State of California
Office of Administrative Law

In re:
Delta Stewardship Council

Regulatory Action:

Title 23, California Code of Regulations

Adopt sections: 5005.1, Appendix 3A, Appendix 4A, Appendix 8A
Amend sections: 5001, 5002, 5003, 5004, 5005, 5006, 5007, 5008, 5009, 5010, 5011, 5012, 5013, 5014, 5015
Repeal sections:

NOTICE OF APPROVAL OF REGULATORY ACTION

Government Code Section 11349.3

OAL Matter Number: 2025-0114-02

OAL Matter Type: Regular Resubmittal (SR)

In this rulemaking action, the Delta Stewardship Council (DSC) adopts and amends regulations regarding Delta Ecosystem Restoration. These regulations will require state and local agencies to disclose contributions for ecosystem function restoration and the social benefits provided in the Delta; require disclosure of cultural, recreational, agricultural, and natural resources benefits anticipated form the completion of the covered action; require state and local agencies to explain how certain projects will accommodate for issues associated with sea level rise; require agencies to explain how projects will safeguard against levee failure; redefine the range of levees on certain rivers; define new terms; and amend DSC's existing mitigation and reporting requirements.

OAL approves this regulatory action pursuant to section 11349.3 of the Government Code. This regulatory action becomes effective on 4/1/2025.

Date: February 27, 2025

Sam Micon
Senior Attorney

For: Kenneth J. Pogue
Director

Original: Jessica R. Pearson, Executive Officer
Copy: Eva Bush

STATE OF CALIFORNIA—OFFICE OF ADMINISTRATIVE LAW

NOTICE PUBLICATION/REGULATIONS SUBMISSION — RESUBMITTAL

STD. 400 (REV. 10/2019)

For use by Secretary of State only

OAL FILE NUMBERS	NOTICE FILE NUMBER	REGULATORY ACTION NUMBER	EMERGENCY NUMBER
	Z-	2025-0114-02SR	

For use by Office of Administrative Law (OAL) only

OFFICE OF ADMIN. LAW
2025 JAN 14 PM 12:21

NOTICE | REGULATIONS

ENDORSED - FILED
in the office of the Secretary of State
of the State of California

FEB 27 2025
1:32PM aB

AGENCY WITH RULEMAKING AUTHORITY: Delta Stewardship Council

AGENCY FILE NUMBER (If any):

A. PUBLICATION OF NOTICE (Complete for publication in Notice Register)

1. SUBJECT OF NOTICE	TITLE(S)	FIRST SECTION AFFECTED	2. REQUESTED PUBLICATION DATE
Proposed Amendment and Adoption to CCR	23	5001	

3. NOTICE TYPE	4. AGENCY CONTACT PERSON	TELEPHONE NUMBER	FAX NUMBER (Optional)
☒ Notice re Proposed Regulatory Action ☐ Other	Eva Bush	(916) 284-1619	

OAL USE ONLY	ACTION ON PROPOSED NOTICE	NOTICE REGISTER NUMBER	PUBLICATION DATE
	☐ Approved as Submitted ☐ Approved as Modified ☐ Disapproved/ Withdrawn	2024, 14-Z	3/29/24

B. SUBMISSION OF REGULATIONS (Complete when submitting regulations)

1a. SUBJECT OF REGULATION(S): Delta Ecosystem Restoration

1b. ALL PREVIOUS RELATED OAL REGULATORY ACTION NUMBER(S): Z-2024-0318-02

2. SPECIFY CALIFORNIA CODE OF REGULATIONS TITLE(S) AND SECTION(S) (Including title 26, if toxics related)

SECTION(S) AFFECTED (List all section number(s) individually. Attach additional sheet if needed.)	
	ADOPT: 5005.1, Appendix 3A, Appendix 4A, Appendix 8A
	AMEND: 5001, 5002, 5003, 5004, 5005, 5006, 5007, 5008, 5009, 5010, 5011, 5012, 5013, 5014, 5015
TITLE(S): 23	REPEAL:

3. TYPE OF FILING

- ☐ Regular Rulemaking (Gov. Code §11346)
- ☒ Resubmittal of disapproved or withdrawn nonemergency filing (Gov. Code §§11349.3, 11349.4)
- ☐ Emergency (Gov. Code, §11346.1(b))
- ☐ Certificate of Compliance: The agency officer named below certifies that this agency complied with the provisions of Gov. Code §§11346.2-11347.3 either before the emergency regulation was adopted or within the time period required by statute.
- ☐ Resubmittal of disapproved or withdrawn emergency filing (Gov. Code, §11346.1)
- ☐ Emergency Readopt (Gov. Code, §11346.1(h))
- ☐ File & Print
- ☐ Other (Specify)
- ☐ Changes Without Regulatory Effect (Cal. Code Regs., title 1, §100)
- ☐ Print Only

4. ALL BEGINNING AND ENDING DATES OF AVAILABILITY OF MODIFIED REGULATIONS AND/OR MATERIAL ADDED TO THE RULEMAKING FILE (Cal. Code Regs. title 1, §44 and Gov. Code §11347.1)
December 24, 2024 - January 7, 2025

5. EFFECTIVE DATE OF CHANGES (Gov. Code, §§ 11343.4, 11346.1(d); Cal. Code Regs., title 1, §100)

- ☒ Effective January 1, April 1, July 1, or October 1 (Gov. Code §11343.4(a))
- ☐ Effective on filing with Secretary of State
- ☐ §100 Changes Without Regulatory Effect
- ☐ Effective other (Specify)

6. CHECK IF THESE REGULATIONS REQUIRE NOTICE TO, OR REVIEW, CONSULTATION, APPROVAL OR CONCURRENCE BY, ANOTHER AGENCY OR ENTITY

- ☒ Department of Finance (Form STD. 399) (SAM §6660)
- ☐ Fair Political Practices Commission
- ☐ State Fire Marshal
- ☐ Other (Specify)

7. CONTACT PERSON	TELEPHONE NUMBER	FAX NUMBER (Optional)	E-MAIL ADDRESS (Optional)
Eva Bush	916) 284 1619		

8. I certify that the attached copy of the regulation(s) is a true and correct copy of the regulation(s) identified on this form, that the information specified on this form is true and correct, and that I am the head of the agency taking this action, or a designee of the head of the agency, and am authorized to make this certification.

SIGNATURE OF AGENCY HEAD OR DESIGNEE	DATE
	Jan 7, 2025

TYPED NAME AND TITLE OF SIGNATORY: Jessica Pearson, Executive Officer

For use by Office of Administrative Law (OAL) only

ENDORSED APPROVED

FEB 27 2025

Office of Administrative Law

State of California
Delta Stewardship Council
715 P Street
Sacramento, CA 95814

California Code of Regulations, Title 23. Water
Division 6. Delta Stewardship Council

Amendment of Sections 5001, 5002, 5003, 5004, 5005, 5006, 5007, 5008, 5009, 5010, 5011, 5012, 5013, 5014, and 5015; Addition of Section 5005.1 and Appendix 3A, Appendix 4A, and Appendix 8A

Definitions (Section 5001)

As used in this division, the terms listed below shall have the meanings noted:

(a) "Adaptive management" means a framework and flexible decision-making process for ongoing knowledge acquisition, monitoring, and evaluation leading to continuous improvement in management planning and implementation of a project to achieve specified objectives.

(b) "Agricultural water management plan" means a plan prepared, adopted, and updated by an agricultural water supplier pursuant to the Agricultural Water Management Planning Act, Water Code section 10800 et seq.

(c) "Agricultural water supplier" under the Water Code refers to both agricultural retail water suppliers and agricultural wholesale water suppliers, but not the California Department of Water Resources or the United States Bureau of Reclamation, and includes both of the following:

(1) A water supplier, either publicly or privately owned, providing water to 10,000 or more irrigated acres, excluding recycled water; and

(2) A water supplier or contractor for water, regardless of the basis of the water right, that distributes or sells water for ultimate resale to customers.

(d) "Base Flood" means the flood that has a 1-percent probability of being equaled or exceeded in any given year (also referred to as the 100-year flood).

(e) "Base Flood Elevation" (BFE) means the water surface elevation associated with the base flood.

(f) <u>"BDCP" means the Bay Delta Conservation Plan, which was a habitat conservation plan proposed by the Department of Water Resources, U.S. Fish & Wildlife Service, National Marine Fisheries Service, and Bureau of Reclamation.</u>

~~(f)~~(g) "Best available science" means the best scientific information and data for informing management and policy decisions. Best available science shall be consistent with the guidelines and criteria found in Appendix 1A.

~~(g)~~(h) "Central Valley Flood Protection Board" or "Board" means the Central Valley Flood Protection Board (formerly The Reclamation Board) of the Resources Agency of the State of California as provided in Water Code section 8521.

(i) "CEQA" means the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.).

(j) "Certification of consistency" means a written statement as described in Water Code section 85225.

~~(h)~~(k) "Certifying agency" means, for ~~the~~ purposes of article 5, a State or local public agency that proposes to undertake a covered action.

~~(i)~~(l) "Coequal goals" means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place. In addition, "achievement" for the purpose of determining whether a plan, program, or project meets the definition of a "covered action" under section 5001~~(k)~~(o) is further defined as follows:

(1) "Achieving the coequal goal of providing a more reliable water supply for California" means all of the following:

(A) Better matching the state's demands for reasonable and beneficial uses of water to the available water supply. This will be done by promoting, improving, investing in, and implementing projects and programs that improve the resiliency of the state's water systems, increase water efficiency and conservation, increase water recycling and use of advanced water technologies, improve groundwater management, expand storage, and improve Delta conveyance and operations. The evaluation of progress toward improving reliability will take into account the inherent variability in water demands and supplies across California;

(B) Regions that use water from the Delta watershed will reduce their reliance on this water for reasonable and beneficial uses, and improve regional self-reliance, consistent with existing water rights and the State's area-of-origin statutes and Reasonable Use and Public Trust Doctrines. This will be done by improving, investing in, and implementing local and regional projects and programs that increase water conservation and efficiency, increase water recycling and use of advanced water technologies, expand storage, improve groundwater management, and enhance regional coordination of local and regional water supply development efforts; and

(C) Water exported from the Delta will more closely match water supplies available to be exported, based on water year type and consistent with the coequal goal of protecting, restoring, and enhancing the Delta ecosystem. This will be done by improving conveyance in the Delta and expanding groundwater and surface storage both north and south of the Delta to optimize diversions in wet years when more water is available and conflicts with the ecosystem are less likely, and limit diversions in dry years when conflicts with the ecosystem are more likely. Delta water that is stored in wet years will be available for water users during dry years, when the limited amount of available water must remain in the Delta, making water deliveries more predictable and reliable. In addition, these improvements will decrease the vulnerability of Delta water supplies to disruption by natural disasters, such as, earthquakes, floods, and levee failures.

(2) "Achieving the coequal goal of protecting, restoring, and enhancing the Delta ecosystem" means successfully establishing a resilient, functioning estuary and surrounding terrestrial landscape capable of supporting viable populations of native

resident and migratory species with diverse and biologically appropriate habitats, functional corridors, and ecosystem processes.
(3) "Achieving the coequal goals in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place" means accepting that change, including change associated with achieving the coequal goals, will not cease, but that the fundamental characteristics and values that contribute to the Delta's special qualities and that distinguish it from other places can be preserved and enhanced while accommodating these changes. In this regard, the following are core strategies for protecting and enhancing the unique values that distinguish the Delta and make it a special region:
(A) Designate the Delta as a special place worthy of national and state attention;
(B) Plan to protect the Delta's lands and communities;
(C) Maintain Delta agriculture as a primary land use, a food source, a key economic sector, and a way of life;
(D) Encourage recreation and tourism that allow visitors to enjoy and appreciate the Delta and that contribute to its economy;
(E) Sustain a vital Delta economy that includes a mix of agriculture, tourism, recreation, related industries and business, and vital components of state and regional infrastructure; and
(F) Reduce flood and other risks to people, property, and other interests in the Delta.
~~(j)~~(m) "Commercial recreational visitor-serving uses" means a land use designation that describes visitor-serving uses, accommodations, restaurants, and shops, that respect the rural character and natural environmental setting. These uses also include campgrounds and commercial recreational facilities.
(n) "Council" means the Delta Stewardship Council created pursuant to Water Code section 85200.
~~(k)~~(o)(1) "Covered action" means a plan, program, or project that meets all of the following criteria (which are collectively referred to as covered action screening criteria):

(A) Is a "project," as defined pursuant to section 21065 of the Public Resources Code;
(B) Will occur, in whole or in part, within the boundaries of the Delta or Suisun Marsh;
(C) Will be carried out, approved, or funded by the State or a local public agency;
(D) Will have a significant impact on achievement of one or both of the coequal goals or the implementation of government-sponsored flood control programs to reduce risks to people, property, and State interests in the Delta; and
(E) Is covered by one or more provisions of the Delta Plan, which for these purposes, means one or more of the regulatory policies contained in Article 3.
(2) "Covered action" does not include any plan, program, or project that is exempted pursuant to Water Code section 85057.5(b).
(3) A State or local public agency that proposes to carry out, approve, or fund a plan, program, or project that may be subject to this ~~chapter~~ Chapter must determine whether that proposed plan, program, or project is a covered action. That determination, which is subject to judicial review, must be reasonable, made in good faith, and consistent with the Delta Reform Act and this ~~chapter.~~ Chapter.
(4) Nothing in the application of the definition of a "covered action" shall be interpreted to authorize the abrogation of any vested right whether created by statute or by common law.
(p) "CVP" means the federal Central Valley Project described in Water Code section 11100 et seq.
~~(l)~~(q) "Delta" means the Sacramento-San Joaquin Delta as defined in section 12220 of the Water Code and the Suisun Marsh, as defined in section 29101 of the Public Resources Code.
~~(m)~~(r) "Delta Plan" means the comprehensive, long-term management plan for the Delta to further the achievement of the coequal goals, as adopted by the Delta Stewardship Council in accordance with the Sacramento-San Joaquin Delta Reform Act of 2009.
~~(n)~~(s) "Designated Floodway" means those floodways, as defined in California Code of Regulations, Title 23, section 4 (i), under the jurisdiction of the Central Valley Flood Protection Board.
(t) "Disadvantaged community" means communities described in Health and Safety Code section 39711.
~~(o)~~(u) "Encroachment" means any obstruction or physical intrusion by construction of works or devices, planting or removal of vegetation, or by any means for any purpose, into or otherwise affecting a floodway or floodplain.
~~(p)~~(v) "Enhancement" or "enhancing," for purposes of section 5001~~(i)~~(*l*)(2), means improving existing desirable habitat and natural processes. Enhancement may include, by way of example, flooding the Yolo Bypass more often to support native species or to expand or better connect existing habitat areas. Enhancement includes many fish and wildlife management practices, such as managing wetlands for waterfowl production or shorebird habitat, installing fish screens to reduce entrainment of fish at water diversions, or removing barriers that block migration of fish to upstream spawning habitats.
(w) "Environmental justice" has the same meaning as in Government Code section 65040.12(e).

