

# Section 1

## Introduction

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3 This section provides an overview of the Delta Plan, the Delta Plan Program Environmental Impact  
4 Report (EIR), and the process to develop these documents.

### 5 1.1 Delta Plan Purpose and Project Objectives

6 In November 2009, the California Legislature enacted SBX7 1, one of several bills passed at that time  
7 related to water supply reliability, ecosystem health, and the Delta. SBX7 1 took effect on February 3,  
8 2010.<sup>1</sup> Division 35 of this legislation, also known as the Sacramento-San Joaquin Delta Reform Act of  
9 2009 (Delta Reform Act), requires the development of a legally enforceable, comprehensive, long-term  
10 management plan for the Delta, referred to as the Delta Plan. The Delta Stewardship Council (Council)  
11 was established as an independent State agency by the Delta Reform Act.

12 The Council’s primary responsibility is to develop, adopt, and implement the Delta Plan, a legally  
13 enforceable, comprehensive, long-term management plan for the Sacramento–San Joaquin Delta and the  
14 Suisun Marsh (Delta) that achieves the coequal goals (Water Code section 85300(a)). *Coequal goals*  
15 *means the two goals of providing a more reliable water supply for California and protecting, restoring*  
16 *and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and*  
17 *enhances the unique cultural, recreational, natural resource and agricultural values of the Delta as an*  
18 *evolving place* (Water Code section 85054).

19 Achieving the coequal goals is a primary and fundamental purpose of the Delta Plan. Additionally, the  
20 Delta Reform Act states that the policy of the State is “to achieve the following objectives as inherent in  
21 the coequal goals for the management of the Delta:

22 (a) *Manage the Delta’s water and environmental resources and the water resources of the state*  
23 *over the long term.*

24 (b) *Protect and enhance the unique cultural, recreational, and agricultural values of the*  
25 *California Delta as an evolving place.*

26 (c) *Restore the Delta ecosystem, including its fisheries and wildlife, as the heart of a healthy*  
27 *estuary and wetland ecosystem.*

28 (d) *Promote statewide water conservation, water use efficiency, and sustainable water use.*

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<sup>1</sup> The Act modified amended Sections 29702, 29725, 29727, 29733, 29735, 29735.1, 29738, 29741, 29751, 29752, 29754, 29756.5, 29763, 29771, and 29780 of the Public Resources Code; added Sections 29703.5, 29722.5, 29722.7, 29728.5, 29759, 29773, 29773.5, and 29778.5; added Division 22.3 of the Public Resources Code; repealed Section 29762 and repealed and added Sections 29736, 29739, 29753, 29761, 29761.5, and 29764 of the Public Resources Code. The Act also added Division 35 (commencing with Section 85300) and repealed Division 26.4 of the Water Code.

1           (e) *Improve water quality to protect human health and the environment consistent with achieving*  
2           *water quality objectives in the Delta.*

3           (f) *Improve the water conveyance system and expand statewide water storage.*

4           (g) *Reduce risks to people, property, and state interests in the Delta by effective emergency*  
5           *preparedness, appropriate land uses, and investments in flood protection.*

6           (h) *Establish a new governance structure with the authority, responsibility, accountability,*  
7           *scientific support, and adequate and secure funding to achieve these objectives” (Water Code*  
8           *section 85020 et. seq.).*

9           The fundamental purpose of the Delta Plan, therefore, is to achieve the coequal goals and all of the  
10          inherent subgoals and objectives listed above. To accomplish this purpose, the Delta Reform Act requires  
11          that the Delta Plan address the following subjects (Water Code sections 85302(c) through (e), and 85303-  
12          85308).

13          ◆ The Delta Plan shall include measures that promote all of the following characteristics of a  
14          healthy Delta ecosystem:

- 15           • Viable populations of native resident and migratory species.
- 16           • Functional corridors for migratory species.
- 17           • Diverse and biologically appropriate habitats and ecosystem processes.
- 18           • Reduced threats and stresses on the Delta ecosystem.
- 19           • Conditions conducive to meeting or exceeding the goals in existing species recovery plans  
20           and state and federal goals with respect to doubling salmon populations.
- 21           • The Delta Plan shall include measures to promote a more reliable water supply that address  
22           all of the following:
  - 23               • Meeting the needs for reasonable and beneficial uses of water.
  - 24               • Sustaining the economic vitality of the state.
  - 25               • Improving water quality to protect human health and the environment.

26          ◆ The following subgoals and strategies for restoring a healthy ecosystem shall be included in the  
27          Delta Plan:

- 28           • Restore large areas of interconnected habitats within the Delta and its watershed by 2100.
- 29           • Establish migratory corridors for fish, birds, and other animals along selected Delta river  
30           channels.
- 31           • Promote self-sustaining, diverse populations of native and valued species by reducing the risk  
32           of take and harm from invasive species.
- 33           • Restore Delta flows and channels to support a healthy estuary and other ecosystems.
- 34           • Improve water quality to meet drinking water, agriculture, and ecosystem long-term goals.
- 35           • Restore habitat necessary to avoid a net loss of migratory bird habitat and, where feasible,  
36           increase migratory bird habitat to promote viable populations of migratory birds.

37          ◆ The Council shall consider, for incorporation into the Delta Plan, actions designed to implement  
38          the six subgoals and strategies described immediately above.

