Levee.	Potential land use impacts from new levees.
Winter Island Tidal Habitat Restoration Project	DWR and CDFW	Completed	This project restored tidal connectivity to the interior of Winter Island to create aquatic habitat at intertidal and shallow subtidal elevations, associated high marsh, and riparian habitats on the site to benefit native fish species. The project was intended to partially fulfill the 8,000-acre tidal habitat restoration obligations of DWR, contained within RPA 4 of the 2008 USFWS Delta Smelt BiOp and referenced in RPA I.6.1 of the 2009 (NMFS) Salmonid BiOp, for long-term coordinated operations of the SWP and the CVP. Construction was completed in November 2019.	Land use impacts from restoration of aquatic habitat.

1 BiOp = Biological Opinion; CCWD = Contra Costa Water District; CDFW = California Department of Fish and Wildlife; cfs =
2 cubic feet per second; CVFPP = Central Valley Flood Protection Plan; CVP = Central Valley Project; DMC = Delta-Mendota
3 Canal; DWR = California Department of Water Resources; Intertie = Delta-Mendota Canal/California Aqueduct Intertie;
4 NMFS = National Marine Fisheries Service; RD = Reclamation District; Reclamation = U.S. Bureau of Reclamation; RPA =
5 Reasonable and Prudent Alternative; SPFC = State Plan of Flood Control; SWP = State Water Project; TAF = thousand acre-
6 feet; USACE = U.S. Army Corps of Engineers; USFWS = U.S. Fish and Wildlife Service; WSAFCA = West Sacramento Area
7 Flood Control Area.

8

1 **14.3.4.1 Cumulative Impacts of the No Project Alternative**

2 The ongoing projects and programs in the Delta under the No Project Alternative in addition to the
3 cumulative projects would require construction to either construct new facilities or implement
4 restoration and habitat enhancement goals. In combination with the past, present, and probable
5 future projects in the study area (Table 14-5), the No Project Alternative could result in land use
6 incompatibilities with specific land use designations or with local plans and policies. However, an
7 incompatibility does not by itself constitute an adverse physical effect on the environment but
8 rather may indicate the potential for a proposed activity to have a physical effect on the
9 environment.

10 The projects in Table 14-5 could result in temporary and permanent changes in land use, which may
11 be incompatible with land use designations. Construction of facilities could occur on land that is
12 currently designated as agriculture, for example, resulting in a net loss of agricultural land. However,
13 construction and operations of the above listed projects are unlikely to change overall land use
14 designations or patterns.

15 Additionally, the types of projects assumed under the No Project Alternative are largely restoration
16 and water conveyance projects. These types of projects are unlikely to result in the loss of access
17 from one portion of an existing community to another or result in the division of an established
18 community.

19 **14.3.4.2 Cumulative Impacts of the Project Alternatives**

20 All project alternatives involve construction that would result in temporary and permanent changes
21 in land use. In some cases, there would be incompatibilities with existing land uses (such as
22 agricultural land and land designated for recreation) and incompatibilities with some local plans
23 and policies adopted to avoid or mitigate environmental effects. However, an incompatibility does
24 not by itself constitute an adverse physical effect on the environment. Construction-related impacts
25 would be temporary. The project alternatives and compensatory mitigation would result in some
26 land conversion from building the project components but not to a level that would result in changes
27 in land use designations or overall land use patterns. Much of the potential land area where
28 activities may take place is existing open space or agricultural land or recreational land uses
29 occurring in open space areas. Some of the proposed mitigation efforts to protect terrestrial
30 biological resources would specifically preserve existing land uses. No established communities
31 would be divided. Operation and maintenance of the project alternatives would not result in any
32 land use changes. Therefore, because the incremental changes in land use associated with
33 construction of the project alternatives and the potential conflicts with land use plans, policies, and
34 regulations adopted to avoid or mitigate environmental impacts would not result in physical effects
35 on the environment, none of the alternatives would have cumulatively considerable contribution to
36 impacts on land use. Accordingly, none of the project alternatives would result in a cumulatively
37 significant impact, nor would any alternative contribute to a cumulatively considerable impact on
38 land use.