~~(q)~~(x) "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.
~~(r)~~(y) "Floodplain" means any land area susceptible to being inundated by flood waters from any source.
~~(s)~~(z) "Floodplain values and functions" has the same meaning as set forth in 33 Code of Federal Regulations section 320.4(*l*)(1).
~~(t)~~(aa) "Floodproofing" means any combination of structural and nonstructural additions, changes, or adjustments appropriate for residential structures, which reduce or eliminate risk of flood damage to real estate, improved real property, or structures with their contents.
~~(u)~~(bb) "Floodway" means the portion of the floodplain that is effective in carrying flow (that is, the channel of a river or other watercourse and the adjacent land areas that convey flood waters).
~~(v)~~(cc) "Government-sponsored flood control program to reduce risks to people, property, and State interests in the Delta" means any State or federal strategy, project, approval, funding, or other effort that is intended to reduce the likelihood and/or consequences of flooding of real property and/or improvements, including risks to people, property, and State interests in the Delta, that is carried out pursuant to applicable law, including, but not limited to the following:
(1) State Water Resources Law of 1945, Water Code section 12570 et seq.;
(2) Sacramento-San Joaquin River Flood Control Projects (Flood Control Act of 1941, P.L. 77-228);
(3) Local Plans of Flood Protection prepared pursuant to the Local Flood Protection Planning Act (Water Code section 8200 et seq.), that are consistent with the Central Valley Flood Protection Plan pursuant to Water Code section 9612;
(4) Central Valley Flood Protection Plan (Water Code section 9600 et seq.);
(5) Subventions Program, Special Projects Program (Water Code section 12300 et seq.);
(6) Way Bill 1973-Subventions Program, Special Projects Program (Water Code section 12980 et seq.);
(7) Central Valley Flood Protection Board Authority (California Code of Regulations, Title 23, Division 1); and
(8) National Flood Insurance Program (National Flood Insurance Act of 1968, 42 U.S.C. 4001 et seq., P.L. 90-448).
~~(w)~~(dd) "High Priority islands or tracts" means the tracts of land listed under "High Priority" in the Table (Delta Levees Investment Strategy Priorities) of Section 5012 of this title and depicted in Appendix P to the Delta Plan.
~~(x)~~(ee) "Levee improvement" means any activity that is not levee operation and maintenance, and that is intended to reduce the probability of flooding or the addition of a feature that did not previously exist. Examples of levee improvements include changing levee geometry to reach a higher level of protection, providing riprap where none previously existed, and other similar activities.
~~(y)~~(ff) "Levee operation and maintenance" means any activity to retain or maintain the intended functions of flood control facilities and of existing encroachments or needed to keep the system functioning properly. Examples of maintenance activities include mowing, tree and brush trimming and removal, revetment restoration, rodent control, spraying, painting, coating,

patching, burning, and other similar activities but does not include any significant excavation or any excavation during flood season.

~~(z) "Nonnative invasive species," for purposes of section 5009, means species that establish and reproduce rapidly outside of their native range and may threaten the diversity or abundance of native species through competition for resources, predation, parasitism, hybridization with native populations, introduction of pathogens, or physical or chemical alteration of the invaded habitat.~~

(gg) "Nonnative invasive species" means, for purposes of section 5009, species that are all of the following:

(1) Establish and reproduce rapidly outside of their native range.

(2) May threaten the diversity or abundance of native species through competition for resources, predation, parasitism, hybridization with native populations, introduction of pathogens, or physical or chemical alteration of the invaded habitat.

~~(aa)~~(hh) "Nonproject levee" means a local levee owned or maintained by a local agency or private owner that is not a project facility under the State Water Resources Law of 1945, ~~chapter~~ Chapter 1 (commencing with Water Code section 12570) and ~~chapter~~ Chapter 2 (commencing with section 12639 of Part 6 of the Water Code).

(ii) "Oak woodland" has the same meaning as in Fish and Game Code section 1361.

~~(bb)~~(jj) "Other Priority islands or tracts" means the tracts of land listed under "Other Priority" in the Table (Delta Levees Investment Strategy Priorities) of Section 5012 of this title and depicted in Appendix P to the Delta Plan.

~~(cc)~~(kk) "Person" means, for purposes of article 5, any person, firm, association, organization, partnership, business trust, corporation, limited liability company, or company, and state or local public agency.

~~(dd)~~(*ll*) "Project levee" means a federal flood control levee that is a project facility under the State Water Resources Law of 1945, ~~chapter~~ Chapter 1 (commencing with Water Code section 12570) and ~~chapter~~ Chapter 2 (commencing with section 12639 of Part 6 of the Water Code).

~~(ee)~~(mm) "Proposed action" means a plan, program, or project that meets the covered action screening criteria listed in section 5001~~(k)~~(o)(1)(A) through (D). Proposed action is also a "covered action," and therefore subject to compliance with the regulatory policies contained in Articles 2 and 3-if the proposed action meets the covered action screening criterion listed in section ~~5011(k)~~5001(o)(1)(E).

~~(ff)~~(nn) "Protection" or "protecting," for purposes of section 5001~~(i)~~(*l*)(2), means preventing harm to the ecosystem, which could include preventing the conversion of existing habitat, the degradation of water quality, irretrievable conversion of lands suitable for restoration, or the spread of invasive nonnative species.

(oo) "Recreational benefits" means, for the purposes of section 5005.1, a category of social benefits that are derived by individuals or groups that recreate in the Delta and the business operations and communities that recreation supports, including, but not limited to, those listed in Table 2-2 in Appendix 3A.

~~(gg)~~(pp) "Regulated stream" means those streams identified in Table 8.1 of California Code of Regulations, Title 23, section 112, under the jurisdiction of the Board.

~~(hh)~~(qq) "Restoration" or "restoring," for purposes of section 5001~~(i)~~*(l)*(2), has the same meaning as in Water Code section 85066. Restoration actions may include restoring interconnected habitats within the Delta and its watershed, restoring more natural Delta flows, or improving ecosystem water quality.

~~(ii)~~(rr) "Setback levee" means a new levee constructed behind an existing levee which allows for removal of a portion of the existing levee and creation of additional floodplain connected to the stream. In the Delta, a "setback levee" may not necessarily result in removal of the existing levee.

~~(jj)~~(ss) "Significant impact" for the purpose of determining whether a project meets the definition of a "covered action" under section 5001~~(k)~~(o)(1)(D) means a substantial positive or negative impact on the achievement of one or both of the coequal goals or the implementation of a government-sponsored flood control program to reduce risks to people, property, and State interests in the Delta, that is directly or indirectly caused by a project on its own or when the project's incremental effect is considered together with the impacts of other closely related past, present, or reasonably foreseeable future projects. The following categories of projects will not have a significant impact for this purpose:

(1) "Ministerial" projects exempted from CEQA, pursuant to Public Resources Code section 21080(b)(1);

(2) "Emergency" projects exempted from CEQA, pursuant to Public Resources Code section 21080(b)(2) through (4);

(3) Temporary water transfers of up to one year in duration.

(4) Other projects exempted from CEQA, unless there are unusual circumstances indicating a reasonable possibility that the project will have a significant impact under Water Code section 85057.5(a)(4), as further defined by this section. Examples of unusual circumstances could arise in connection with, among other things:

(A) Local government general plan amendments for the purpose of achieving consistency with the Delta Protection Commission's Land Use and Resource Management Plan; and

(B) Small-scale habitat restoration projects, as referred to in CEQA Guidelines, section 15333 of Title 14 of the California Code of Regulations, proposed in important restoration areas, but which are inconsistent with the Delta Plan's policy related to appropriate habitat restoration for a given land elevation (section 5006 of this ~~chapter).~~ Chapter).

~~(kk) "Very-High Priority islands or tracts" means the tracts of land identified under "Very-High Priority" in the Table (Delta Levees Investment Strategy Priorities) of Section 5012 of this title and depicted in Appendix P to the Delta Plan.~~

(tt) "Special status species" means either of the following:

(1) Meets the definition of endangered, rare, or threatened species as defined in California Code of Regulations, title 14, section 15380.

(2) Is designated a species of special concern by the Department of Fish and Wildlife.

(uu) "SWP" means the State Water Project operated by the Department of Water Resources.

~~(ll)~~(vv) "Urban area" means a developed area in which there are 10,000 residents or more.

~~(mm)~~(ww) "Urbanizing area" means a developed area or an area outside of a developed area that is planned or anticipated to have 10,000 residents or more within the next 10 years.

~~(nn)~~(xx) "Urban water management plan" means a plan prepared, adopted, and updated by an urban water supplier pursuant to the Urban Water Management Planning Act, Water Code section 10610 et seq.
~~(oo)~~(yy) "Urban water supplier" refers to both "urban retail water suppliers" and "urban wholesale water suppliers":
(1) "Urban retail water supplier" means a water supplier, either publicly or privately owned, that directly provides potable municipal water to more than 3,000 end users or that supplies more than 3,000 acre-feet of potable water annually at retail for municipal purposes.
(2) "Urban wholesale water supplier" means a water supplier, either publicly or privately owned, that provides more than 3,000 acre-feet of potable water annually at wholesale for municipal purposes.
(zz) "Very-High Priority islands or tracts" means the tracts of land identified under "Very-High Priority" in the Table (Delta Levees Investment Strategy Priorities) of Section 5012 of this title and depicted in Appendix P to the Delta Plan.
~~(pp)~~(aaa) "Water supplier" refers to both "urban water suppliers" and "agricultural water suppliers," but for purposes of section 5003, does not include agricultural water suppliers during the time that they may be exempted by section 10853 of the Water Code from the requirements of Parts 2.55 and 2.8 of Division 6 of the Water Code.
NOTE: Authority cited: Sections 85210, 85225.30 and 85306, Water Code. Reference: Sections 10608.12, 10853, 85020, 85052, 85054, 85057.5, 85058, 85059, 85066, 85200, 85225, 85300, 85302 and 85308, Water Code.

Detailed Findings to ~~establish consistency~~ Establish Consistency with the Delta Plan (Section 5002)
(a) This policy specifies what must be addressed in a certification of consistency filed by a State or local public agency with regard to a covered action. This policy only applies after a "proposed action" has been determined by a State or local public agency to be a covered action because it is covered by one or more of the regulatory policies contained in Article 3. Inconsistency with this policy may be the basis for an appeal.
(b) Certifications of consistency must include detailed findings that address each of the following requirements:
(1) Covered actions, in order to be consistent with the Delta Plan, must be consistent with this regulatory policy and with each of the regulatory policies contained in Article 3 implicated by the covered action. The Delta Stewardship Council acknowledges that in some cases, based upon the nature of the covered action, full consistency with all relevant regulatory policies may not be feasible. In those cases, the agency that files the certification of consistency may nevertheless determine that the covered action is consistent with the Delta Plan because, on whole, that action is consistent with the coequal goals. That determination must include a clear identification of areas where consistency with relevant regulatory policies is not feasible, an explanation of the reasons why it is not feasible, and an explanation of how the covered action nevertheless, on whole, is consistent with the coequal goals. That determination is subject to review by the Delta Stewardship Council on appeal;
(2) Covered actions not exempt from CEQA must include all applicable feasible mitigation measures adopted as part of Appendix O and incorporated into the Delta Plan ~~as amended April 26, 2018, which is here by incorporated by reference,~~ as amended June 23, 2022, which is hereby incorporated by reference, (unless the measure(s) are within

the exclusive jurisdiction of an agency other than the agency that files the certification of ~~consistency),~~ consistency) or substitute mitigation measures that the agency that files the certification of consistency finds are equally or more effective;
(3) As relevant to the purpose and nature of the project, all covered actions must document use of best available science;
(4) Ecosystem restoration and water management covered actions must include adequate provisions, appropriate to the scope of the covered action, to assure continued implementation of adaptive management. This requirement shall be satisfied through both of the following:
(A) An adaptive management plan that describes the approach to be taken consistent with the adaptive management framework in Appendix 1B; and
(B) Documentation of access to adequate resources and delineated authority by the entity responsible for the implementation of the proposed adaptive management process.
(c) A conservation measure proposed to be implemented pursuant to a natural community conservation plan or a habitat conservation plan that was:
(1) Developed by a local government in the Delta; and
(2) Approved and permitted by the California Department of Fish and Wildlife prior to May 16, 2013, is deemed to be consistent with sections 5005 through 5009 of this ~~chapter~~ Chapter if the certification of consistency filed with regard to the conservation measure includes a statement confirming the nature of the conservation measure from the California Department of Fish and Wildlife.
NOTE: Authority cited: Section 85210(i), Water Code. Reference: Sections 85225, 85225.10, 85020, 85054, 85302(g) and 85308, Water Code.

Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (5003)
(a) Water shall not be exported from, transferred through, or used in the Delta if all of the following apply:
(1) One or more water suppliers that would receive water as a result of the export, transfer, or use have failed to adequately contribute to reduced reliance on the Delta and improved regional self-reliance consistent with all of the requirements listed in paragraph (1) of subsection (c);
(2) That failure has significantly caused the need for the export, transfer, or use; and
(3) The export, transfer, or use would have a significant adverse environmental impact in the Delta.
(b) For purposes of Water Code section 85057.5(a)(3) and section 5001~~(k)~~(o)(1)(E) of this ~~chapter,~~ Chapter, this policy covers a proposed action to export water from, transfer water through, or use water in the Delta, but does not cover any such action unless one or more water suppliers would receive water as a result of the proposed action.
(c)(1) Water suppliers that have done all of the following are contributing to reduced reliance on the Delta and improved regional self-reliance and are therefore consistent with this policy:
(A) Completed a current Urban or Agricultural Water Management Plan (Plan) which has been reviewed by the California Department of Water Resources for compliance with the applicable requirements of Water Code Division 6, Parts 2.55, 2.6, and 2.8
(B) Identified, evaluated, and commenced implementation, consistent with the implementation schedule set forth in the Plan, of all programs and projects included in the Plan that are locally cost effective and technically feasible which reduce reliance on the Delta; and
(C) Included in the Plan, commencing in 2015, the expected outcome for measurable reduction

in Delta reliance and improvement in regional self-reliance. The expected outcome for measurable reduction in Delta reliance and improvement in regional self- reliance shall be reported in the Plan as the reduction in the amount of water used, or in the percentage of water used, from the Delta watershed. For the purposes of reporting, water efficiency is considered a new source of water supply, consistent with Water Code section 1011(a).
(2) Programs and projects that reduce reliance could include, but are not limited to, improvements in water use efficiency, water recycling, stormwater capture and use, advanced water technologies, conjunctive use projects, local and regional water supply and storage projects, and improved regional coordination of local and regional water supply efforts. NOTE: Authority cited: Section 85210(i), Water Code. Reference: Sections 10608, 10610.2, 10610.4, 10801, 10802, 85001(c), 85004(b), 85020(a), 85020(d), 85020(h), 85021, 85022(d)(1), 85022(d)(5), 85023, 85054, 85300, 85302(d), 85303 and 85304, Water Code.

Transparency in Water Contracting (5004)
(a) The contracting process for water from the State Water Project and/or the Central Valley Project must be done in a publicly transparent manner consistent with applicable policies of the California Department of Water Resources and the Bureau of Reclamation referenced below.
(b) For purposes of Water Code section 85057.5(a)(3) and section 5001~~(k)~~(o)(1)(E) of this ~~chapter,~~ Chapter, this policy covers the following:
(1) With regard to water from the State Water Project, a proposed action to enter into or amend a water supply or water transfer contract subject to California Department of Water Resources Guidelines 03-09 and/or 03-10 (each dated July 3, 2003), which are attached as Appendix 2A; and
(2) With regard to water from the Central Valley Project, a proposed action to enter into or amend a water supply or water transfer contract subject to section 226 of P.L. 97- 293, as amended or section 3405(a)(2)(B) of the Central Valley Project Improvement Act, Title XXXIV of Public Law 102-575, as amended, which are attached as Appendix 2B, and Rules and Regulations promulgated by the Secretary of the Interior to implement these laws.
NOTE: Authority cited: Section 85210(i), Water Code. Reference: Sections 85020, 85021, 85300 and 85302, Water Code.

Delta Flow Objectives (Section 5005)
(a) The State Water Resources Control Board's Bay Delta Water Quality Control Plan flow objectives shall be used to determine consistency with the Delta Plan. If and when the flow objectives are revised by the State Water Resources Control Board, the revised flow objectives shall be used to determine consistency with the Delta Plan.
(b) For purposes of Water Code section 85057.5(a)(3) and section 5001~~(k)~~(o)(1)(E) of this ~~chapter,~~ Chapter, the policy set forth in subsection (a) covers a proposed action that could significantly affect flow in the Delta.
NOTE: Authority cited: Section 85210(i), Water Code. Reference: Sections 85020, 85054, 85086, 85087, 85300 and 85302, Water Code.