- 1       ♦ The Delta Plan shall include recommendations regarding state agency management of lands in the  
2       Delta.
- 3       ♦ In carrying out all of the foregoing, the Council shall make use of the best available science.
- 4       ♦ The Delta Plan shall promote statewide water conservation, water use efficiency, and sustainable  
5       use of water.
- 6       ♦ The Delta Plan shall promote options for new and improved infrastructure relating to the water  
7       conveyance in the Delta, storage systems, and for the operation of both to achieve the coequal  
8       goals.
- 9       ♦ The Delta Plan shall attempt to reduce risks to people, property, and state interests in the Delta by  
10       promoting effective emergency preparedness, appropriate land uses, and strategic levee  
11       investments.
- 12       ♦ The Council may incorporate into the Delta Plan the emergency preparedness and response  
13       strategies for the Delta developed by the California Emergency Management Agency pursuant to  
14       Section 12994.5.
- 15       ♦ The Council, in consultation with the Central Valley Flood Protection Board, shall recommend in  
16       the Delta Plan priorities for state investments in levee operation, maintenance, and improvements  
17       in the Delta, including both levees that are a part of the State Plan of Flood Control and non-  
18       project levees.
- 19       ♦ The Delta Plan may identify actions to be taken outside of the Delta, if those actions are  
20       determined to significantly reduce flood risks in the Delta.
- 21       ♦ The Delta Plan may include local plans of flood protection.
- 22       ♦ The Council, in consultation with the Department of Transportation, may address in the Delta  
23       Plan the effects of climate change and sea level rise on the three state highways that cross the  
24       Delta.
- 25       ♦ The Council, in consultation with the State Energy Resources Conservation and Development  
26       Commission and the Public Utilities Commission, may incorporate into the Delta Plan additional  
27       actions to address the needs of Delta energy development, energy storage, and energy  
28       transmission and distribution.
- 29       ♦ The Delta Plan shall meet all of the following requirements:
- 30       • Be based on the best available scientific information and the independent science advice  
31       provided by the Delta Independent Science Board.
- 32       • Include quantified or otherwise measurable targets associated with achieving the objectives of  
33       the Delta Plan.
- 34       • Where appropriate, utilize monitoring, data collection, and analysis of actions sufficient to  
35       determine progress toward meeting the quantified targets.
- 36       • Describe the methods by which the Council shall measure progress toward achieving the  
37       coequal goals.
- 38       • Where appropriate, recommend integration of scientific and monitoring results into ongoing  
39       Delta water management.

- 1 • Include a science-based, transparent, and formal adaptive management strategy for ongoing  
2 ecosystem restoration and water management decisions.

3 Consequently, for purposes of this Draft Program EIR, the Project Objectives are as follows:  
4 Achievement of the coequal goals and the eight “inherent” objectives, in a manner that: (1) furthers the  
5 statewide policy to reduce reliance on the Delta in meeting the State’s future water supply needs through  
6 regional self-reliance, (2) is consistent with specific statutory content requirements for the Delta Plan  
7 (Water Code sections 85302(c) through (e), and 85303-85308), (3) is implementable in a comprehensive,  
8 concurrent and interrelated fashion, and (4) is accomplished as rapidly as realistically possible without  
9 jeopardizing ultimate success.

## 10 1.2 Overview and Use of the Delta Plan

11 The Delta Plan, as a comprehensive management plan for the Delta to achieve the coequal goals, includes  
12 subgoals and strategies to assist in guiding the State and local agency actions related to the Delta (Water  
13 Code section 85300). Primarily, the Delta Plan functions as a strategic document because it provides  
14 guidance and recommendations to cities, counties, and State, federal, and local agencies to restore the  
15 Delta ecosystem and provide a more reliable water supply for California. The Council will work with  
16 government agencies, the California Legislature, and stakeholders to promote and coordinate  
17 implementation of these recommendations.

18 The Delta Plan also contains several significant regulatory policies with which cities, counties, and State  
19 and local agencies are expected to comply. The Delta Reform Act established a certification process for  
20 compliance with the Delta Plan. Under this certification process, State and local agencies that propose to  
21 carry out, approve or fund a qualifying action or project, called a “covered action” in both the Delta  
22 Reform Act and the Delta Plan, must certify that this action or project is consistent with the Delta Plan  
23 and must file a certificate of consistency with the Council. This is discussed in more detail in Section 2A,  
24 Proposed Project and Alternatives, and in Section 2B, Introduction to Resource Sections.

25 The Council does not exercise direct review and approval authority over covered actions to determine  
26 their consistency with the regulatory policies in the Delta Plan. Instead, the Council serves as an appellate  
27 body. Any person alleging that a covered action is not consistent with the Delta Plan may appeal the  
28 certificate of consistency to the Council within 30 days of its being filed. Upon receiving an appeal, the  
29 Council has 60 days to hear the appeal and an additional 60 days to make its decision and issue specific  
30 written findings. If the covered action is found to be inconsistent, the action or project may not proceed  
31 until it is revised so that it is consistent with the Delta Plan.

32 The Council does not propose or contemplate constructing, owning, or operating any facilities used for  
33 water supplies, ecosystem restoration, water quality protection, flood management, or protection and  
34 enhancement of values of the California Delta as an evolving place to implement the Delta Plan  
35 recommendations or regulatory policies.

## 36 1.3 Project Background

37 In California, water is an exceedingly complex topic. The Delta is a “crossroads” for freshwater used by  
38 millions of Californians for domestic use, species habitat, and millions of acres of irrigated agriculture.  
39 The Delta is important in countless ways to many different people and species. The 1,300-square-mile  
40 mosaic of water channels and levee-protected islands between the San Francisco Bay Area and the  
41 Central Valley provides critical economic and environmental functions and services upon which much of  
42 California depends. The Delta and Suisun Marsh can be characterized by the following issues and  
43 facilities.

- 1       ♦ The 45,600-square-mile Delta watershed provides all or a portion of surface water or groundwater  
2       supplies to more than 96 percent of residents in California (based on population estimates by city  
3       and county, California Department of Finance 2011).
- 4       ♦ Approximately 14 percent of the state’s total water supply is conveyed through the Delta from  
5       northern California to areas outside of the Delta (DWR 2009).
- 6       ♦ The Delta and Suisun Marsh support more than 55 known fish species and more than 750 plant  
7       and wildlife species. Of these species, approximately 100 wildlife species, 140 plant species, and  
8       13 taxonomic units of fish are considered special-status species and are afforded some form of  
9       legal or regulatory protection (CNDDDB 2010, USFWS 2010, CNPS 2010).
- 10      ♦ The Delta and Suisun Marsh is home to more than a half million residents living in dozens of  
11      communities, including portions of 17 incorporated cities in five Delta counties, and supports  
12      over 146,000 jobs (DPC 2010).
- 13      ♦ Approximately 57 percent of the Delta and Suisun Marsh, over 480,000 acres of agricultural land,  
14      currently supports a highly productive agricultural industry that produces revenues of hundreds of  
15      millions of dollars annually (DWR 2007a, DWR 2007b, DOC 2008, DPC 2010).
- 16      ♦ The Delta and Suisun Marsh levees and lands support interstate and intrastate federal and State  
17      highways and railroad tracks, more than 500 miles of major electrical transmission lines with  
18      over 60 substations, over 400 miles of major natural gas pipelines that provide energy throughout  
19      Northern California, and critical petroleum product pipelines that provide transportation fuels to  
20      airports and fuel depots from Sacramento to the San Francisco Bay Area. (DPC 2010,  
21      DWR 2009).
- 22      ♦ The Delta and Suisun Marsh has more than 1,335 miles of levees that protect over 800,000 acres  
23      of land.
- 24      ♦ The Delta supports over 6 million visitor days annually from those who recreate in the form of  
25      boating (DBW 2002). Fishing, hunting, bird-watching, and camping provide recreational  
26      opportunities for even more visitors to the area.