Disclose Contributions to Restoring Ecosystem Function and Providing Social Benefits (Section 5005.1)
(a) A complete certification of consistency for a covered action subject to this section shall disclose and include both of the following documents:

(1) Appendix 3A, Section 1, which requires all of the following:
(A)Demonstration if the covered action has one or more of the priority attributes.
(B)Disclosure of the covered action's contribution to the restoration of a resilient, functioning Delta ecosystem.
(C)Identification of the Ecosystem Restoration Tier identified in Appendix 3A, Section 2, that is associated with the covered action based on the listed priority attributes.
(2) Appendix 3A, Section 2, which requires both of the following:
(A) Identification of the social benefits that would be provided by the covered action.
(B) Disclosure of supporting information in the categories of cultural benefits, recreational benefits, agricultural benefits, and natural resource benefits.
(b) For purposes of Water Code section 85057.5(a)(3) and section 5001(o)(1)(E) of this chapter, this policy applies to a covered action that includes protection, enhancement, or restoration of the ecosystem.
NOTE: Authority cited: Section 85210, Water Code. Reference: Sections 85020, 85022, 85054,-85300, 85302, 85308, Water Code.

Restore ~~Habitat~~ Habitats at Appropriate Elevations (Section 5006)

~~(a) Habitat restoration must be carried out consistent with Appendix 3, which is Section II of the Draft Conservation Strategy for Restoration of the Sacramento-San Joaquin Delta Ecological Management Zone and the Sacramento and San Joaquin Valley Regions (California Department of Fish and Wildlife 2011). The elevation map attached as Appendix 4 should be used as a guide for determining appropriate habitat restoration actions based on an area's elevation. If a proposed habitat restoration action is not consistent with Appendix 4, the proposal shall provide rationale for the deviation based on best available science.~~

(a)For purposes of this section, the following terms have the following meanings:
(1) "Deep Subtidal Elevation Band" in the Delta means the land area that is located more than 8 feet below Mean Lower Low Water. For purposes of the Suisun Marsh, this means the land area that is located more than 4.5 feet below Mean Lower Low Water.
(2) "Intertidal Elevation Band" means the land area that is located between Mean Lower Low Water and Mean Higher High Water.
(3) "Sea Level Rise Accommodation Band" means the land area that is located between Mean Higher High Water and 10 feet above Mean Higher High Water.
(4) "Shallow Subtidal Elevation Band" in the Delta means the land area that is located between Mean Lower Low Water and 8 feet below Mean Lower Low Water. For purposes of Suisun Marsh, this means the land area that is located between Mean Lower Low Water and 4.5 feet below Mean Lower Low Water.
(b) A complete certification of consistency for a covered action subject to this section shall disclose and include all of the documentation required by Appendix 4A, which includes all of the

following:
(1) A completed Appendix 4A.
(2) The rationale, based on best available science, for any inconsistency with Appendix 4A, Table 1.1, and how that covered action is nevertheless consistent with the coequal goals of the Delta Plan.
(3)(A) An explanation, based on best available science, for a covered action that takes place in whole or in part in the Intertidal Elevation Band and Sea Level Rise Accommodation Band, of how the action is designed to accommodate each of the following:
(i) Future marsh migration.
(ii) Anticipated sea level rise.
(iii) Tidal inundation.
(B) If the action described in this paragraph does not implicate one or more of the elements set forth in subparagraph (A), explain for each of those elements why it does not.
(C) The information required to be provided pursuant to this paragraph may be included in an adaptive management plan if a plan is required pursuant to section 5002.
(4)(A) An explanation based on best available science, for a covered action that takes place in whole or in part in the Shallow Subtidal Elevation Band or the Deep Subtidal Elevation Band, of how the action is designed to safeguard against levee failure over the design life of the covered action.
(B) The information required to be provided pursuant to this paragraph may be included in an adaptive management plan if a plan is required pursuant to section 5002.
~~(b)~~(c)(1) For purposes of Water Code section 85057.5(a)(3) and section 5001~~(k)~~(o)(1)(E) of this ~~chapter,~~ Chapter, this policy covers a proposed action that includes habitat restoration.
(2) For a covered action that had a Notice of Preparation, Mitigated Negative Declaration or Negative Declaration published prior to April 1, 2025, those changes shall become operative two years after the effective date of those changes.
NOTE: Authority cited: Section 85210(i), Water Code. Reference: Sections 85020, 85022, 85054, ~~85210(h), 85300, 85302, 85308,~~ 85300 and 85302, Water Code.

Protect Opportunities to Restore Habitat (Section 5007)
(a)(1) Within the priority habitat restoration areas depicted in Appendix 5, significant adverse impacts to the opportunity to restore habitat ~~as~~ described in section 5006, ~~must~~ shall be avoided or mitigated.
~~(b)~~(2) ~~Impacts referenced in subsection (a) will~~ Any impacts described in paragraph (1) shall be deemed to be avoided or mitigated if the ~~project is~~ covered action as designed and implemented ~~so that it will~~ would not preclude or otherwise interfere with the ability to restore habitat as described in section 5006.
~~(c) Impacts referenced in subsection (a) shall be mitigated to a point where the impacts have no significant effect on the opportunity to restore habitat as described in section 5006. Mitigation shall be determined, in consultation with the California Department of Fish and Wildlife, considering the size of the area impacted by the covered action and the type and value of habitat that could be restored on that area, taking into account existing and proposed restoration plans, landscape attributes, the elevation map shown in Appendix 4, and other relevant information about habitat restoration opportunities of the area.~~
(3) If the impacts referenced in paragraph (1) are mitigated rather than avoided, those impacts shall be mitigated to the extent that the project has no significant impact on the opportunity to restore habitat as described in section 5006.

~~(d)~~(b)(1) For purposes of Water Code section 85057.5(a)(3) and section 5001~~(k)~~(o)(1)(E) of this ~~chapter,~~ Chapter, this policy covers proposed actions in the priority habitat restoration areas depicted in Appendix 5. It does not cover proposed actions outside those areas.

(2) For a covered action that had a Notice of Preparation, Mitigated Negative Declaration or Negative Declaration published prior to April 1, 2025, those changes shall become operative two years after the effective date of those changes.

NOTE: Authority cited: Section 85210(i), Water Code. Reference: Sections 85020, 85022, 85054, 85300, ~~85302,~~ 85302 and 85305, Water Code.

Expand Floodplains and Riparian Habitats in Levee Projects (Section 5008)

~~(a) Levee projects must evaluate and where feasible incorporate alternatives, including the use of setback levees, to increase floodplains and riparian habitats. Evaluation of setback levees in the Delta shall be required only in the following areas (shown in Appendix 8):~~

~~(1) The Sacramento River between Freeport and Walnut Grove, the San Joaquin River from the Delta boundary to Mossdale, Paradise Cut, Steamboat Slough, Sutter Slough; and the North and South Forks of the Mokelumne River, and~~

~~(2) Urban levee improvement projects in the cities of West Sacramento and Sacramento.~~

~~(b) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(s)(1)(E) of this Chapter, this policy covers a proposed action to construct new levees or substantially rehabilitate or reconstruct existing levees.~~

(a)(1) A certification of consistency for a project subject to this section that is located in the setback levee evaluation areas depicted in Appendix 8A shall evaluate, and the levee project where feasible shall incorporate, alternatives that would increase floodplains and riparian habitats.

(2) For purposes of this paragraph, Appendix 8A depicts the Sacramento River between the Deepwater Ship Channel and Steamboat Slough, the San Joaquin River from the Stanislaus River confluence to Rough and Ready Island, the Stanislaus River, the Cosumnes River, Middle River, Old River, Paradise Cut, Elk Slough, Sutter Slough, and the North and South Forks of the Mokelumne River.

(b) A certification of consistency for a project subject to this section that is an urban levee improvement project in the cities of Sacramento or West Sacramento shall evaluate alternatives that would modify all or a portion of the original levee prism to physically expand the width of the channel.

(c)(1) For purposes of Water Code section 85057.5(a)(3) and section 5001(o)(1)(E) of this chapter, this policy covers a proposed action that includes any of the following:

(A) Constructing a new flood control work.

(B) Making permanent a structural change or improvement that enhances the function of a flood control work.

(C)Changing the level of protection of a flood control work.

(D)Adapting a flood control work for new or different use.

(2) For a covered action that had a Notice of Preparation, Mitigated Negative Declaration or Negative Declaration published prior to April 1, 2025, those changes shall become operative two years after the effective date of those changes.

NOTE: Authority cited: Section 85210(i), Water Code. Reference: Sections 85020, 85022, 85054, 85300, 85302 and 85305, Water Code.

Avoid Introductions of and Habitat Improvements for Invasive Nonnative Species (Section 5009)
(a) The potential for new introductions of or improved habitat conditions for nonnative invasive species, striped bass, or bass must be fully considered and avoided or mitigated in a way that appropriately protects the ecosystem.
(b) For purposes of Water Code section 85057.5(a)(3) and section 5001~~(k)~~(o)(1)(E) of this ~~chapter,~~ Chapter, this policy covers a proposed action that has the reasonable probability of introducing or improving habitat conditions for nonnative invasive species.
NOTE: Authority cited: Section 85210(i), Water Code. Reference: Sections 85020, ~~85022, 85300, 85302 and 85305,~~ 85054, 85300 and 85302, Water Code.

Locate New Urban Development Wisely (Section 5010)
(a) New residential, commercial, and industrial development must be limited to the following areas, as shown in Appendix 6 and Appendix 7:
(1) Areas that city or county general plans, as of May 16, 2013, designate for residential, commercial, and industrial development in cities or their spheres of influence;
(2) Areas within Contra Costa County's 2006 voter-approved urban limit line, except no new residential, commercial, and industrial development may occur on Bethel Island unless it is consistent with the Contra Costa County general plan effective as of May 16, 2013;
(3) Areas within the Mountain House General Plan Community Boundary in San Joaquin County; or
(4) The unincorporated Delta towns of Clarksburg, Courtland, Hood, Locke, Ryde, and Walnut Grove.
(b) Notwithstanding subsection (a), new residential, commercial, and industrial development is permitted outside the areas described in subsection (a) if it is consistent with the land uses designated in county general plans as of May 16, 2013, and is otherwise consistent with this ~~chapter.~~ Chapter.
(c) For purposes of Water Code section 85057.5(a)(3) and section 5001~~(k)~~(o)(1)(E) of this ~~chapter,~~ Chapter, this policy covers proposed actions that involve new residential, commercial, and industrial development that is not located within the areas described in subsection (a). In addition, this policy covers any such action on Bethel Island that is inconsistent with the Contra Costa County general plan effective as of May 16, 2013. This policy does not cover commercial recreational visitor-serving uses or facilities for processing of local crops or that provide essential services to local farms, which are otherwise consistent with this ~~chapter.~~ Chapter.
(b) This policy is not intended in any way to alter the concurrent authority of the Delta Protection Commission to separately regulate development in the Delta's Primary Zone.
NOTE: Authority cited: Section 85210(i), Water Code. Reference: Sections 85020, 85022, 85300, 85302 and 85305, Water Code.

Respect Local Land Use when Siting Water or Flood Facilities or Restoring Habitats (Section 5011)
(a) Water management facilities, ecosystem restoration, and flood management infrastructure must be sited to avoid or reduce conflicts with existing uses or those uses described or depicted in city and county general plans for their jurisdictions or spheres of influence when feasible, considering comments from local agencies and the Delta Protection Commission. Plans for ecosystem restoration must consider sites on existing public lands, when feasible and consistent with a project's purpose, before privately owned sites are purchased. Measures to mitigate conflicts with adjacent uses may include, but are not limited to, buffers to prevent adverse effects on adjacent farmland.
(b) For purposes of Water Code section 85057.5(a)(3) and section 5001~~(k)~~(o)(1)(E) of this ~~chapter,~~ Chapter, this policy covers proposed actions that involve the siting of water management facilities, ecosystem restoration, and flood management infrastructure.

NOTE: Authority cited: Section 85210(i), Water Code. Reference: Sections 85020, 85022, 85054, 85300 and 85305, Water Code.

Prioritization of State Investments in Delta Levees and Risk Reduction (Section 5012)

(a) Fund levee operation and maintenance. For the purposes of Water Code Section 85306, State investments in levee operation and maintenance of Delta project levees and nonproject levees shall be prioritized as follows:

(1) For project levees, funding should be prioritized to ensure levees are operated and maintained in accordance with Code of Federal Regulations, Title 33, Part 208.10 and applicable federal Operation and Maintenance manuals, active in federal Public Law 84-99 Rehabilitation Program, and consistent with Central Valley Flood Protection Board Resolution No. 2018-06 for Acceptable Operation and Maintenance of the State Plan of Flood Control.

(2) For nonproject levees, funding should be prioritized to ensure levees are operated and maintained to protect the Delta's physical characteristics.

(b) Delta levees investment strategy. The priorities listed in the Table 1 below and depicted in Delta Plan Appendix P dated August 2021, which is incorporated by reference, shall guide State discretionary investments in the improvement of Delta levees. The California Department of Water Resources' funding decisions are subject to its consideration of the benefits, costs, engineering considerations, and other factors. As the California Department of Water Resources selects levee improvement projects for funding through its levee funding programs, it should fund projects at the Very-High priority islands or tracts, before funding projects at High Priority or Other Priority islands or tracts. If available funds are sufficient to fully fund levee improvement projects at the Very-High Priority islands or tracts, then funds for levee improvement projects on High Priority islands or tracts should be funded and after those projects have been fully funded, then levee improvement projects at Other Priority islands or tracts may be funded.

Table 1: Delta Levees Investment Strategy Priorities

Very High Priority	Bacon Island, Bethel Island, Bishop/DLIS-14 (North Stockton), Brannan-Andrus, Byron Tract, DLIS-19 (Grizzly Slough Area), DLIS-28, DLIS-33, DLIS-63 (Grizzly Island Area), Drexler Tract, Dutch Slough, Hastings Tract, Hotchkiss Tract, Jersey Island, Jones Tract (Upper and Lower), Maintenance Area 9 North, Maintenance Area 9 South, McCormack-Williamson Tract, McDonald Island, McMullin Ranch, Middle and Upper Roberts Island, New Hope Tract, North Stockton, Paradise Junction, Reclamation District 17, Ryer Island, Sherman Island, Staten Island, Terminous Tract, Twitchell Island, Union Island West, Upper Andrus Island, Victoria Island, Webb Tract.
High Priority	Bouldin Island, Brack Tract, Bradford Island, Cache Haas Area, Central Stockton, Clifton Court Forebay, DLIS-01 (Pittsburg Area), DLIS-07 (Knightsen Area), DLIS-08 (Discovery Bay Area), DLIS-20 (Yolo Bypass), DLIS-22 (Rio Vista), DLIS-26 (Morrow Island), DLIS-29, DLIS-30, DLIS-31 (Garabaldi Unit), DLIS-32, DLIS-39, DLIS-41 (Joice Island Area), DLIS-44 (Hill Slough Unit), DLIS-55, DLIS-59, Egbert Tract, Fabian Tract, Glanville, Grand Island, Holland Tract, Honker Bay, Kasson District, Libby McNeil, Little Egbert Tract, Lower Roberts Island, Mandeville Island, Mossdale Island, Netherlands, Palm-Orwood, Paradise Cut, Pearson District, Pescadero District, Rindge Tract, River Junction, Shima Tract, Stewart Tract, Sunrise Club, Tyler Island, Union Island East, Veale Tract, Walnut Grove, Woodward Island, Yolano.

Other Priority	Atlas Tract, Bixler Tract, Canal Ranch Tract, Chipps Island, Coney Island, Dead Horse Island, DLIS-06 (Oakley Area), DLIS-10, DLIS-15, DLIS-17, DLIS-18, DLIS-25, DLIS-27, DLIS-34, DLIS-35, DLIS-36, DLIS-37 (Chadbourne Area), DLIS-40, DLIS-43 (Potrero Hills Area), DLIS-46, DLIS-47, DLIS-48, DLIS-49, DLIS-50, DLIS-51, DLIS-52, DLIS-53, DLIS-54, DLIS-56, DLIS-57, DLIS-62, Drexler Pocket, Ehrheardt Club, Empire Tract, Fay Island, Glide District, Holt Station, Honker Lake Tract, King Island, Lisbon District, Medford Island, Mein's Landing, Merritt Island, Peters Pocket, Pico-Naglee, Prospect Island, Quimby Island, Randall Island, Rio Blanco Tract, Rough And Ready Island, Shin Kee Tract, Stark Tract, Sutter Island, Venice Island, Walthall, West Sacramento, Wetherbee Lake, Winter Island, Wright-Elmwood Tract.

(c) Annual Report.

(1) The California Department of Water Resources shall submit a written annual report, as described in paragraph (2), to the Council, as well as present the report to the Council, on State funds distributed or provided by the California Department of Water Resources within the legal Delta. At least 45 days prior to the oral presentation before the Council, and no later than March 1 of each calendar year, the California Department of Water Resources shall submit the written annual report to the Council and make the report publicly available.

(2) The report shall include:

(A) A description of all discretionary State funding for levees awarded by the California Department of Water Resources, during the reporting year; including both of the following:

(i) Levee improvement.

(ii) Levee operation and maintenance.

(B) A list of each levee improvement project proposal submitted to the California Department of Water Resources for funding, regardless of whether the California Department of Water Resources awarded funding to the project;

(C) A list of the improvement projects awarded funding, the funding level awarded, the local cost share, and the applicable priority of the island or tract from Table 1 in subsection (b), where the levee improvement project is located;

(D) A description, for each awarded project, of changes (when completed) to levee geometry, the specific locations of those changes, and expected changes in the level of flood protection provided or standard achieved;

(E) If the California Department of Water Resources awards funds for any levee improvement project that is inconsistent with the priorities identified in subsection (b), the annual report shall identify for each project: how the funding is inconsistent with the priorities, describe why variation from the priorities is necessary, and explain how the funding nevertheless protects

lives, property, or other State interests, such as infrastructure, agriculture, water supply reliability, Delta ecosystem, or Delta communities;

(F) A summary of the California Department of Water Resources' rationale for levee improvement project proposals submitted, but not awarded funding during the reporting year; and

(G) A summary of all previous California Department of Water Resources funded levee improvement project activities completed during the reporting year and location of those activities.

(d) For purposes of Water Code section 85057.5(a)(3) and section 5001~~(k)~~(o)(1)(E) of this Chapter, this policy covers a proposed action that involves discretionary State investments in Delta flood risk management, including levee operations, maintenance, and improvements. Nothing in this policy establishes or otherwise changes existing levee standards.

NOTE: Authority cited: Sections 85210 and 85306, Water Code. Reference: Sections 85020, 85022, 85054, 85057.5, 85300, 85305, 85306, 85307 and 85309, Water Code.

Require Flood Protection for Residential Development in Rural Areas (Section 5013)

(a) New residential development of five or more parcels shall be protected through floodproofing to a level 12 inches above the 100-year base flood elevation, plus sufficient additional elevation to protect against a 55-inch rise in sea level at the Golden Gate, unless the development is located within:

(1) Areas that city or county general plans, as of May 16, 2013, designate for development in cities or their spheres of influence;

(2) Areas within Contra Costa County's 2006 voter-approved urban limit line, except Bethel Island;

(3) Areas within the Mountain House General Plan Community Boundary in San Joaquin County; or

(4) The unincorporated Delta towns of Clarksburg, Courtland, Hood, Locke, Ryde, and Walnut Grove, as shown in Appendix 7.

(b) For purposes of Water Code section 85057.5(a)(3) and section 5001~~(k)~~(o)(1)(E) of this ~~chapter,~~ Chapter, this policy covers a proposed action that involves new residential development of five or more parcels that is not located within the areas described in subsection (a).

NOTE: Authority cited: Section 85210(i), Water Code. Reference: Sections 85020, 85300, 85305 and 85306, Water Code.

Protect Floodways (Section 5014)

(a) No encroachment shall be allowed or constructed in a floodway, unless it can be demonstrated by appropriate analysis that the encroachment will not unduly impede the free flow of water in the floodway or jeopardize public safety.

(b) For purposes of Water Code section 85057.5(a)(3) and section 5001~~(k)~~(o)(1)(E) of this ~~chapter,~~ Chapter, this policy covers a proposed action that would encroach in a floodway that is not either a designated floodway or regulated stream.

NOTE: Authority cited: Section 85210(i), Water Code. Reference: Sections 85020, 85300, 85302 and 85305, Water Code.

Floodplain Protection (Section 5015)

(a) No encroachment shall be allowed or constructed in any of the following floodplains unless it can be demonstrated by appropriate analysis that the encroachment will not have a

significant adverse impact on floodplain values and functions:
(1) The Yolo Bypass within the Delta;
(2) The Cosumnes River-Mokelumne River Confluence, as defined by the North Delta Flood Control and Ecosystem Restoration Project (McCormack-Williamson), or as modified in the future by the California Department of Water Resources or the U.S. Army Corps of Engineers (California Department of Water Resources 2010); and
(3) The Lower San Joaquin River Floodplain Bypass area, located on the Lower San Joaquin River upstream of Stockton immediately southwest of Paradise Cut on lands both upstream and downstream of the Interstate 5 crossing. This area is described in the Lower San Joaquin River Floodplain Bypass Proposal, submitted to the California Department of Water Resources by the partnership of the South Delta Water Agency, the River Islands Development Company, Reclamation District 2062, San Joaquin Resource Conservation District, American Rivers, the American Lands Conservancy, and the Natural Resources Defense Council, March 2011. This area may be modified in the future through the completion of this project.
(b) For purposes of Water Code section 85057.5(a)(3) and section 5001~~(k)~~(o)(1)(E) of this ~~chapter,~~ Chapter, this policy covers a proposed action that would encroach in any of the floodplain areas described in subsection (a).
(c)This policy is not intended to exempt any activities in any of the areas described in subsection (a) from applicable regulations and requirements of the Central Valley Flood Protection Board.
NOTE: Authority cited: Section 85210(i), Water Code. Reference: Sections 85020, 85300, 85302 and 85305, Water Code.

Appendix 3A. Disclosing Contributions to Restoring Ecosystem Function and Providing Social Benefits

Section 1. Priority Attributes and Ecosystem Tier

Appendix 3A, Section 1, Subsection 1.6 (Ecosystem Restoration Tier) requires the identification of the appropriate Ecosystem Restoration Tier for the covered action, based on the selections in Subsections 1.1 through 1.5 of Section 1.

Restoring Hydrological, Geomorphic, and Biological Processes

1.1.1 In **Field 1** of **Table 1-1** below, select the ecosystem type(s) that the covered action proposes to restore, if any. Select all that apply.

1.1.2 In **Field 2** of **Table 1-1** below, select the corresponding hydrological, geomorphic, and/or biological process(es) that the covered action proposes to restore, if any. Select all that apply.

Table 1-1. Priority Attribute 1 – Restoring Hydrological, Geomorphic, and Biological Processes Selections

Row Number	Field 1. Ecosystem Type	Field 2. Hydrological, Geomorphic, and Biological Processes
1	☐ Tidal wetland	☐ Full tidal action and complex variable patterns of tidal inundation ☐ Sediment delivery, scour, and accretion ☐ Channel formation ☐ Delivery of organic and nonorganic compounds which support nutrient cycling, primary productivity, plant growth, and peat formation ☐ Native vegetation recruitment, growth and succession, primary production, and higher trophic-level interactions
2	☐ Nontidal wetland	☐ Temporary or permanent inundation through natural hydrologic connections to surface and/or groundwater, but does not include managed wetlands ☐ Hydric soil development through organic matter accumulation and/or terrestrial sediment delivery ☐ Delivery of organic and nonorganic compounds which support nutrient cycling, primary productivity, plant growth, and peat formation ☐ Native vegetation recruitment, growth, succession, primary production, and higher trophic-level interactions
3	☐ Willow thicket	☐ Temporary or seasonal floodplain inundation ☐ Floodplain sediment delivery, scour, and accretion which results in complex floodplain micro-topography ☐ Unrestrained (natural) stream channels which allow cut-bank and point-bar formation, meander migration, and the development of shaded riverine aquatic habitats ☐ Delivery of organic and nonorganic compounds which support nutrient cycling, primary productivity, plant growth, and floodplain soils ☐ Native vegetation recruitment, growth, succession, primary production, and higher trophic-level interactions
4	☐ Willow riparian scrub or shrub	☐ Temporary or seasonal floodplain inundation ☐ Floodplain sediment delivery, scour, and accretion which results in complex floodplain micro-topography ☐ Unrestrained (natural) stream channels which allow cut-bank and point-bar formation, meander migration, and the development of shaded riverine aquatic habitats ☐ Delivery of organic and nonorganic compounds which support nutrient cycling, primary productivity, plant growth, and floodplain soils ☐ Native vegetation recruitment, growth, succession, primary production, and higher trophic-level interactions

Table 1-1. Priority Attribute 1 – Restoring Hydrological, Geomorphic, and Biological Processes Selections (contd.)

Row Number	Field 1. Ecosystem Type	Field 2. Hydrological, Geomorphic, and Biological Processes
5	☐ Valley foothill riparian	☐ Temporary or seasonal floodplain inundation ☐ Floodplain sediment delivery, scour, and accretion which results in complex floodplain micro-topography ☐ Unrestrained (natural) stream channels which allow cut-bank and point-bar formation, meander migration, and the development of shaded riverine aquatic habitats ☐ Delivery of organic and nonorganic compounds which support nutrient cycling, primary productivity, plant growth, and floodplain soils ☐ Native vegetation recruitment, growth, succession, primary production, and higher trophic-level interactions
6	☐ Vernal pool complex	☐ Water inputs from precipitation, runoff, groundwater or subsurface flow that cause temporary inundation and saturation with water ☐ Morphology (surface area, volume, depth, depth to hardpan) which supports hydrology, chemical processes, and native species colonization and persistence ☐ Hydrology and hydrogeomorphic setting that supports appropriate wetland soil development ☐ Native vegetation recruitment, growth, succession, primary production, higher trophic-level interactions, and appropriate pool substrates
7	☐ Alkali seasonal wetland complex	☐ Water inputs from precipitation, runoff, groundwater or subsurface flow that cause temporary inundation and saturation with water ☐ Morphology (surface area, volume, depth, depth to hardpan) which supports hydrology, chemical processes, and native species colonization and persistence ☐ Hydrology and hydrogeomorphic setting that supports appropriate wetland soil development ☐ Native vegetation recruitment, growth, succession, primary production, higher trophic-level interactions, and appropriate pool substrates

Table 1-1. Priority Attribute 1 – Restoring Hydrological, Geomorphic, and Biological Processes Selections (contd.)

Row Number	Field 1. Ecosystem Type	Field 2. Hydrological, Geomorphic, and Biological Processes
8	☐ Wet meadow	☐ Water inputs from precipitation, runoff, groundwater or subsurface flow that cause temporary inundation and saturation with water ☐ Morphology (surface area, volume, depth, depth to hardpan) which supports hydrology, chemical processes, and native species colonization and persistence ☐ Hydrology and hydrogeomorphic setting that supports appropriate wetland soil development ☐ Native vegetation recruitment, growth, succession, primary production, higher trophic-level interactions, and appropriate pool substrates
9	☐ Stabilized interior dune vegetation	☐ Readily draining substrates ☐ Wind-driven geomorphic processes ☐ Movement, scour, and deposition which supports recruitment, growth, and succession of native dune scrub vegetation communities
10	☐ Oak woodland	☐ Fire disturbance or fire disturbance analogue (e.g., grazing) which maintains vegetation dynamics conducive to oak recruitment and other vegetation dynamics
11	☐ Grassland	☐ Fire disturbance or fire disturbance analogue (e.g., grazing) which maintains vegetation dynamics conducive to oak recruitment and other vegetation dynamics

1.1.3 In **Table 1-1**, above, each row in **Field 1** lists an ecosystem type, and in the same row in **Field 2** are the corresponding hydrological, geomorphic, and biological processes that a covered action could restore.

Based on the ecosystem type(s) selected in **Field 1**, would the proposed action restore any corresponding hydrological, geomorphic, and biological processes in **Field 2**?

☐ Yes

☐ No (continue to Section 1.2)

1.1.4 If the answer to **Section 1.1.3** is "Yes," describe how the proposed action would restore the selected hydrological, geomorphic, and biological process(es) selected in **Table 1-1** above, and attach supporting documentation.

Being Large-Scale

1.2.1 In **Field 1** of **Table 1-2** below, select the ecosystem type(s) that the covered action proposes to restore. Select all that apply.

1.2.2 In **Field 2** of **Table 1-2** below, select the corresponding area where the covered action proposes to restore hydrological, geomorphic, and biological processes. For every row that is selected in **Field 1**, make a corresponding selection in **Field 2**.

Table 1-2. Priority Attribute 2 – Being Large-Scale Selections

Row Number	Field 1. Ecosystem Type	Field 2. Proposed Restored Area
1	☐ Tidal wetland	☐ > or = 500 acres (large-scale) ☐ < 500 acres
2	☐ Nontidal wetland (including managed wetland)	☐ > or = 500 acres (large-scale) ☐ < 500 acres
3	☐ Willow thicket	☐ > or = 200 acres (large-scale) ☐ < 200 acres ☐ Floodplain ratio[1] > or = 6 (large-scale) *refer to table notes for methodology* ☐ Floodplain ratio[1] < 6
4	☐ Willow riparian scrub or shrub	☐ > or = 200 acres (large-scale) ☐ < 200 acres ☐ Floodplain ratio[1] > or = 6 (large-scale) *refer to table notes for methodology* ☐ Floodplain ratio[1] < 6
5	☐ Valley foothill riparian	☐ > or = 200 acres (large-scale) ☐ < 200 acres ☐ Floodplain ratio[1] > or = 6 (large-scale) *refer to table notes for methodology* ☐ Floodplain ratio[1] < 6
6	☐ Vernal pool complex	☐ > or = 40 acres (large-scale) ☐ < 40 acres
7	☐ Alkali seasonal wetland complex	☐ > or = 40 acres (large-scale) ☐ < 40 acres
8	☐ Wet meadow	☐ > or = 40 acres (large-scale) ☐ < 40 acres
9	☐ Stabilized interior dune vegetation	☐ > or = 1.5 acres (large-scale) ☐ < 1.5 acres

Table 1-2. Priority Attribute 2 – Being Large-Scale Selections (contd.)

Row Number	Field 1. Ecosystem Type	Field 2. Proposed Restored Area
10	☐ Oak woodland	☐ > or = 40 acres (large-scale) ☐ < 40 acres
11	☐ Grassland	☐ > or = 40 acres (large-scale) ☐ < 40 acres

Notes:

[1] Method to calculate the floodplain ratio

a. Existing bankfull channel width (use the mean of at least six cross sections): _____ meters
b. Protected, restored, or enhanced floodplain width: _____ meters
c. Floodplain ratio (divide [b] by [a])

1.2.3 In **Table 1-2**, above, each row in **Field 1** lists an ecosystem type(s), and the corresponding row in **Field 2** lists the restoration area that would be considered large-scale.

Based on the selection(s) made in **Field 2**, would any selected restoration area for the covered action be large-scale?

☐ Yes

☐ No (continue to Section 1.3)

1.2.4 If the answer to **Section 1.2.3** is "Yes," describe the area of each ecosystem type that the covered action proposes to restore, corresponding to the selections in **Table 1-2** above, and attach supporting documentation.

Improving Connectivity

1.3.1 In **Field 1** of **Table 1-3** below, select the aspect(s) of connectivity that the covered action proposes to improve. Select all that apply.

Table 1-3. Priority Attribute 3 – Improving Connectivity Selections

Row Number	Field 1. Aspects of Connectivity
1	☐ Creates or reestablishes hydraulic and hydrologic connections to marsh or floodplain ecosystems
2	☐ Reduces distance between patches of similar ecosystem types
3	☐ Reduces distance between patches of different ecosystem types used by species for refuge or life history needs
4	☐ Protects, restores, or enhances wetland and riparian transgression/migration space
5	☐ Removes or remediates barriers (dams and diversions) to fish migration

1.3.2 Selecting at least one Aspect of Connectivity in **Table 1-3** above indicates that the proposed action would improve connectivity. Based on the selection(s) in **Table 1-3**, would the covered action improve connectivity?

☐ Yes

☐ No (continue to Section 1.4)

1.3.3 If the answer to **Section 1.3.2** is "Yes," describe how the covered action would improve the aspect(s) of connectivity selected in **Field 1** of **Table 1-3** above and attach supporting documentation.

Increasing Native Vegetation Cover

1.4.1 In **Field 1** of **Table 1-4** below, select the ecosystem type(s) that the covered action proposes to restore. Select all that apply.