27      The Delta serves as the center of California’s two largest water distribution systems: the Central Valley  
28      Project (CVP), operated by the federal Bureau of Reclamation (Reclamation), and the State Water Project  
29      (SWP), operated by the California Department of Water Resources (DWR). Both projects operate  
30      reservoirs in the Delta watershed and diversions at pumping plants in the central and southern Delta to  
31      deliver water cities and irrigated farmland in the San Francisco Bay Area, San Joaquin Valley, central  
32      coastal region near San Luis Obispo, and southern California.

### 33      1.3.1    Current Conditions

34      As recognized by the California Legislature, the Delta is “a distinct and valuable natural resource of vital  
35      and enduring interest to all the people” and the “permanent protection of the Delta’s natural and scenic  
36      resources is the paramount concern to present and future residents of the state and the nation” (Water  
37      Code section 85022(c)(1)). “It serves Californians concurrently as both the hub of the California water  
38      system and the most valuable estuary and wetland ecosystem on the west coast of North and South  
39      America” (Water Code section 85002).

40      Valued Delta resources are, by almost any measure, in serious decline. Multiple factors are collectively  
41      degrading water availability and water quality and threatening the survival of multiple native fish species.  
42      These factors include reduced freshwater flows into the Delta, water diversion facilities, invasive species,

1 discharge and runoff from agricultural and urban areas, altered waterway geometry by flood management  
2 levee construction, and replacement of native habitats with agricultural and urban growth.

### 3 **1.3.1.1 Water Supply Reliability**

4 Although the Delta is at the heart of the state's largest water collection and delivery systems, strongly  
5 variable precipitation determines California's water supply in any given year (Dettinger et al. 2011).  
6 Precipitation in the state ranges between 100 million acre feet (MAF) in dry years and 200 MAF in wet  
7 years (Western Regional Climate Center 2011). Most of the state's annual precipitation occurs over a  
8 period of only 5 to 15 days combined, and recent scientific analysis concludes that "larger variations [in  
9 precipitation] in California necessitate heroic levels of management of the State's water resources to  
10 accommodate wider swings of wet and dry years than in any other state" (Dettinger et al. 2011).

11 To serve as a buffer against the state's natural susceptibility to floods and droughts and supplement  
12 numerous local storage projects, the SWP and CVP systems of reservoirs upstream of the Delta store,  
13 divert, and release water. A portion of the stored water is diverted within the Delta watershed and the  
14 Delta by agricultural, municipal and industrial, and State and federal refuge water users. Agricultural  
15 runoff and tailwater, municipal and industrial wastewater, and most of the waters diverted by the refuges  
16 return to the rivers and continue to flow into the Delta. A portion of the stored water flows through the  
17 Delta and is diverted at intakes located in the south Delta for continued conveyance to agricultural,  
18 municipal and industrial, and State and federal refuge water users located outside of the Delta. The  
19 remaining portions of water that enter the Delta flow into Suisun Bay for continued conveyance through  
20 San Francisco Bay and to the Pacific Ocean through the Golden Gate.

21 The river systems flowing into the Delta drain about 40 percent of the land in California and carry about  
22 half of the state's total annual runoff (DWR 2009). The Sacramento River provides about three-quarters  
23 of the flow into the Delta, and the San Joaquin River and eastside tributaries supply the remaining one-  
24 quarter (LAO 2008). Unimpaired flows into the Delta average about 30 MAF per year, or 36 percent of  
25 California's average annual water supply of 83 MAF (Chung and Ejeta 2011). Of the total water in the  
26 Delta watershed, about half is diverted upstream for agricultural (87 percent), urban (8 percent), and  
27 environmental (5 percent) uses (DWR 2009). A portion of the diverted flows is returned to the rivers.  
28 Annual diversions from CVP and SWP facilities in the Delta (Delta exports) vary from 3 to 6.5 MAF.  
29 Delta exports represent as little as 10 percent of all Delta outflows during wet years and more than 40  
30 percent of all Delta outflows during dry years (DWR 2011).

31 The dependence of the state's major regional economies on water supplies from the Delta has grown  
32 while the reliability of water supplies from the Delta has begun to deteriorate. As native fish populations  
33 decline, regulatory and court-imposed constraints on Delta water system operations are triggering legal  
34 issues that result in reductions in water supply reliability, impacting urban and agricultural water users.  
35 Many water users that had developed agricultural and urban areas based upon assurance that surface  
36 water supplies would be available have relied upon groundwater to a greater extent. This has led to  
37 extensive groundwater overdrafts in many areas. Although groundwater and surface water are often  
38 interconnected, the State Water Resources Control Board has limited authority to regulate groundwater.  
39 Groundwater is sustainably managed in some areas of the state, but other areas suffer from unsustainable  
40 overdraft (Famiglietti et al. 2011) and require improved management efforts.

41 Compounding the complexity of these problems is the increasing volatility of Delta water supplies as a  
42 consequence of climate change, including more rain and less snow, earlier snowmelt, and higher winter  
43 and lower spring-summer runoff patterns (Knowles and Cayan 2004, Knowles et al. 2006). Water supply  
44 reliability also is affected by volatile, or wide ranging, precipitation patterns in California. The  
45 Department of Water Resources (DWR 2009) and various federal agencies are conducting studies to  
46 characterize and project changes in precipitation patterns due to climate change. Climate change is  
47 expected to affect California's water supply through changes in precipitation and runoff patterns with

1 more severe storm events and more severe droughts, possibly with less snow and more rain, which would  
2 reduce annual water availability because the “water storage” includes water in the reservoirs and water in  
3 the snowpack that melts throughout the spring and much of the summer. Sea level rise also would reduce  
4 availability of freshwater in the central Delta and for the CVP and SWP.