1.4.2 In **Field 2** of **Table 1-4** below, select the corresponding native vegetation community or communities for which the covered action would increase cover. Select all that apply.

Table 1-4. Priority Attribute 4 – Increasing Native Vegetation Cover Selections

Row Number	Field 1. Ecosystem Type	Field 2. Native Vegetation Community (VegCAMP CaCode)
1	☐ Tidal wetland	☐ *Schoenoplectus (acutus, californicus)* Alliance (52.128.00) ☐ *Typha (domingensis, latifolia)* Alliance (52.050.00) ☐ *Juncus effuses* (soft rush marshes) Alliance (45.561.00) ☐ *Juncus articus* (Baltic and Mexican rush marshes) Alliance (45.562.00) ☐ *Eleocharis macrostachya* Alliance (45.230.00) ☐ *Sarcocornia pacifica* Alliance (52.215.00) ☐ *Distichlis spicata* Alliance (41.200.00) ☐ Other
2	☐ Nontidal wetland (including managed wetland)	☐ *Schoenoplectus (acutus, californicus)* Alliance (52.128.00) ☐ *Typha (domingensis, latifolia)* Alliance (52.050.00) ☐ *Juncus effuses* (soft rush marshes) Alliance (45.561.00) ☐ *Juncus articus* (Baltic and Mexican rush marshes) Alliance (45.562.00) ☐ *Eleocharis macrostachya* Alliance (45.230.00) ☐ Other
3	☐ Willow thicket	☐ *Salix gooddingii* Alliance (61.211.00) ☐ *Salix laevigata* Alliance (61.206.00) ☐ *Salix lasiolepus* Alliance (61.201.00) ☐ *Salix lucida* Alliance (61.204.00) ☐ *Salix exigua* Alliance (61.209.00) ☐ *Cornus sericea* (red osier thickets) Alliance (80.100.00) ☐ *Rosa californica* Alliance (63.907.00) ☐ *Acer negundo* (box-elder forest) Alliance (61.440.00) ☐ *Sambucus nigra* (blue elderberry stands) Alliance (63.410.01) ☐ Other

Table 1-4. Priority Attribute 4 – Increasing Native Vegetation Cover Selections (contd.)

Row Number	Field 1. Ecosystem Type	Field 2. Native Vegetation Community (VegCAMP CaCode)
4	☐ Willow riparian scrub or shrub	☐ *Salix gooddingii* Alliance (61.211.00) ☐ *Salix laevigata* Alliance (61.206.00) ☐ *Salix lasiolepus* Alliance (61.201.00) ☐ *Salix lucida* Alliance (61.204.00) ☐ *Salix exigua* Alliance (61.209.00) ☐ *Cornus sericea* (red osier thickets) Alliance (80.100.00) ☐ *Rosa californica* Alliance (63.907.00) ☐ *Acer negundo* (box-elder forest) Alliance (61.440.00) ☐ *Cephalanthus occidentalis* (button willow thickets) Alliance (63.300.00) ☐ Other
5	☐ Valley foothill riparian	☐ *Quercus agrifolia* Alliance (71.060.00) ☐ *Quercus lobata* Alliance (71.040.00) ☐ *Quercus (agrifolia, douglasii, garryana, kelloggii, lobata, wislizeni)* Alliance (71.100.00) ☐ *Quercus wislizeni* Alliance (71.080.00) ☐ *Juglans hindsii* and hybrids special stands Alliance (61.810.00) ☐ *Salix gooddingii* Alliance (61.211.00) ☐ *Salix laevigata* Alliance (61.205.00) ☐ *Salix lasiolepis* Alliance (61.201.00) ☐ *Salix lucida* Alliance (61.204.00) ☐ *Salix exigua* Alliance (61.209.00) ☐ *Acer negundo* (box-elder forest) Alliance (61.440.00) ☐ *Cornus sericea* (red osier thickets) Alliance (80.100.00) ☐ *Rosa californica* Alliance (63.907.00) ☐ *Platanus racemosa* Alliance (61.310.00) ☐ *Populus fremontii* Alliance (61.130.00) ☐ *Cephalanthus occidentalis* (button willow thickets) Alliance (63.300.00) ☐ Other
6	☐ Vernal pool complex	☐ *Lasthenia fremontii – Downingia bicornuta* (Fremont's goldfields – *Downingia* vernal pools) Alliance (42.007.00) ☐ *Eryngium aristulatum* Alliance (42.004.00) ☐ Other

Table 1-4. Priority Attribute 4 – Increasing Native Vegetation Cover Selections (contd.)

Row Number	Field 1. Ecosystem Type	Field 2. Native Vegetation Community (VegCAMP CaCode)
7	☐ Alkali seasonal wetland complex	☐ *Cressa truxillensis – Distichlis spicata* (alkali weed - saltgrass playas and sinks) Alliance (46.100.00) ☐ *Lasthenia fremontii – Distichlis spicata* (Fremont's goldfields – saltgrass alkaline vernal pools) Alliance (44.119.00) ☐ *Allenrolfea occidentalis* (iodine bush scrub) Alliance (36.120.00) ☐ *Sporobolus airoides* (alkali sacaton grassland) Alliance (52.060.00) ☐ *Leymus cinereus – Leymus triticoides* (creeping rye grass turfs) Alliance (41.080.00) ☐ *Frankenia salina* (alkali heath marsh) Alliance (52.500.00) ☐ Other
8	☐ Wet meadow	☐ *Lasthenia californica – Plantago erecta – Vulpia microstachys* (California goldfields – dwarf plantain – six-weeks fescue flower fields) Alliance (44.108.00) ☐ *Leymus cinereus – Leymus triticoides* (creeping rye grass turfs) Alliance (41.080.00) ☐ *Ambrosia psilostachya* (western ragweed meadows) Alliance (33.065.00) ☐ *Lotus purshianus* (Spanish clover fields) Provisional Herbaceous Alliance (52.230.00) ☐ *Juncus effusus* (soft rush marshes) Alliance (45.561.00) ☐ *Juncus articus* (Baltic and Mexican rush marshes) Alliance (45.562.00) ☐ Other
9	☐ Stabilized interior dune vegetation	☐ *Lupinus albifrons* (silver bush lupine scrub) Alliance (32.081.00) ☐ *Baccharis pilularis* (coyote brush scrub) Alliance (32.060.00) ☐ *Lotus scoparius* (deer weed scrub) Alliance (52.240.00) ☐ Other
10	☐ Oak woodland	☐ *Quercus agrifolia Alliance (71.060.00)* ☐ *Quercus lobata Alliance (71.040.00)* ☐ *Quercus (agrifolia, douglasii, garryana, kelloggii, lobata, wislizeni) Alliance (71.100.00)* ☐ *Quercus wislizeni Alliance (71.080.00)* ☐ *Quercus douglasii Alliance (71.020.00)* ☐ Other

Table 1-4. Priority Attribute 4 – Increasing Native Vegetation Cover Selections (contd.)

Row Number	Field 1. Ecosystem Type	Field 2. Native Vegetation Community (VegCAMP CaCode)
11	☐ Grassland	☐ *Lasthenia californica – Plantago erecta – Vulpia microstachys* (California goldfields – Dwarf plantain –six-weeks fescue flower fields) Alliance (44.108.00) ☐ *Leymus cinereus – Leymus triticoides* (creeping rye grass turfs) Alliance (41.080.00) ☐ *Nassella pulchra* Alliance (41.150.00) ☐ *Eschscholzia californica* (California poppy fields) Alliance (43.200.00) ☐ *Amsinckia* (fiddleneck fields) Alliance (42.110.00) ☐ *Plagiobothrys nothofulvus* (popcorn flower fields) Alliance (43.300.00) ☐ Other

Note:
VegCAMP is the California component of the National Vegetation Classification system, maintained by the California Department of Fish and Wildlife in collaboration with other agencies and organizations.

1.4.3 Refer to both **Table 1-2** and **Table 1-4** for this section. On what share of the aggregate area(s) selected in **Field 2** of **Table 1-2** would the covered action increase the cover of the native vegetation community or communities selected in **Field 2** of **Table 1-4**?

☐ At least 75% of the aggregate area (increases native vegetation cover)

☐ Less than 75% of the aggregate area

1.4.4 Based on the selection in **Section 1.4.3** above, would the covered action increase native vegetation cover?

☐ Yes

☐ No (continue to Section 1.5)

1.4.5 Describe how the covered action would increase cover of the native vegetation communities selected in **Table 1-4**, across the area selected in **Section 1.4.3**, and attach supporting documentation. If the selection(s) in Table 1-4 include "Other," identify and describe those native vegetation communities here.

Contributing to the Recovery of Special-Status Species

1.5.1 In **Field 1** of **Table 1-5** below, select the ecosystem type(s) that the covered action proposes to restore. Select all that apply.

1.5.2 In **Field 2** of **Table 1-5** below, select the corresponding special-status species whose recovery would be contributed to by the proposed action. Select all that apply.

Table 1-5. Priority Attribute 5 – Contributing to the Recovery of Special-Status Species Selections

Row Number	Field 1. Ecosystem Type	Field 2. Special-Status Species
1	☐ Tidal wetland	☐ California least tern (*Sterna antillarum browni*) ☐ Ridgway's rail (*Rallus obsoletus*) ☐ California black rail (*Laterallus jamaicensis coturniculus*) ☐ Suisun song sparrow (*Melospiza melodia*) ☐ Tricolored blackbird (*Agelaius tricolor*) ☐ White-tailed kite (*Elanus leucurus*) ☐ Salt marsh harvest mouse (*Reithrodontomys raviventris*) ☐ Suisun shrew (Sorex ornatus sinuosus) ☐ California red-legged frog (*Rana draytonii*) ☐ Western pond turtle (*Actinemys marmorata*) ☐ Giant garter snake (*Thamnophis gigas*) ☐ Green sturgeon (*Acipenser medirostris*) ☐ Delta smelt (*Hypomesus transpacificus*) ☐ Longfin smelt (*Spirinchus thaleichthys*) ☐ Chinook salmon (Central Valley fall/late fall-run) (*Oncorhynchus tshawytscha*) ☐ Chinook salmon (Central Valley spring-run) (*Oncorhynchus tshawytscha*) ☐ Chinook salmon (Sacramento River winter-run) (*Oncorhynchus tshawytscha*) ☐ Steelhead (*Oncorhynchus mykiss*) ☐ Delta mudwort (*Limosella subulata*) ☐ Mason's lilaeopsis (*Lilaeopsis masonii*) ☐ Slough thistle (*Cirsium crassicaule*) ☐ Delta tule pea (*Lathyrus jepsonii*) ☐ Suisun thistle (*Cirsium hydrophilum* var. *hydrophilum*) ☐ Suisun marsh aster (*Symphyotrichum lentum*) ☐ Soft bird's beak (*Choropyron molle* ssp. *molle*) ☐ Side flowering skullcap (*Scutellaria lateriflora*) ☐ Other special-status species

Table 1-5. Priority Attribute 5 – Contributing to the Recovery of Special-Status Species Selections (contd.)

Row Number	Field 1. Ecosystem Type	Field 2. Special-Status Species
2	☐ Nontidal wetland (including managed wetland)	☐ California least tern (*Sterna antillarum browni*) ☐ Ridgway's rail (*Rallus obsoletus*) ☐ California black rail (*Laterallus jamaicensis coturniculus*) ☐ Suisun song sparrow (*Melospiza melodia*) ☐ Tricolored blackbird (*Agelaius tricolor*) ☐ White-tailed kite (*Elanus leucurus*) ☐ Salt marsh harvest mouse (*Reithrodontomys raviventris*) ☐ Suisun shrew (*Sorex ornatus sinuosus*) ☐ California red-legged frog (*Rana draytonii*) ☐ Western pond turtle (*Actinemys marmorata*) ☐ Giant garter snake (*Thamnophis gigas*) ☐ Delta mudwort (*Limosella subulata*) ☐ Mason's lilaeopsis (*Lilaeopsis masonii*) ☐ Slough thistle (*Cirsium crassicaule*) ☐ Delta tule pea (*Lathyrus jepsonii*) ☐ Suisun thistle (*Cirsium hydrophilum* var. *hydrophilum*) ☐ Suisun marsh aster (*Symphyotrichum lentum*) ☐ Soft bird's beak (*Choropyron molle* ssp. *molle*) ☐ Side flowering skullcap (*Scutellaria lateriflora*) ☐ Other special-status species
3	☐ Willow thicket	☐ Least Bell's vireo (*Vireo bellii pusillus*) ☐ Western yellow-billed cuckoo (*Coccyzus americanus*) ☐ Yellow-breasted chat (*Icteria virens*) ☐ Swainson's hawk (*Buteo swainsoni*) ☐ San Joaquin kit fox (*Vulpes macrotis mutica*) ☐ Riparian woodrat (Neotoma fuscipes riparia) ☐ Riparian brush rabbit (*Sylvilagus bachmani*) ☐ Chinook salmon (Central Valley fall/late fall-run) (*Oncorhynchus tshawytscha*) ☐ Chinook salmon (Central Valley spring-run) (*Oncorhynchus tshawytscha*) ☐ Chinook salmon (Sacramento River winter-run) (*Oncorhynchus tshawytscha*) ☐ Steelhead (*Oncorhynchus mykiss*) ☐ Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) ☐ Other special-status species

Table 1-5. Priority Attribute 5 – Contributing to the Recovery of Special-Status Species Selections (contd.)

Row Number	Field 1. Ecosystem Type	Field 2. Special-Status Species
4	☐ Willow riparian scrub or shrub	☐ Least Bell's vireo (*Vireo bellii pusillus*) ☐ Western yellow-billed cuckoo (*Coccyzus americanus*) ☐ Yellow-breasted chat (*Icteria virens*) ☐ Swainson's hawk (*Buteo swainsoni*) ☐ San Joaquin kit fox (*Vulpes macrotis mutica*) ☐ Riparian woodrat (*Neotoma fuscipes riparia*) ☐ Riparian brush rabbit (*Sylvilagus bachmani*) ☐ Chinook salmon (Central Valley fall/late fall-run) (*Oncorhynchus tshawytscha*) ☐ Chinook salmon (Central Valley spring-run) (*Oncorhynchus tshawytscha*) ☐ Chinook salmon (Sacramento River winter-run) (*Oncorhynchus tshawytscha*) ☐ Steelhead (*Oncorhynchus mykiss*) ☐ Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) ☐ Other special-status species
5	☐ Valley foothill riparian	☐ Least Bell's vireo (*Vireo bellii pusillus*) ☐ Western yellow-billed cuckoo (*Coccyzus americanus*) ☐ Yellow-breasted chat (*Icteria virens*) ☐ Swainson's hawk (*Buteo swainsoni*) ☐ San Joaquin kit fox (*Vulpes macrotis mutica*) ☐ Riparian woodrat (*Neotoma* fuscipes riparia) ☐ Riparian brush rabbit (*Sylvilagus bachmani*) ☐ Chinook salmon (Central Valley fall/late fall-run) (*Oncorhynchus tshawytscha*) ☐ Chinook salmon (Central Valley spring-run) (*Oncorhynchus tshawytscha*) ☐ Chinook salmon (Sacramento River winter-run) (*Oncorhynchus tshawytscha*) ☐ Steelhead (*Oncorhynchus mykiss*) ☐ Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) ☐ Other special-status species

Table 1-5. Priority Attribute 5 – Contributing to the Recovery of Special-Status Species Selections (contd.)

Row Number	Field 1. Ecosystem Type	Field 2. Special-Status Species
6	☐ Vernal pool complex	☐ Greater sandhill crane (*Grus canadensis*) ☐ California red-legged frog (*Rana draytonii*) ☐ California tiger salamander (*Ambystoma californiense*) ☐ Giant garter snake (*Thamnophis gigas*) ☐ Vernal pool tadpole shrimp (*Lepidurus packardi*) ☐ Longhorn fairy shrimp (*Branchinecta longiantenna*) ☐ Vernal pool fairy shrimp (*Branchinecta lynchi*) ☐ Mid-valley fairy shrimp (*Branchinecta mesovallensis*) ☐ Conservancy fairy shrimp (*Branchinecta conservatio*) ☐ California linderiella (*Linderiella occidentalis*) ☐ Legenere (*Legenere limosa*) ☐ Boggs Lake hedge-hyssop (*Gratiola heterosepala*) ☐ Dwarf downingia (*Downingia pusilla*) ☐ Other special-status species
7	☐ Alkali seasonal wetland complex	☐ Greater sandhill crane (*Grus canadensis*) ☐ California red-legged frog (*Rana draytonii*) ☐ California tiger salamander (*Ambystoma californiense*) ☐ Giant garter snake (*Thamnophis gigas*) ☐ Vernal pool tadpole shrimp (*Lepidurus packardi*) ☐ Longhorn fairy shrimp (*Branchinecta longiantenna*) ☐ Vernal pool fairy shrimp (*Branchinecta lynchi*) ☐ Mid-valley fairy shrimp (*Branchinecta mesovallensis*) ☐ Conservancy fairy shrimp (*Branchinecta conservatio*) ☐ California linderiella (*Linderiella occidentalis*) ☐ Legenere (*Legenere limosa*) ☐ Boggs Lake hedge-hyssop (*Gratiola heterosepala*) ☐ Dwarf downingia (*Downingia pusilla*) ☐ Other special-status species
8	☐ Wet meadow	☐ Carquinez goldenbush (*Isocoma arguta*) ☐ Alkali milkvetch (*Astragalus tener*) ☐ Heckard's peppergrass (*Lepidium latipes* var. *heckardii*) ☐ Brittlescale (*Atriplex depressa*) ☐ Heartscale (*Atriplex cordulata* var. *cordulata*) ☐ Delta button celery (*Eryngium racemosum*) ☐ San Joaquin spearscale (*Atriplex joaquiniana*) ☐ Other special-status species

Table 1-5. Priority Attribute 5 – Contributing to the Recovery of Special-Status Species Selections (contd.)

Row Number	Field 1. Ecosystem Type	Field 2. Special-Status Species
9	☐ Stabilized interior dune vegetation	☐ Lange's metalmark butterfly (*Apodemia mormo langei*) ☐ Antioch Dunes evening primrose (*Oenothera deltoides howellii*) ☐ Contra Costa wallflower (*Erysimum capitatum*) ☐ Other special-status species
10	☐ Oak woodland	☐ Swainson's hawk (*Buteo swainsonii*) ☐ California red-legged frog (*Rana draytonii*) ☐ California tiger salamander (*Ambystoma califonriense*) ☐ Western pond turtle (*Actinemys marmorata*) ☐ Other special-status species
11	☐ Grassland	☐ Greater sandhill crane (*Grus canadensis*) ☐ White-tailed kite (*Elanus leucurus*) ☐ Yellow-breasted chat (*Icteria virens*) ☐ Swainson's hawk (*Buteo swainsonii*) ☐ Western burrowing owl (*Athene cunicularia*) ☐ California red-legged frog (*Rana draytonii*) ☐ California tiger salamander (*Ambystoma californiense*) ☐ Western pond turtle (*Actinemys marmorata*) ☐ Giant garter snake (*Thamnophis gigas*) ☐ Other special-status species

1.5.3 In **Table 1-5** above, each row in **Field 1** lists ecosystem type(s), and the corresponding row in Field 2 lists the special-status species for which a covered action could contribute to their recovery.

Based on the selection(s) made in **Field 2**, would the covered action contribute to the recovery of special-status species?

☐ Yes

☐ No (continue to Section 1.6)

1.5.4 If the answer to **Section 1.5.3** is "Yes," describe how the covered action would contribute to the recovery of the special-status species corresponding to the selections in **Table 1-5** above, and attach supporting documentation. If the selection(s) in Table 1-5 include "Other," identify and describe those special-status species in the area provided below.

Ecosystem Restoration Tier

1.6.1 **Field 1** of **Table 1-6.1,** below, lists Priority Attributes 1 through 5. The corresponding row in **Field 2** of **Table 1-6.1** lists the selection in this **Appendix 3A** made in Sections 1.1 through 1.5, above, on whether the covered action would have the applicable Priority Attribute.

Complete **Field 3** of **Table 1-6.1**, by copying the responses from the corresponding sections in Sections 1.1. through 1.5 of this **Appendix 3A** form, as indicated in **Field 2**.

Table 1-6.1. Summary of Responses

Row Number	Field 1. Priority Attribute	Field 2. Section Number	Field 3. Response to Section
1	Restoring Hydrological, Geomorphic, and Biological Processes	1.1.3	☐ Yes ☐ No
2	Being Large-Scale	1.2.3	☐ Yes ☐ No
3	Improving Connectivity	1.3.2	☐ Yes ☐ No
4	Increasing Native Vegetation	1.4.4	☐ Yes ☐ No
5	Contributing to the Recovery of Special-Status Species	1.5.3	☐ Yes ☐ No

1.6.2 Add the number of "Yes" responses in **Table 1-6.1** Field 3, and then select the corresponding number in **Field 1** of **Table 1-6.2**, below. The corresponding value in **Field 2** of **Table 1-6.2** is the covered action's ecosystem restoration tier.

Table 1-6.2. Calculated Ecosystem Restoration Tier

Row Number	Field 1. Number of "Yes" Responses in Table 1-6.1, Field 3, Rows 1 through 5	Field 2. Ecosystem Restoration Tier
1	☐ 1	☐ Tier 5
2	☐ 2	☐ Tier 4
3	☐ 3	☐ Tier 3
4	☐ 4	☐ Tier 2
5	☐ 5	☐ Tier 1

Section 2. Social Benefits and Delta as Place

Social Benefits

Appendix 3A, Section 2, Subsections 2.1 through 2.4 (Social Benefits) require the identification of the social benefits that would be provided by the covered action, and the disclosure of supporting information, in each of the following four categories:

2.1 Cultural Benefits

2.2 Recreational Benefits

2.3 Agricultural Benefits

2.4 Natural Resource Benefits

Cultural Benefits

2.1.1 In **Field 1** of **Table 2-1** below, select the types of cultural benefits that the covered action would provide. Select all that apply.

2.1.2 In **Field 2** of **Table 2-1** below, select the specific cultural benefits that the covered action would provide. Select all that apply.

Table 2-1. Cultural Benefits Selections

Row Number	Field 1. Types of Cultural Benefits	Field 2. Specific Cultural Benefits
1	☐ Ecocultural resources	☐ Supports long-term resilience of tribal ecocultural resource species ☐ Engages tribes in a way that respects sovereignty and protects or enhances access to natural resources ☐ Provides education on ecocultural resources through interpretive signage, facilities, or funding for interpretive personnel/events ☐ Supports responsible ecotourism, agritourism, sportfishing, hunting, or other cultural activities ☐ Involves the public in stewardship of ecocultural resources during project implementation or monitoring
2	☐ Human health and well-being	☐ Improves air quality, water quality, or environmental quality in a manner that is expected to protect or enhance human health and well-being ☐ Provides public access to lands for exercise, relaxation, and/or appreciation of natural beauty
3	☐ Environmental justice	☐ Redresses existing environmental inequities by targeting action and resources for disadvantaged and disproportionately impacted communities ☐ Engaged and co-planned with disadvantaged communities ☐ Improves access for safe subsistence fishing ☐ Improves environmental conditions (e.g., air quality or water quality) for at-risk groups

2.1.3 Based on the types of cultural benefits selected in **Field 1** of **Table 2-1**, and the specific cultural benefits selected in **Field 2,** would implementation of the covered action result in cultural benefits?

☐ Yes

☐ No

2.1.4 If the answer to **Section 2.1.3** is "Yes," describe how the covered action would provide the types of cultural benefits and specific cultural benefits selected in **Table 2-1**, and then attach supporting documentation. Cite any relevant literature or consultations with tribes, local communities, or experts.

2.1.5 If the answer to **Section 2.1.3** is "No," but the proposed action would provide cultural benefits not listed in the table above, describe the cultural benefits that the action would provide, and attach supporting documentation. Cite any relevant literature or consultations with tribes, local communities, or experts.

Recreational Benefits

2.2.1 In **Field 1** of **Table 2-2** below, select the specific recreational benefits that the covered action would provide. Select all that apply.

Table 2-2. Recreational Benefits Selections

Row Number	Field 1. Specific Recreational Benefits
1	☐ Provides opportunities for land-based recreational activities such as hiking and wildlife observation
2	☐ Provides opportunities for water-based recreational activities such as nonmotorized and motorized boating
3	☐ Connects users to the Great California Delta Trail System
4	☐ Includes public facilities such as restrooms
5	☐ Contributes to species populations in a way that benefits recreational fishing (e.g., salmon, sturgeon), nature study, and wildlife observation (e.g., birdwatching)
6	☐ Enhances public access to recreation (e.g., provides parking) while mitigating traffic impacts on neighboring agricultural and private lands

2.2.2 Based on the specific recreational benefits selected in **Field 1** of **Table 2-2**, would implementation of the covered action result in recreational benefits?

☐ Yes

☐ No

2.2.3 If the answer to **Section 2.2.2** is "Yes," describe how the covered action would provide the specific recreational benefits selected in **Table 2-2**, and then attach supporting documentation. Cite any relevant literature or consultations with local communities or experts.

2.2.4 If the answer to **Section 2.2.2** is "No," but the proposed action would provide recreational benefits not listed in the table above, describe the recreational benefits that the proposed action would provide, and attach supporting documentation. Cite any relevant literature or consultations with local communities or experts.

Agricultural Benefits

2.3.1 In **Field 1** of **Table 2-3** below, select the specific agricultural benefits that the covered action would provide. Select all that apply.

Table 2-3. Agricultural Benefits Selections

Row Number	Field 1. Specific Agricultural Benefits
1	☐ Protects or enhances ecological systems supportive of agriculture such as supporting pollination or natural pest control
2	☐ Conserves or improves soils in a manner that benefits agricultural land use
3	☐ Restores natural processes and communities that would reduce flood risk to neighboring agricultural lands
4	☐ Improves local water quality
5	☐ Recharges groundwater, increasing the water supply available in an aquifer, in locations that do not have high water tables
6	☐ Prevents increases in subsurface water levels, in locations with high water tables that interfere with agricultural activities

2.3.2 Based on the specific agricultural benefits selected in **Field 1** of **Table 2-3**, would implementation of the proposed action result in agricultural benefits?

☐ Yes

☐ No

2.3.3 If the answer to **Section 2.3.2** is "Yes," describe how the covered action would provide the specific agricultural benefits selected in **Table 2-3**, and then attach supporting documentation. Cite any relevant literature or consultations with local communities or experts.

2.3.4 If the answer to **Section 2.3.2** is "No," but the covered action would provide agricultural benefits not listed in the table above, describe the agricultural benefits that the action would provide, and attach supporting documentation. Cite any relevant literature or consultations with local communities or experts.

Natural Resource Benefits

2.4.1 In **Field 1** of **Table 2-4** below, select the specific natural resource benefits that the covered action would provide. Select all that apply.

Table 2-4. Natural Resource Benefits Selections

Row Number	Field 1. Specific Natural Resource Benefits
1	☐ Reduces flood risk by reducing peak water elevations
2	☐ Reduces flood risk by reducing operations and maintenance requirements on flood control works
3	☐ Reduces flood risk by reversing subsidence
4	☐ Reduces carbon emissions by reversing subsidence
5	☐ Mitigates climate change by sequestering carbon or other greenhouse gases
6	☐ Reduces heat island effects
7	☐ Increases native species habitat
8	☐ Enhances biodiversity of native species

2.4.2 Based on the specific natural resource benefits selected in **Field 1** of **Table 2-4**, would implementation of the covered action result in natural resource benefits?

☐ Yes

☐ No

2.4.3 If the answer to **Section 2.4.2** is "Yes," describe how the covered action would provide the specific natural resource benefits selected in **Table 2-4**, and then attach supporting documentation. Cite any relevant literature or consultations with local communities or experts.

2.4.4 If the answer to **Section 2.4.2** is "No," but the proposed action would provide natural resource benefits not listed in the table above, describe the natural resource benefits that the action would provide, and attach supporting documentation. Cite any relevant literature or consultations with local communities or experts.

Delta as Place

2.4.5 If the answers to **Section 2.1.3, Section 2.2.2**, **Section 2.3.2**, and **Section 2.4.2** are "No," explain how the proposed action would protect and enhance the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place (California Water Code section 85054), and then attach supporting documentation. Cite any relevant literature or consultations with local communities or experts.

Appendix 4A. Protecting, Restoring, and Enhancing Habitats at Appropriate Elevations

A certification of consistency for any covered action that is subject to Section 5006 of Title 23 of the California Code of Regulations must include a completed Appendix 4A as well as the documentation and information required by Appendix 4A.

1.1.1 In **Field 1** of **Table 1-1** below, select the elevation band in which the project is located. If the project is located in more than one elevation band, select all applicable elevation bands.

1.1.2 In **Field 2** of **Table 1-1** below, select the type of conservation action that would be implemented by the project or a portion of the project. If more than one type of conservation action would be implemented by the project, or a portion of the project, select all applicable conservation actions.

Table 1-1. Elevation Bands and Conservation Actions

Row Number	Field 1. Elevation Bands	Field 2. Conservation Actions
1	☐ Upland elevation band	Protection, restoration, or enhancement of: ☐ Oak woodland ☐ Grassland ☐ Seasonal wetlands ☐ Upland and lowland river floodplain
2	☐ Floodplain elevation band	Protection, restoration, or enhancement of: ☐ Upland and lowland river floodplain ☐ Nontidal wetlands ☐ Annual flooding regimes ☐ Geomorphic processes
3	☐ Sea level rise accommodation band	Protection, restoration, or enhancement of: ☐ Oak woodland ☐ Grassland ☐ Seasonal wetlands ☐ Upland and lowland river floodplain ☐ Annual flooding regimes ☐ Geomorphic processes ☐ Emergent wetlands ☐ Migration space

Table 1-1. Elevation Bands and Conservation Actions (contd.)

Row Number	Field 1. Elevation Bands	Field 2. Conservation Actions
4	☐ Intertidal elevation band	Protection, restoration, or enhancement of: ☐ Tidal wetlands ☐ Tidal inundation regimes ☐ Migration space
5	☐ Shallow subtidal elevation band	☐ Subsidence halting - ☐ Subsidence reversal -
6	☐ Deep subtidal elevation band	☐ Subsidence halting - ☐ Subsidence reversal - ☐ Agricultural practices that support wildlife

1.1.3 In **Table 1-1**, above, each row in **Field 1** lists the elevation band that is appropriate for the corresponding conservation actions listed in the same row in **Field 2**.

Based on the selected elevation band(s) in **Field 1** and the selected corresponding appropriate conservation action(s) in **Field 2**, is (are) the proposed conservation action(s) selected in **Field 2** appropriate for the selected elevation band(s) selected in **Field 1**? Do not select "Yes" if there is no selection in **Field 2** corresponding to each selected elevation band in **Field 1**.

☐ Yes

☐ No

1.1.4 If the answer to **Section 1.1.3** is "Yes," provide supporting evidence to demonstrate that the selections are accurate and describe such evidence below.

1.1.5 If the answer to **Section 1.1.3** is "No," based on best available science, provide a rationale for the inconsistency and explain how the conservation action is nonetheless at an appropriate elevation, and therefore consistent with this policy.