### 5 **1.3.1.2 Ecosystem Degradation**

6 Landscape attributes, particularly waterway geometry, elevation, and other environmental conditions,  
7 have changed dramatically in the Delta and the Suisun Marsh over the last 160 years. Much of the  
8 original habitat for native species in the Delta has been destroyed (Healey et al. 2008, Moyle et al. 2010,  
9 Baxter et al. 2010). Historically, the Delta was a 700,000-acre mosaic of variable landscape types  
10 influenced by tides and river flows. Historical Delta landscapes showed considerable seasonal and  
11 interannual variability in flow characteristics and inundation patterns. The historical Delta can be divided  
12 into three primary landscapes: flood basins in the north Delta, tidal islands in the central Delta, and  
13 distributary rivers (multiple branches flowing away from main channels) in the south Delta (Grossinger  
14 et al. 2010; Whipple et al. 2010, 2011).

15 The historical flood basins in the north Delta occurred where the Sacramento River entered the Delta with  
16 a broad zone of nontidal, freshwater, emergent plant-dominated (tule) wetlands that transitioned into tidal  
17 freshwater wetlands, shallow perennial ponds and lakes, riparian forests along natural levees, and  
18 seasonal wetlands. The historical central Delta included about 200,000 acres of tidal islands with  
19 freshwater emergent plants that were inundated regularly by spring tides. Banks of the tidal islands were  
20 commonly covered in tules, and willows, grasses, sedges, shrubs, and ferns grew in the interior of the  
21 islands. The historical south Delta contained a complex network of channels with low berms acting as  
22 natural levees, large woody debris, willows, and other shrubs with upland areas supporting open oak  
23 woodlands. Historical data from the Delta paint a picture of rich habitat complexity at multiple spatial and  
24 temporal scales (Grossinger et al. 2010, Whipple et al. 2010, Whipple 2011).

25 The historical Delta and Suisun Marsh landscape and ecosystems changed through construction of  
26 approximately 1,335 miles of levees, draining of lands behind the levees for crop production, construction  
27 of dams in the Delta watershed, and diverting water for use outside of the Delta (Hanak et al. 2011).  
28 Construction of dams on most tributary rivers flowing into the Delta have been dammed has greatly  
29 reduced access to areas critical to fish lifecycles, including spawning habitats. The once pronounced  
30 seasonal and interannual flow variability has given way to more stable and artificially regulated  
31 conditions, and the formerly highly complex landscape of the past has been replaced by a much more  
32 uniform landscape resembling a simplified grid of straightened river channels, fixed in space and time,  
33 used for north-south and east-west water conveyance and shipping. These activities have produced a rich  
34 agricultural and urban economy in the Delta and far beyond its borders, but it has come at a cost to the  
35 original estuarine ecosystem and its native species.

36 The resultant reduction in the extent, quality, and diversity of habitats supporting native species has led to  
37 declines in populations of native resident and migratory species. The current Delta continues to be a  
38 productive ecosystem, but the prevailing habitat types and conditions support a much different mix of  
39 species than the historical Delta did, and many of the currently thriving species are nonnative species.  
40 Current habitat conditions are insufficient to sustain a number of aquatic and terrestrial native species  
41 such as the fishes involved in the sudden “pelagic organism decline” (referred to as POD) in the first  
42 decade of the twenty-first century (Sommer et al. 2007, Baxter et al. 2010), as well as winter- and spring-  
43 run Chinook salmon, giant garter snake, and Suisun thistle, among others (Healey et al. 2008, Moyle et al.  
44 2010).

45 Ecosystem restoration is challenged by persistent threats and stresses to the processes, habitats, and  
46 species it seeks to restore. The current degraded ecological conditions for many native Delta species are  
47 the result of the combined impacts of multiple drivers and stressors. It is difficult to assess and prioritize

1 stressors because they interact with each other, affect ecosystem attributes in varying ways (what may be  
2 negative for one stressor may be positive for another stressor), and effects may change in different time  
3 periods or locations (Delta ISB 2011).

#### 4 **1.3.1.3 Threats to Delta Communities and Uses**

5 The Legislature declared the Delta “inherently flood-prone” in 1992 (Public Resources Code section  
6 29704). Despite ongoing maintenance of the levee system, communities that have grown up behind these  
7 levees face the ever-present threat of flooding and, in some cases, potentially catastrophic flooding. Some  
8 islands have a greater risk flooding because the ground levels have subsided over more than 100 years.  
9 The subsidence occurs on islands with peat soils when agricultural cultivation exposes the peat minerals  
10 to the air and allows oxidation of the organic material. As the organic material oxidizes, the soil volume  
11 decreases, and the ground elevation declines. In some islands, the ground elevation is below sea level  
12 elevation. Therefore, if a levee failure occurs on one of these islands, water would fill the island. On these  
13 islands, the levees could be under greater stresses than if the ground elevation had not subsided because,  
14 originally, the levees were constructed to withstand pressures of water elevation above the ground  
15 elevation on the landside of the levee only during flood events. On many islands, the water is  
16 continuously higher than the ground elevation and this could cause higher pressures on the levees than  
17 they were constructed to withstand unless they have been modified (Lund et al. 2010).

18 The potential for catastrophic levee failure in the Delta and the risk to its residents and water delivery  
19 infrastructure posed by floods, sea level rise, earthquakes, and land subsidence is real and growing.  
20 Levees face potential threats such as large runoff events, earthquakes, extreme high tides, wind-generated  
21 waves, subsidence, and sea level rise. Individually, each of these threats is enough to cause serious  
22 concern; together, they represent the potential for catastrophic disruption of the Delta and its economic  
23 and ecological services. A mass failure of the levee system would have real life-and-death impacts, and  
24 property losses that could total billions of dollars. Levee failures not only create direct damage and  
25 potential loss of life from flooding, but also change the configuration of the Delta—both water and land—  
26 and alter the mixing of fresh water with salt water. A failure could also have significant effects on  
27 California’s economy due to interruption of water supply service to 25 million urban water users and to  
28 approximately 3 million acres of irrigated farmland that depend, in part or in whole, on water conveyed  
29 through the Delta. The cost of maintaining, improving, or repairing these levees may be more than the  
30 assessed value of the use of the land they protect in some cases (Sumner et al. 2011). This creates an  
31 uncertain future for Delta agriculture and for the associated Delta economy and those residents who  
32 depend upon the levees.

33 Preventing floods is impossible, but prudent planning and organization of flood management activities  
34 can significantly reduce vulnerabilities and risk. Risks can be reduced through an emergency  
35 preparedness, response, and recovery system; appropriate land uses; water management changes;  
36 reservoir reoperation; and strategic levee improvements.

37 The Delta and Suisun Marsh area support numerous recreational opportunities, including parks, wildlife  
38 areas, campgrounds, marinas, small communities, historic sites, and agricultural islands with farm  
39 markets and wineries. The Delta is one of California’s most important boating, fishing, and waterfowl  
40 hunting resources; a place with rich natural habitats for bird watching and nature study, and a scenic place  
41 to meander and explore by boat or car. Physical changes to Delta waterways to accommodate water  
42 supply or flood management facilities and increasing Delta population could reduce some of these  
43 opportunities. However, increasing population growth in the San Francisco Bay Area and Central Valley  
44 and a more likely desire in the future to recreate close to where people live could increase recreational  
45 demands for the Delta (DPC 2011).

46 The August 2011 Public Draft Economic Sustainability Plan Sacramento-San Joaquin Delta (DPC 2011)  
47 discussed that the Delta is relatively diverse, growing, and economically integrated, however, the Delta

1 Primary Zone that is generally agricultural is somewhat less diversified and has a less robust economy.  
2 The Primary Zone has not grown substantially because of restrictive land use regulations and because the  
3 existing population has not funded infrastructure expansion. The population in the Primary Zone is  
4 getting older, with the percent of the population at age 55 or older rising from 24 percent in 2000 to  
5 38 percent in 2010. Approximately 45 percent of all jobs in the Primary Zone are categorized as  
6 agriculture. However, in the total Delta (Primary and Secondary Zones) the economy grew and population  
7 increased 54 percent between 1990 and 2010 - although population growth has appeared to stabilize since  
8 the economic downturn of the past several years. In the total Delta, only 19 percent of the population is  
9 age 55 or older, and 45 percent of the jobs in the total Delta are in retail, education, health care, and  
10 accommodations/food services - not agriculture. These figures indicate that there is a major difference in  
11 populations and employment between the Primary and Secondary Zones. The Primary Zone, with  
12 66 percent of the total Delta land area (490,047 acres of the total 737,358 acres) includes an older  
13 population that is dependent upon agriculture for much of the economic drivers. Because land use  
14 restrictions (as established by the Delta Protection Commission in accordance with the Delta Protection  
15 Act of 1992) limit the possibility of development in the Primary Zone, there are few possibilities to  
16 convert agricultural lands to other uses. However, there are limited buffer areas between the agricultural,  
17 urban, rural and suburban residential, industrial, or ecosystem restoration land uses in the Delta. The lack  
18 of buffer zones can cause conflicts between agricultural land uses throughout the Delta and development  
19 that occurs primarily along the boundaries of the Delta in the Secondary Zone. Conflicts between  
20 development and agriculture could constrain future agricultural operations (such as requests from  
21 development to agricultural operations to limit agricultural spraying or dairy operations near municipal  
22 areas). Currently, agricultural land use protections reduce the opportunities for new houses or commercial  
23 structures to be constructed in the Primary Zone.

## 24 1.3.2 Previous Efforts to Restore Balance to the Delta

25 California has long attempted to manage major events in the Delta such as water supply shortages,  
26 droughts, flood risk, and the annual decline of fisheries. For example, when flooding occurred as a result  
27 of sediment deposition in the Sacramento River caused by hydraulic mining practices over a century ago,  
28 the response was to construct limited flood channels with high levees on either side to contain the  
29 floodwaters and create high velocities to move mining debris into the San Francisco Bay estuary.  
30 However, the levees eliminated major portions of the Delta's riparian habitat. As another example, in the  
31 late 1800s the federal government incentivized the "reclamation" of "nuisance" swampland to reduce  
32 threats of vector-borne disease and to gain productive land for farming. These actions did provide  
33 productive farm land, but destroyed extensive Delta wetlands that served as an important part of  
34 California's Bay-Delta estuary.

35 Because these actions were taken without an understanding of the complex interactions of the water  
36 resource and land use actions with the ecosystem, it was difficult for the agencies that implemented these  
37 actions to foresee the degraded ecosystem conditions that would follow and that currently exist. As data  
38 collection efforts have increased and the data are analyzed, this understanding is beginning to be used by  
39 federal, State, and local agencies to develop programs that can improve the Delta ecosystem and continue  
40 to provide for the need of water users throughout California, and the Delta farmers and communities.

41 The following subsections describe several critical historical events that have led to a need to restore  
42 balance to the Delta and/or have attempted to contribute or contributed to partial restoration of Delta  
43 balance.

### 44 1.3.2.1 *Referendum Vote on the Peripheral Canal*

45 The CVP south Delta intakes and pumping plant were completed in the 1950s and the SWP south Delta  
46 intakes and pumping plant were completed in the late 1960s. Water is conveyed from the Sacramento  
47 River to the south Delta intakes through the Delta channels by flowing from the confluence of the

1 Sacramento and San Joaquin rivers near Collinsville along Old and Middle rivers to the intakes. The CVP  
2 facilities also include the Delta Cross Channel near Walnut Grove. During specific flow and fisheries  
3 conditions, gates at the Delta Cross Channel along the Sacramento River near Walnut Grove (upstream  
4 from Collinsville) are opened to allow freshwater to move towards the south Delta intakes and improve  
5 water quality in the south Delta. In the early 1900s, planners of the state water system had evaluated a  
6 “peripheral canal” to divert Sacramento River water near Walnut Grove and convey the water to the south  
7 Delta to serve the local communities. However, due to the expense and concerns about construction  
8 impacts and water quality, the Delta Cross Channel was developed. However, use of the Delta Cross  
9 Channel is limited in capacity and the gates are closed to protect fisheries and local channels.

10 Certain SWP facilities were constructed in the 1960s, but the SWP imagined by engineers was only built  
11 in part. SWP aqueduct facilities were initially designed and constructed to provide service to agencies to  
12 meet their water delivery needs up to 1990 (DWR 2008). The original planning documents for the SWP  
13 were premised on significant infrastructure/conveyance additions to divert north coast river water down to  
14 the Delta for export to areas south of the Delta. Failure to construct a peripheral canal (discussed below),  
15 and passage of federal and State laws to protect wild rivers, has capped any expectation of north coast  
16 water being moved south. Thus, the demands from water users continue, but the full amount of water  
17 originally envisioned when the SWP was planned is no longer visible.