APPENDIX 8A. PRIORITY LOCATIONS TO EVALUATE PHYSICAL EXPANSION OF CHANNEL WIDTH

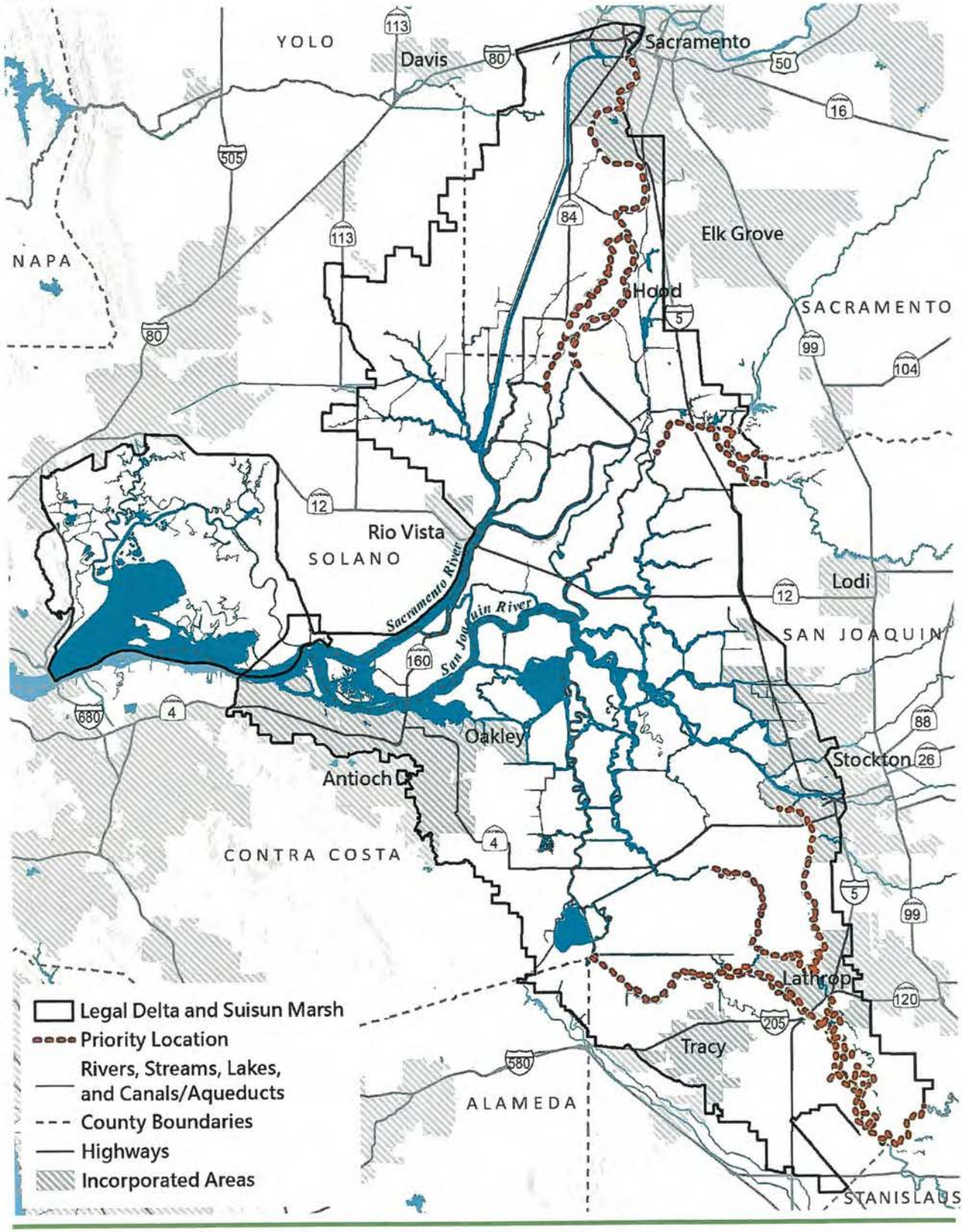

Figure 1. Priority Locations to Evaluate Physical Expansion of Floodplains

Figure 1. Priority Locations to Evaluate Physical Expansion of Floodplains (contd.)

Figure 1 is a map that identifies the Priority Locations to Evaluate Physical Expansion of Floodplains within the Delta, corresponding to the requirements of Ecosystem Restoration Policy 4 (ER P4). Priority locations are shown along select waterways in upstream portions of the Delta. The priority locations are:

- the Sacramento River between the Deepwater Ship Channel and Steamboat Slough, including urban levees in West Sacramento and Sacramento;
- Elk Slough;
- Sutter Slough, from Miner Slough to Elk Slough;
- the Cosumnes River and the Mokelumne River, from the boundary of the Delta to the confluence with Snodgrass Slough;
- the San Joaquin River from the Stanislaus River confluence to Rough and Ready Island, including urban levees in Stockton and levees that run through Lathrop;
- the portion of the Stanislaus River that is within the boundary of the Delta;
- Middle River, from the Old River confluence to the midpoint between Howard Road and Tracy Boulevard;
- Old River, from the San Joaquin River confluence to Hammer Island, including levees that run through Lathrop; and
- Paradise Cut.

Alternative formats of this map are available upon request.

~~Appendix O~~
~~Mitigation Monitoring and Reporting Program~~
Delta Plan Ecosystem Amendment
Mitigation Monitoring and Reporting Program

Mitigation Monitoring and Reporting Program

Delta Plan Background

In November 2009, the California Legislature enacted Senate Bill X7 1, one of several bills passed at that time related to water supply reliability, ecosystem health, and the Sacramento–San Joaquin Delta (Delta). This new law became effective February 3, 2010. Division 35 of the Water Code (Wat~~er~~ Code), also known as the Sacramento–San Joaquin Delta Reform Act of 2009 (Delta Reform Act, or Act), requires the development of a legally enforceable, comprehensive, long-term management plan for the Delta, referred to as the Delta Plan. In May 2013, the Delta Stewardship Council (Council) adopted the Delta Plan. The Delta Plan has been amended since adoption.

~~In May 2013, the Delta Stewardship Council (Council) adopted the Delta Plan. Prior to adopting the 2013 Delta Plan, the Council certified the 2013 Program Environmental Impact Report (PEIR) (2013 PEIR),1 analyzes the potential significant impacts associated with implementing the Delta Plan at a program level of detail. The Delta Plan was subsequently amended in 2016. Several components of the Delta Plan require revisions due to changes in circumstances and conditions in the Delta, and prior commitments made in the Delta Plan adopted in 2013. The proposed Delta Plan Amendments (Proposed Project or proposed amendments) involve three components: Delta Levee Investment and Risk Reduction Strategy (DLIS); Delta Conveyance, Storage Systems, and the Operation of Both (CSO); and Performance Measures (PM). which~~

~~The Delta Stewardship Council (Council), as the California Environmental Quality Act (CEQA) lead agency, prepared a PEIR for the Delta Plan Amendments in accordance with the requirements of CEQA (Public Resources Code Section 21000 et seq) and the CEQA Guidelines (California Code of Regulations, title 14, section 15000, et seq.). As an informational document, the PEIR provides full disclosure to the public and Council regarding the potential significant environmental effects of the Proposed Project. It is also intended to provide sufficient information to foster informed decision-making by the Council.~~

The fundamental purpose of the Delta Plan is to further achievement of the coequal goals, which are defined in Wat~~er~~ Code section 85054, and all of the inherent subgoals and policy objectives defined by statute~~, as identified in the PEIR~~. The Delta Plan contains an integrated and legally enforceable set of policies that serve ~~serves~~ as a basis for future certifications of consistency with the Delta Plan by State and local

agencies with regard to specified "covered actions" as defined in Wat. ~~er~~ Code section 85057.5. It also establishes a process by which any person can appeal such certifications to the Council, consistent with the Delta Reform Act and Council regulations. See Wat. ~~er~~ Code sections 85225.10(a), 85225.15, 85225.30; Delta Stewardship Council, Administrative Procedures Governing Appeals section I(5).

The Delta Reform Act requires the Council to review the Delta Plan at least once every five years and revise it as the Council deems appropriate (Wat. Code section 85300(c)). When the Delta Plan was adopted, the Council anticipated periodic reviews of the Delta Plan and potential need for updates in response to changing circumstances and conditions in the Delta.

Ecosystem Amendment

The purpose of the proposed amendment to Chapter 4, *Protect Restore, and Enhance the Delta Ecosystem,* of the Delta Plan (proposed Ecosystem Amendment or Proposed Project) is to address a fundamental shift in how conservation is being planned and implemented in the Delta.

The Council, as the California Environmental Quality Act (CEQA) lead agency, prepared a Program Environmental Impact Report (PEIR) for the proposed Ecosystem Amendment in accordance with the requirements of CEQA (Public Resources Code Section 21000 et seq) and the CEQA Guidelines (California Code of Regulations [Cal. Code Regs.], title 14, section 15000, et seq.). As an informational document, the PEIR provides full disclosure to the public and Council of the potential significant environmental effects of the Ecosystem Amendment, and sufficient information to foster informed decision-making by the Council.

Mitigation Measures

Mitigation measures have been adopted and incorporated into the Delta Plan in order to reduce or avoid the significant environmental impacts of the Delta Plan. The Ecosystem Amendment PEIR includes new mitigation measures as well as revisions to applicable mitigation measures that were previously adopted and incorporated into the Delta Plan, as amended April 26, 2018, in order to incorporate updated formatting, best practices, and current standards, as relevant. The revised mitigation measures are equally effective as the previously adopted mitigation measures, and would not result in any new or substantially more severe impacts than the previously adopted mitigation measures.

Mitigation Monitoring and Reporting Program

Public Resources Code section 21081.6(a) ~~requires and CEQA Guidelines section 15097~~ require a public agency to adopt a monitoring or reporting program to ensure compliance with the mitigation measures adopted by the agency at the time of project approval. ~~The Council is responsible for making sure that the identified mitigation measures are fully enforceable by adopting and incorporating them into the Delta Plan (Pub. Resources Code section 21081.6(b).~~ This Mitigation Monitoring and Reporting Program (MMRP) ~~is to~~ will be used by the Council to ensure compliance with the mitigation measures identified in the ~~Delta Plan Amendments~~ Ecosystem Amendment PEIR and ~~the 2013 PEIR. Table 1 and Table 2 present the mitigation measures identified in~~ adopted and incorporated into the Delta Plan ~~Amendments PEIR and~~ by the ~~2013 PEIR, respectively.~~ Council.

~~For covered actions constructed in response to~~ Table 1 presents the ~~proposed amendments in~~ Delta Plan Mitigation Measures identified in the ~~Primary and Extended Planning areas, other public agencies would be required to implement the~~ Ecosystem Amendment PEIR, which includes new mitigation measures ~~in Table 1 and Table 2 or equally effective measures, if feasible,~~ as well as revisions to applicable mitigation measures that were previously adopted and incorporated into the Delta Plan, as amended April 26, 2018. The mitigation measures in Table 1 would continue to be implemented as part of the Delta Plan and would apply to covered actions as required by Delta Plan policy G P1(b)(2) (California Code of Regulations ~~([~~Cal. Code ~~of~~ Regs.]~~.)~~ title 23, section 5002(b)(2)). Delta Plan policy G P1 ~~(Cal. Code of Regs. title 23 section 5002(b)(2))~~(b)(2) specifies that any covered action that is not exempt from CEQA must include either the mitigation measures identified in Table 1 ~~and Table 2~~ and adopted and incorporated into the Delta Plan, if applicable and feasible; substitute mitigation measures that the proposing agency finds to be equally or more effective ~~than those~~

~~identified Table 1 and Table 2~~; or an explanation of why such mitigation is not feasible.

Monitoring and/or reporting on implementation of these mitigation measures is accomplished through the certification of consistency process required by policy G P1 (Cal. Code of Regs. title 23 section 5002). ~~The 2013 PEIR~~ In the Certification of Consistency Form ~~Mitigation Measures were adopted and incorporated into the Delta Plan in order to reduce or avoid the significant environmental impacts of the Delta Plan. The 2013 PEIR Mitigation Measures would continue to be implemented as part of the Proposed Project and would apply to covered actions as required by Delta Plan policy G P1.~~

~~Table 1 and Table 2 are in tabular format and contain the following information:~~

submitted to the Council for every covered action, the proposing agency for the covered action must identify the specific mitigation measures for the covered action that correspond to each applicable mitigation measure, or explain why any such measures are not feasible in the context of the specific covered action and describe any substitute mitigation that is equally as effective as the pertinent mitigation measure. In addition, the Council is responsible for reviewing all appeals of a proposing agency's certification that a covered action is consistent with the Delta Plan.

For covered actions that are implemented in response to the Ecosystem Amendment, the implementation and enforcement of Delta Plan Mitigation Measures, or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council. For non-covered actions that are implemented in response to the proposed Ecosystem Amendment, implementation of Delta Plan Mitigation Measures is recommended; however, the implementation and enforcement of mitigation measures for projects that are not covered actions is not within the authority of the Council.

Table 1 ~~and Table 2 are in tabular format and~~ contains the following information in tabular format:

Mitigation Measure Number: Lists the mitigation measures by number, as designated in the ~~2013 PEIR and~~ Delta Plan Ecosystem Amendment PEIR and adopted and incorporated into the Delta Plan, by resource.

Mitigation Measure: Provides the text of the mitigation measures that have been adopted by the Council as designated in the Delta Plan ~~Amendments PEIR~~ Ecosystem Amendment PEIR, and adopted and incorporated into the Delta Plan, by resource.

~~**Implemented By:** The Council is responsible for making sure that the mitigation measures identified in the PEIR are fully enforceable by adopting and incorporating them into the Delta Plan Pub. Resources Code section 21081.6(b).~~

~~**When Implemented:** All of the mitigation measures identified in the 2013 PEIR have been adopted and incorporated into the Delta Plan through Delta Plan Policy G P1 and are required to be implemented for covered actions pursuant to regulatory requirements (23 Cal. Code of Regs. section 5002(b)(2)), if applicable and feasible, unless equally effective substitute mitigation is implemented.~~

~~**Monitoring or Reporting Action:** Monitoring and/or reporting on implementation of the adopted mitigation measures will be accomplished through the Certification of~~

~~Consistency process. In the Certification of Consistency Form submitted to the Council for every covered action, the proposing agency for the action will identify the specific mitigation measures for the covered action that correspond to each applicable mitigation measure, or will explain why any such measures are not feasible in the context of the specific covered action and describe any substitute mitigation that is equally as affective as the pertinent mitigation measure. In addition, the Council is responsible for reviewing all appeals of a proposing agency's certification that a covered action is consistent with the Delta Plan.~~

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
Visual Resources ~~Aesthetics~~	
5.2-1	Use non-specular conductors for transmission lines and distribution lines to reduce glare.
8-1(a)	Use compatible colors for proposed structural features, such as intakes, pumping plants, and surge towers. Use earth tone paints and stains with low levels of reflectivity.
8-1(b)	Minimize the vertical profile of proposed structures as much as possible. Where possible, use subgrades for floors of structures. Use landscaped berms instead of walls to mask views of structures from high-visibility sites. Use green roof design where roof structures would be highly visible.
8-1(c)	Use native vegetation plantings on proposed facility walls, such as climbing plants, espaliers, and other forms that soften the appearance of structures.
8-1(d)	Develop a landscaping plan for all proposed structures. Provide vegetative screening to soften views of structures. Landscaping shall complement the surrounding landscape.
8-1(e)	Round the tops and bottoms of spoil disposal areas, and contour the faces of slopes to create more natural-looking landforms. Create visual diversity by planting vegetation with diverse growth forms on the spoil disposal areas; plant with more than just grasses.
8-1(f)	Landscape parking areas at proposed facilities, and include low-impact design features, such as permeable pavers, tree basins, and bioswales, that reduce stormwater runoff and enhance visual quality.
8-1(g)	Conduct only partial vegetative clearing of ~~the limits of~~ construction footprint rather than ~~clearing~~ clear the entire area; partial clearing would leave islands of vegetation and result in a more natural look. Use irregular clearing shapes with feathered edges instead of hard edges to promote a more natural effect. Temporarily disturbed areas shall be restored to pre-construction conditions.
8-1(h)	Develop design form and materials with a goal to achieve ~~compatible~~ aesthetic visual character instead of a strictly utilitarian objective. ~~For example, u~~Use cast natural form elements or natural materials for facing to achieve texture and color compatible with the adjacent landscape; ~~and use~~ natural materials ~~would be preferable~~ for areas of high visibility and public use. Landscape areas adjacent to facilities. Use natural materials, such as wood and stone, for signage at proposed facilities.
8-1(i)	Develop aesthetically pleasing ~~consistent~~ landscaping for relocated roads at the shoulders, intersections, and on- and off-ramps from highways. ~~Newly developed roads in high-visibility areas shall incorporate~~ Design turnouts and scenic ~~vista points~~ viewpoints ~~where appropriate for relocated roads with high visibility and high public use~~ for the public to access.
8-1(j)	To the extent consistent with the safety and reliability of the electric grid, as well as site-specific considerations, use ~~tubular steel~~ single ~~-~~pole ~~or non-specular steel~~ electrical transmission towers instead of lattice-form towers for proposed large electrical transmission lines and specular conductors, and put transmission lines underground along areas with high visibility and high public use.
8-1	~~Consider developing aesthetically well-designed visitor centers, vantage areas, or observation decks at appropriate facilities with interpretation features, walking paths, and other features. Although developing visitor centers would not reduce a visual impact, it would have the effect of making the facilities features of interest to the touring public.~~