18 After SWP facilities were constructed in the 1960s, evaluations continued to identify facilities to improve  
19 Delta water quality, Delta fisheries, and water supply reliability to SWP and CVP water users located  
20 outside of the Delta. Senate Bill 200 (1979-1980 Regular Session) directed the Department of Water  
21 Resources to construct additional facilities as part of the SWP, including a peripheral canal. A peripheral  
22 canal would have diverted water from the Sacramento River near Hood and conveyed water around the  
23 eastern and southern edge of Delta to SWP and CVP south Delta intakes. In response to the 1980 passage  
24 of State legislation, a group of Californians gathered signatures to allow the public to vote on the issue in  
25 a statewide referendum. Concerns regarding the environmental effects of the peripheral canal caused  
26 opposition from environmental advocates, Delta communities, and Central Valley farmers (California  
27 Secretary of State 1982). The 1982 referendum failed, and the canal was not constructed.

### 28 **1.3.2.2 The 1987–1992 Drought**

29 Beginning in 1987, California experienced a drought of memorable severity that lasted six years in  
30 duration. Almost as long as the 1928–1934 drought, the longest drought in California’s modern recorded  
31 history, runoff in the Delta watershed was about half of average during this period, resulting in major  
32 water supply shortages. While nearly all Californians were affected by the drought, agriculture and the  
33 environment were severely affected, and the inadequacy of water supplies from the Delta began to receive  
34 increased statewide attention.

### 35 **1.3.2.3 Central Valley Project Improvement Act and CALFED**

36 In 1992, the Central Valley Project Improvement Act (CVPIA) was authorized as Title XXXIV of the  
37 federal Reclamation Projects Authorization and Adjustment Act of 1992 (Public Law 102-575). The  
38 CVPIA amended authorizations of the CVP to include fish and wildlife protection, restoration, and  
39 mitigation as project purposes having equal priority with irrigation and domestic uses and fish and  
40 wildlife enhancement as a project purpose equal to power generation, and to achieve a reasonable balance  
41 among competing demands for use of CVP water.

42 In June 1994, a group of federal and State agencies signed an agreement to coordinate their actions to  
43 meet federal and State water quality standards to protect the Bay-Delta estuary; coordinate the operation  
44 of the SWP and CVP more closely with environmental mandates; and develop a process to establish a  
45 long-term Bay-Delta solution to address four categories of problems: ecosystem quality, water quality,  
46 water supply reliability, and levee system vulnerability. Following the June 1994 agreement, a group of  
47 government agencies, along with agricultural, urban, and environmental water interests, developed the

1 “Principles of Agreement on Bay-Delta Standards between the State of California and the Federal  
2 Government.” Known as the Bay-Delta Accord, this agreement led to implementation of the CALFED  
3 Bay Delta Program (CALFED) on December 15, 1994. CALFED was a consortium of eight State and ten  
4 federal agencies with management and regulatory responsibilities in the Bay-Delta estuary. The  
5 objectives of the CALFED program were water supply reliability, improved water quality, ecosystem  
6 restoration, and levee system integrity. Phase I of the CALFED program was initiated in 2000.

7 Following the initial implementation of CVPIA and CALFED programs, several Delta aquatic organisms  
8 listed as endangered or threatened under the federal and/or State Endangered Species Acts continued to  
9 decline, including delta smelt and certain salmonids. In response to declining populations of threatened  
10 and endangered aquatic species, the U.S. Fish and Wildlife Service and National Marine Fisheries Service  
11 issued modifications to several biological opinions to modify operations of the SWP and CVP facilities.  
12 The operational changes resulted in reductions in water exported from the Delta.

13 Critics of the process claimed that CALFED was not reaching its goals to improve ecosystem quality,  
14 water quality, and water supply reliability, and reduce levee system vulnerability. In 2006, the State’s  
15 Little Hoover Commission, an independent oversight agency, issued a report essentially declaring the  
16 joint State and federal CALFED effort a failure. Shortly thereafter, the CALFED program was  
17 administratively disbanded, and a few years later, the original authorizing State statute was formally  
18 repealed. The federal authorizing statute has been continued and programs are funded.

#### 19 **1.3.2.4 Delta Vision**

20 In partial response to the Little Hoover Commission Report, a Delta Vision Blue Ribbon Task Force was  
21 formed with members appointed by the governor in 2006. The Task Force issued a Strategic Plan in 2008  
22 that built on CALFED’s objectives but went a step further by introducing the concept of coequal goals for  
23 the Delta—water supply reliability and ecosystem health—and recommending that a new governance  
24 structure be established. The Delta Vision Strategic Plan outlined a number of specific actions necessary  
25 to achieve the coequal goals, much of which formed the basis for the Delta Reform Act of 2009.

### 26 **1.3.3 Delta Reform Act Developed in Response to These Issues**

27 Recommendations of the Delta Vision Strategic Plan were considered by the Legislature in the adoption  
28 of the Delta Reform Act. Signed into law in 2009, the Delta Reform Act was part of a larger package of  
29 legislation intended to improve California’s water supply. The Delta Reform Act recognized the ongoing  
30 Delta concerns through the following legislative findings (Water Code sections 85001-85004):

- 31 ♦ The Sacramento-San Joaquin Delta watershed and California’s water infrastructure are in crisis  
32 and existing Delta policies are not sustainable. Resolving the crisis requires fundamental  
33 reorganization of the state’s management of Delta watershed resources....It is the intent of the  
34 Legislature to provide for the sustainable management of the Sacramento-San Joaquin Delta  
35 ecosystem, to provide for a more reliable water supply for the state, to protect and enhance the  
36 quality of water supply from the Delta, and to establish a governance structure that will direct  
37 efforts across state agencies to develop a legally enforceable Delta Plan.
- 38 ♦ The Sacramento-San Joaquin Delta is a critically important natural resource for California and the  
39 nation. It serves Californians concurrently as both the hub of the California water system and the  
40 most valuable estuary and wetland ecosystem on the west coast of North and South America.
- 41 ♦ Originally, the Delta was a shallow wetland with water covering the area for many months of the  
42 year. Natural levees, created by deposits of sediment, allowed some islands to emerge during the  
43 dry summer months. Salinity would fluctuate, depending on the season and the amount of  
44 precipitation in any one year, and the species that comprised the Delta ecosystem had evolved and  
45 adapted to this unique, dynamic system.

- 1       ♦ Delta property ownership developed pursuant to the federal Swamp Land Act of 1850, and state  
2       legislation enacted in 1861, and as a result of the construction of levees to keep previously  
3       seasonal wetlands dry throughout the year. That property ownership, and the exercise of  
4       associated rights, continue to depend on the landowners' maintenance of those non-project levees  
5       and do not include any right to state funding of levee maintenance or repair.
- 6       ♦ In 1933, the Legislature approved the California Central Valley Project Act, which relied upon  
7       the transfer of Sacramento River water south through the Delta and maintenance of a more  
8       constant salinity regime by using upstream reservoir releases of freshwater to create a hydraulic  
9       salinity barrier. As a result of the operations of state and federal water projects, the natural  
10      salinity variations in the Delta have been altered. Restoring a healthy estuarine ecosystem in the  
11      Delta may require developing a more natural salinity regime in parts of the Delta.
- 12     ♦ The economies of major regions of the state depend on the ability to use water within the Delta  
13     watershed or to import water from the Delta watershed. More than two-thirds of the residents of  
14     the state and more than two million acres of highly productive farmland receive water exported  
15     from the Delta watershed.
- 16     ♦ Providing a more reliable water supply for the state involves implementation of water use  
17     efficiency and conservation projects, wastewater reclamation projects, desalination, and new and  
18     improved infrastructure, including water storage and Delta conveyance facilities.

19     The Delta Reform Act also recognized the Delta concerns for land use planning in the Delta through the  
20     following legislative findings and goals (Water Code sections 85022(c) and (d)):

- 21     ♦ Findings:
  - 22       • The Delta is a distinct and valuable natural resource of vital and enduring interest to all the  
23       people and exists as a delicately balanced estuary and wetland ecosystem of hemispheric  
24       importance.
  - 25       • The permanent protection of the Delta's natural and scenic resources is the paramount  
26       concern to present and future residents of the state and nation.
  - 27       • To promote the public safety, health, and welfare, and to protect public and private property,  
28       wildlife, fisheries, and the natural environment, it is necessary to protect and enhance the  
29       ecosystem of the Delta and prevent its further deterioration and destruction.
  - 30       • Existing developed uses, and future developments that are carefully planned and developed  
31       consistent with the policies of this division, are essential to the economic and social well-  
32       being of the people of this state and especially to persons living and working in the Delta.
- 33     ♦ Fundamental Goals for managing land use in the Delta are to do all of the following (Water  
34     Code 85022(d)):
  - 35       • Protect, maintain, enhance, and, where feasible, restore the overall quality of the Delta  
36       environment and its natural and artificial resources.
  - 37       • Ensure the utilization and conservation of Delta resources, taking into account the social and  
38       economic needs of the people of the state.
  - 39       • Maximize public access to Delta resources and maximize public recreational opportunities in  
40       the Delta consistent with sound resources conservation principles and constitutionally  
41       protected rights of private property owners.

- 1 • Encourage state and local initiatives and cooperation in preparing procedures to implement  
2 coordinated planning and development for mutually beneficial uses, including educational  
3 uses, in the Delta.
- 4 • Develop new or improved aquatic and terrestrial habitat and protect existing habitats to  
5 advance the goal of restoring and enhancing the Delta ecosystem.
- 6 • Improve water quality to protect human health and the environment consistent with achieving  
7 water quality objectives in the Delta.

8 To respond to these issues, the Delta Reform Act created two new governance bodies, the Sacramento-  
9 San Joaquin Delta Conservancy (Delta Conservancy), and the Council. The Delta Conservancy was  
10 created to work in collaboration and cooperation with local governments and interested parties. It was  
11 created to be a primary State agency to implement ecosystem restoration in the Delta, with additional  
12 responsibilities to focus on economic sustainability for the Delta. The Council was established in  
13 recognition of the need to coordinate and collaborate across the myriad federal, State, and local  
14 government agencies, including the new Delta Conservancy, each of which has various roles and  
15 responsibilities in the Delta. The Council’s foremost undertaking is to develop and implement the Delta  
16 Plan to address the issues and methods to attain the coequal goals and its inherent objectives established  
17 by the legislature.

## 18 1.4 Overview of the Delta Plan Environmental 19 Impact Report

20 This EIR is being prepared by the Council as the Project proponent and State lead agency under the  
21 California Environmental Quality Act (CEQA). CEQA requires lead agencies to consider the  
22 environmental consequences of a project over which they have discretionary authority before approving,  
23 carrying out, or funding the project. Under CEQA, a project is an activity which may cause either a direct  
24 physical change in the environment or a reasonably foreseeable indirect physical change in the  
25 environment. CEQA requires a lead agency to prepare an EIR if the project may have a significant  
26 adverse environmental effect (a “significant impact”).

27 The discretionary action that will be considered by the Council is the adoption of the Delta Plan. Because  
28 the Council does not propose or contemplate constructing, owning, or operating any facilities or directly  
29 undertaking any specific activities to implement the Delta Plan recommendations or regulatory policies,  
30 there would be no direct physical change in the environment due to adoption of the Delta Plan. However,  
31 adoption of the Delta Plan by the Council could influence the nature, timing, or other aspects of decisions  
32 and actions by other agencies (particularly when those actions are “covered actions” under the Delta  
33 Reform Act). Those decisions and actions, as potentially influenced by the Delta Plan, could cause  
34 physical changes in the environment as discussed in more detail in Section 2B, Introduction to Resource  
35 Sections, and in Sections 3 through 24.

36 This EIR is a program-level EIR due to the broad, program level of the Delta Plan. Future environmental  
37 documents would be completed by other agencies when they propose to implement projects that are  
38 subject to consistency reviews by the Council, or projects which are encouraged or otherwise influenced  
39 by the Delta Plan. Hence, this program EIR is not intended to provide project-level clearance for any  
40 specific project.

41 The Delta Plan is being developed for adoption by the Council, which is a State agency. However, the  
42 Delta Reform Act requires that the Delta Plan be developed consistent with the federal Coastal Zone  
43 Management Act of 1972 (or an equivalent compliance mechanism), Section 8 of the federal Reclamation

1 Act of 1902, and the federal Clean Water Act. If the Council adopts the Delta Plan pursuant to the federal  
2 Coastal Zone Management Act of 1972, the Council will submit the Delta Plan to the Secretary of the  
3 U.S. Department of Commerce for consideration under the Coastal Zone Management Act. At this time,  
4 there is no federal lead agency because, until the Delta Plan is adopted by the Council, no federal action  
5 will be formally requested. This EIR is being prepared to be consistent with most of the requirements of  
6 the National Environmental Policy Act (NEPA) in anticipation that a federal agency will consider this  
7 document in preparation of a NEPA environmental analysis. Therefore, all of the alternatives analyzed in  
8 this EIR, including the Proposed Project and No Project Alternative, are evaluated at an equal level of  
9 detail (while avoiding unnecessary repetition) consistent with NEPA requirements. Analysis at an equal  
10 level of detail is not required under CEQA.

## 11 1.4.1 Study Period

12 The study period to be considered in this EIR is defined by the purposes and uses of the Delta Plan. As  
13 described above, the Delta Plan will contain both “recommendations” and an integrated and legally  
14 enforceable set of “policies.” The policies will serve as the [?] basis for future findings of consistency  
15 with the Delta Plan by State and local agencies with regard to Delta-related projects that are “covered  
16 actions”, and for subsequent evaluation of those findings by the Council on appeal, pursuant to Water  
17 Code section 85225 et seq. This regulatory arrangement requires a Delta Plan that has a long-term  
18 perspective, with the acknowledgement that the “Council shall review the Delta Plan at least once every  
19 five years and may revise it as the Council deems appropriate” (Water Code section 85300(c)).

20 The Delta Reform Act includes a reference to a long-term goal to be accomplished by Year 2100  
21 (“Restore large areas of interconnected habitats within the Delta and its watershed by 2100” (Water Code  
22 section 85302(e)(1))). This time frame provides a basis for consideration of a long-term vision for the  
23 Delta Plan. However, the Delta Reform Act also includes references to numerous studies and programs,  
24 the results of which should be considered in development of the Delta Plan. At this time, those studies  
25 have not been completed and several are not anticipated to be completed before 2020. However, it is  
26 anticipated that many of the facilities recommended by those studies would be constructed and  
27 operational by 2030.

28 Therefore, this EIR considers a study period that extends until 2030. Because many of the actions that  
29 could be implemented by other agencies in response to the Delta Plan would be evaluated, designed,  
30 constructed, and under operation by 2030. In the environmental review that would cover the first periodic  
31 review of the Delta Plan in 2016, information developed by the other agencies in the interim will be used  
32 to update and refine this EIR’s analysis.

## 33 1.4.2 Project Area

34 The project area to be considered in this EIR is defined by the purposes and uses of the Delta Plan. The  
35 project area, shown in Figure 1-1, includes the Delta, the Delta watershed that contributes water to the  
36 Delta, and areas outside of the Delta that use Delta water. This area was defined to include the areas of  
37 possible impacts of each alternative, as described in Section 2A, Introduction to Resource Sections.

## 38 1.4.3 Public Involvement Process

39 A Notice of Preparation (NOP) was filed with the Governor’s Office of Planning and Research and  
40 distributed to over 400 agencies, organizations, and individuals on December 10, 2010. The NOP  
41 provided notice of a 48-day review period. The NOP contained a general description of the background  
42 and issues to be considered in development of the Delta Plan.

43

44

1 **Figure 1-1**  
2 **Project Area**



3

1 Seven public scoping meetings were held during mid- to late-January 2011. The Council received over  
2 100 written responses to the NOP from federal agencies, tribes, State agencies, regional authorities, local  
3 government agencies, non-governmental organizations, and individuals. The seven scoping meetings  
4 were attended by over 370 people, 90 of whom provided oral comments on the environmental compliance  
5 process and the scope and content of the EIR. The NOP is provided in Appendix I, and a summary of the  
6 scoping process is provided in Section 2A, Proposed Project and Alternatives.

7 The Delta Plan was prepared in sequential drafts, with increasingly more complete First, Second, Third,  
8 Fourth, and Fifth Staff Draft Delta Plan versions presented at Council meetings from February through  
9 August 2011. At each stage of the development of the Staff Draft Delta Plan, the Council held public  
10 meetings for the purpose of receiving information and comments and for Council deliberation. All  
11 Council meetings are public and are simulcast on the Council website at [www.deltacouncil.ca.gov](http://www.deltacouncil.ca.gov). Public  
12 comments received on the Staff Draft Delta Plan versions were posted on the Council website and  
13 considered in the development of the subsequent Staff Draft Delta Plan versions and the EIR. The  
14 Proposed Project evaluated in this EIR is the Fifth Staff Draft Delta Plan published on August 2, 2011.  
15 The Proposed Project and the alternatives that are evaluated in this EIR as described in Section 2A,  
16 Proposed Project and Alternatives.

## 17 1.4.4 Document Organization

18 This EIR document contains the following sections:

- 19 ♦ Section 1: Introduction
- 20 ♦ Section 2A: Proposed Project and Alternatives
- 21 ♦ Section 2B: Introduction to Resources Sections
- 22 ♦ Section 3: Water Resources
- 23 ♦ Section 4: Biological Resources
- 24 ♦ Section 5: Delta Flood Risk
- 25 ♦ Section 6: Land Use and Planning
- 26 ♦ Section 7: Agriculture and Forestry Resources
- 27 ♦ Section 8: Visual Resources
- 28 ♦ Section 9: Air Quality
- 29 ♦ Section 10: Cultural Resources
- 30 ♦ Section 11: Geology and Soils
- 31 ♦ Section 12: Paleontological Resources
- 32 ♦ Section 13: Mineral Resources
- 33 ♦ Section 14: Hazards and Hazardous Materials
- 34 ♦ Section 15: Noise
- 35 ♦ Section 16: Population and Housing
- 36 ♦ Section 17: Public Services
- 37 ♦ Section 18: Recreation
- 38 ♦ Section 19: Transportation, Traffic, and Circulation
- 39 ♦ Section 20: Utilities and Service Systems
- 40 ♦ Section 21: Climate Change and Greenhouse Gas Emissions
- 41 ♦ Section 22: Cumulative Impact Assessment
- 42 ♦ Section 23: Bay Delta Conservation Plan
- 43 ♦ Section 24: Other CEQA Considerations
- 44 ♦ Section 25: Comparison of Alternatives
- 45 ♦ Section 26: List of Preparers
- 46 ♦ Appendix A: Acronyms and Abbreviations
- 47 ♦ Appendix B: SBX7 1
- 48 ♦ Appendix C: Policies and Recommendations of the Proposed Project and Alternatives

- 1 ♦ Appendix D: Regulatory Framework
- 2 ♦ Appendix E: Water Resources Supporting Information
- 3 ♦ Appendix F: Biology Appendixes
- 4 ♦ Appendix G: Farmland Definitions
- 5 ♦ Appendix H: Reference Environmental Impact Reports
- 6 ♦ Appendix I: Notice of Preparation

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