8-2(a)	Implement elements of Mitigation Measure 8-1 for temporary construction activities and new facilities that are visible from scenic vistas and designated roads and highways as appropriate.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
8-2(b)	Replace all scenic resources (e.g., large trees) that would be removed for the Proposed Project, when feasible. Identify compensatory mitigation for visual or aesthetic resources by providing improvements to areas with existing diminished scenic quality.
8-3	Projects shall utilize angled or shielded exterior lighting and ~~Use shields for proposed lighting facilities, and~~ ensure that lighting is directed ~~direct lighting~~ downward and inward toward the facilities.
Agricultural and Forestry Resources	
7-1(a)	Design proposed projects to minimize, to the greatest extent feasible, the loss of the highest value agricultural land (i.e., Prime Farmland, Farmland of Statewide Importance, and Unique Farmland).
7-1(b)	Design proposed projects to minimize, to the greatest extent feasible, conflicts with land protected by agricultural zoning or a Williamson Act contract and the terms of the applicable zoning/contract. Approaches for minimizing conflicts include siting project components on lands that are consistent with zoning and contract restrictions, while placing other components in areas that would not affect the agricultural lands.
7-1(c)	For projects that will result in permanent conversion of Farmland, preserve in perpetuity other Farmland through acquisition of an agricultural conservation easement, or contributing funds to a land trust or other entity qualified to preserve Farmland in perpetuity (at a minimum target ratio of 1:1, depending on the nature of the conversion and the characteristics of the Farmland to be converted, to compensate for permanent loss).
7-1(d)	For projects that will result in permanent conversion of Farmland, restore agricultural land to productive use through removal of equipment or structures, such that the land can be designated as Farmland, to replace the impacted Farmland at a 1:1 ratio.
7-1(e)	Redesign project features (e.g., cluster project components) to minimize fragmenting or isolating Farmland. Where a project involves acquiring land or easements, ensure that the remaining non-project area is of a size sufficient to allow viable farming operations and continued classification as Farmland. The project proponents shall be responsible for acquiring easements, making lot line adjustments, and merging affected land parcels into units suitable for continued commercial agricultural management.
7-1(f)	Reconnect utilities or infrastructure that serve agricultural uses if these are disturbed by project construction. If a project temporarily or permanently cuts off roadway access or removes utility lines, irrigation features, or other infrastructure, the project proponents shall be responsible for restoring access as necessary to ensure that economically viable farming operations are not interrupted.
7-1(g)	Manage project operations to minimize the introduction of invasive species or weeds that may affect agricultural production on adjacent agricultural land.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
7-1(h)	Establish buffer areas between projects and adjacent agricultural land that are sufficient to protect and maintain land capability and agricultural operation flexibility. Design buffers to protect the feasibility of ongoing agricultural operations and reduce the effects of construction- or operation-related activities (including the potential to introduce special-status species in the agricultural areas) on adjacent or nearby properties. The buffer shall also serve to protect ecological restoration areas from noise, dust, and the application of agricultural chemicals. The width of the buffer shall be determined on a project-by-project basis to account for variations in prevailing winds, crop types, agricultural practices, ecological restoration, or infrastructure. Buffers can function as drainage swales, trails, roads, linear parkways, or other uses compatible with ongoing agricultural operations.
7-2	~~Design proposed projects to minimize, to the greatest extent feasible, conflicts and inconsistencies with land protected by agricultural zoning or a Williamson Act contract and the terms of the applicable zoning/contract.~~
7-3(a)	Avoid protected forestland and timberland through site selection and/or project design.
7-3(b)	~~Where feasible,~~ When selecting a project site, project proponents ~~should~~ shall take into ~~account~~ consideration the value of the forest, not only in terms of direct products such as wood but also as part of the watershed ecosystem.~~, when selecting a project site. Wherever possible, nonprotected sites should be preferred and selected instead of protected sites.~~
7-3(c)	For projects that will result in permanent conversion of Forestland, ~~preserve in perpetuity other forestland through a conservation easement or by acquiring lands~~ project proponents shall acquire, at a fair market value, other forestland that shall be preserved in perpetuity through a conservation easement or ~~contributing~~ contribute funds to a land trust or other agency (at a target ratio of 1:1, depending on the nature of the conversion and the characteristics of the Forestland to be converted, to compensate for permanent loss).
7-3(d)	When removal of existing forestland or timberlands is required as part of an action, project proponents shall acquire the property at fair market value.
7-4	~~For projects that will result in permanent conversion of Forestland, preserve in perpetuity other forestland through a conservation easement or by acquiring lands or contributing funds to a land trust or other agency (at a target ratio of 1:1, depending on the nature of the conversion and the characteristics of the Forestland to be converted, to compensate for permanent loss).~~ ~~Avoid land protected as forestland and timberland through site selection and/or project design. Where feasible, project proponents should take into account the value of the forest, not only in terms of direct products such as wood, but also as part of the watershed ecosystem, when selecting a project site. When possible, unprotected sites should be preferred and selected instead of protected sites.~~ ~~When removal of existing forestland or timberlands is required as part of an action, proponents must acquire the property at fair market value.~~
Air Quality and Greenhouse Gas Emissions	
9-1(a)	Use equipment and vehicles that are compliant with Air Resource Board (ARB) requirements and emission standards for on-road and off-road fleets and engines. New engines and retrofit control systems ~~should~~shall reduce NO~~X~~x and PM from diesel-fueled on-road and off-road vehicles and equipment.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

9-1(b)	Minimize idling times either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage ~~should~~ shall be posted for construction workers at all entrances to the site.
9-1(c)	Maintain all equipment in proper working condition according to manufacturer's specifications.
9-1(d)	Use electric equipment when possible. Use lower-emitting alternative fuels to power vehicles and equipment where feasible.
9-1(e)	Use low Volatile Organic Compound (VOC) coatings and chemicals; minimize chemical use.
9-1(f)	Prepare and implement a dust control plan and apply dust control measures at the construction sites.
9-1(g)	To minimize track-out of dirt and mud from dirt and gravel roads, all trucks and equipment, including their tires, shall be washed prior to leaving the site. Only exteriors of trucks and equipment are to be washed (no engine degreasing), no detergents or chemicals shall be used in the wash water, and off-site runoff of rinse water shall be prevented.
9-1(h)	For projects involving land fallowing, land conversion, or other agricultural operations, implement applicable BMPs from agencies such as the U.S. Department of Agriculture Natural Resources Conservation Service to reduce potential dust emissions.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
9-1(i)	BMPs for fallowed lands could include, but are not limited to, the following: i. Implement conservation cropping sequences and wind erosion protection measures, such as: 1. Plan ahead to start with plenty of vegetation residue~~,~~ and maintain as much residue on fallowed fields as possible. Residue is more effective for wind erosion protection if left standing. 2. If residues are not adequate, small grain can be seeded about the first of the year to take advantage of the winter rains and irrigated with a light irrigation if needed to get adequate growth. 3. Avoid any tillage if possible. 4. Avoid any traffic or tillage when fields are extremely dry to avoid pulverization.
9-1(j)	Apply soil stabilization chemicals to fallowed lands.
9-1(k)	Reapply drain water to allow protective vegetation to be established.
9-1(l)	Reuse irrigation return flows to irrigate windbreaks across blocks of land including many fields to reduce wind fetch and reduce emissions from fallowed, farmed, and other lands within the block. Windbreak species, management, and layout would be optimized to achieve the largest feasible dust emissions reduction per unit water available for their irrigation. Windbreak corridors would provide ancillary aesthetic and habitat benefits. Project-specific lists of mitigation measures ~~should also~~shall include ~~the~~ applicable recommendations or requirements of the local air district(s)~~.For example, the Bay Area Air Quality Management District (BAAQMD) lists the following basic and additional mitigation measures to reduce emissions from project construction (BAAQMD, 2010. California Environmental Quality Act Air Quality Guidelines. December 2010. San Francisco, California. Site accessed February 8, 2011. http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES.aspx).~~ which a project is located in.
9-1(m)	Basic Construction Mitigation Measures Recommended for ALL Proposed Projects i. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. ii. All haul trucks transporting soil, sand, or other loose material off-site shall be covered. iii. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. iv. All vehicle speeds on unpaved roads shall be limited to 15 mph. v. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. vi. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. vii. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator. viii. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
9-1(n)	Additional Construction Mitigation Measures Recommended for Projects with Construction Emissions Above the Threshold i. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe. ii. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph. iii. Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity. iv. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established. v. The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time. vi. All trucks and equipment, including their tires, shall be washed off prior to leaving the site. vii. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel. viii. Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent. ix. Minimizing the idling time of diesel powered construction equipment to two minutes. x. ~~The project shall develop~~Develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent ~~NOx~~ NO_x reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available. xi. Use low VOC (i.e., reactive organic gases or ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings). xii. Requiring that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of ~~NOx~~ NO_x and PM. xiii. Require all contractors to use equipment that meets ARB's most recent certification standard for off-road heavy duty diesel engines.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
~~9-2~~	~~Applicants should develop and implement a project-specific Odor Management Plan. Odor control measures that can be incorporated into this plan include, but are not limited to, the following:~~ • ~~A list of potential odor sources~~ • ~~Identification and description of the most likely sources of odor~~ • ~~Identification of potential, intensity, and frequency of odor from likely sources~~ • ~~A list of odor control technologies and management practices that could be implemented to minimize odor releases~~ • ~~A protocol for monitoring, recording, reporting and responding to odor events, including notification of the local and downwind jurisdictions of projects that may result in odor complaints, including contact numbers for responsible individuals during construction. If odor an event occurs, construction activity should be suspended until conditions change, removing the cause and resultant odors, or until alternate management practices are implemented that significantly reduce the odors.~~
9-3(a)	The Air Quality Technical Report prepared for the Proposed Project shall evaluate human health risks from potential exposures of sensitive receptors to substantial pollutant concentrations on a project-specific basis. The need for a human health risk analysis shall be evaluated using approved screening tools, and discussed with the local Air Quality Management District (AQMD) or Air Pollution Control District (APCD) at the time of preparation of the Air Quality Technical Report. If the health risk is determined to be significant on a project-specific basis, control measures shall be implemented to reduce health risks to levels below the applicable air district threshold.
9-3(b)	Implementation of one or more of the following requirements, where feasible and appropriate would reduce the effects of Impact 9-3a, Construction or Operation of Projects Would Expose Sensitive Receptors to Substantial Pollutant Concentrations ~~*(from the 2013 Delta Plan Program EIR)*~~: i. Implement Mitigation Measure 9-1 to reduce air emissions and air quality impacts from construction and operations of the Proposed Project. ii. Use equipment with diesel engines designed or retrofitted to minimize DPM emissions, usually through the use of catalytic particulate filters in the exhaust. iii. Use electric equipment to eliminate local combustion emissions. iv. Use alternative fuels, such as compressed natural gas or liquefied natural gas.
9-3(c)	If the project would result in significant emissions of airborne, naturally occurring asbestos or metals from excavation, hauling, blasting, tunneling, placement, or other handling of rocks or soil, a dust mitigation and air monitoring plan ~~would~~ shall be required to specify site-specific measures to minimize emissions and that airborne concentrations of the toxic air contaminants (TACs) of concern do not exceed regulatory or risk-based trigger levels.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure Number
21-1	Implement GHG mitigation measures listed in the most recent applicable air district, state, regional, or state-of-the art guidance. ~~California Air Pollution Control Officers Association (CAPCOA), BAAQMD, and other air district guidance documents (e.g., CAPCOA, 2010. Quantifying Greenhouse Gas Mitigation Measures. A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures. Sacramento, California. August, p. 210-232; BAAQMD, 2011. California Environmental Quality Act Air Quality Guidelines. San Francisco, California. Updated May 2011, p. 8-6). Current versions of such guidance documents list the following for construction:~~ ~~1. Use alternative fuels for construction equipment.~~ ~~2. Use electric and hybrid construction equipment.~~ ~~3. Limit construction equipment idling beyond regulatory requirements.~~ ~~4. Institute a heavy-duty off-road vehicle plan.~~ ~~5. Implement a construction vehicle inventory tracking system.~~ ~~6. Use local building materials for at least ten percent of total materials.~~ ~~7. Recycling or reusing at least 50 percent of construction waste or demolition materials.~~ In addition, the California Attorney General's Office has developed a list of various measures that may reduce GHG emissions at the individual project level. A selected list of those proposed measures that could be applied to DWR projects was appended to the DWR guidance document, titled ~~*Guidance for Quantifying Greenhouse Gas Emissions and Determining the Significance of their Contribution to Global Climate Change for CEQA Purposes* (DWR 2010.~~ *Guidance for Quantifying Greenhouse Gas Emissions and Determining the Significance of their Contribution to Global Climate Change for CEQA Purposes. California Department of Water Resources Internal Guidance Document. CEQA Climate Change Committee (2010).* ~~Sacramento, CA. January, Appendix B)~~. As appropriate, the measures can be included as design features of a project, required as changes to the project, or imposed as mitigation (whether undertaken directly by the project proponent or funded by mitigation fees). The measures are examples; the list is not intended to be exhaustive. The following may serve as BMPs to be considered and implemented (as applicable) during design, construction, operation, and maintenance of project facilities.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
21-1(contd.)	**Efficiency** 1. Design buildings to be energy efficient. Site buildings to take advantage of shade, prevailing winds, landscaping and sunscreens to reduce energy use. 2. Install efficient lighting and lighting control systems. Use daylight as an integral part of lighting systems in buildings. 3. Install light colored "cool" roofs, cool pavements, and strategically placed shade trees. 4. Install energy efficient heating and cooling systems, appliances and equipment, and control systems. 5. Install light-emitting diodes for street and other outdoor lighting. 6. Limit the hours of operation of outdoor lighting. ~~7. Provide education on energy efficiency.~~ **Renewable Energy** 1. Install solar and wind power systems~~, and energy-efficient heating ventilation and air conditioning.~~ 2. Install solar panels over parking areas. 3. Use combined heat and power in appropriate applications. **Water Conservation and Efficiency** 1. Create water-efficient landscapes. 2. Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls. 3. Use reclaimed water for landscape irrigation. Install the infrastructure to deliver and use reclaimed water. 4. Design buildings to be water efficient. Install water-efficient fixtures and appliances. ~~5. Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.~~ ~~6. Restrict the use of water for cleaning outdoor surfaces and vehicles.~~ 5.~~7.~~ Implement low-impact development practices that maintain the existing hydrologic character of the site to manage stormwater and protect the environment. (Retaining stormwater runoff on-site can drastically reduce the need for energy-intensive imported water at the site.) 6.~~8.~~ Devise a comprehensive water conservation strategy appropriate for the project and location. The strategy may include many of the specific items listed above, plus other innovative measures that are appropriate to the specific project. ~~9. Provide education about water conservation~~ **Solid Waste ~~Measures~~** ~~1.~~ Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard). ~~2. Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.~~ ~~3. Recover by-product methane to generate electricity.~~

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

21-1(contd.)	**Transportation and Motor Vehicles** 1. Limit idling time for commercial vehicles, including delivery and construction vehicles. 2. Use low- or zero-emission vehicles, including construction vehicles. 3. Use alternative fuels for construction equipment. 4. Promote ride sharing. 5. Use local materials for at least 10 percent of construction materials. 6. Ensure tires on equipment and vehicles are inflated to their proper pressure.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
21-1 (contd.)	~~**SmartWay Truck Efficiency**~~ ~~The strategy involves requiring existing trucks/trailers to be retrofitted with the best available "SmartWay Transport" and/or ARB approved technology. Technologies that reduce GHG emissions from trucks may include devices that reduce aerodynamic drag and rolling resistance. Aerodynamic drag may be reduced using devices such as cab roof fairings, cab side gap fairings, cab side skirts, and on the trailer side, trailer side skirts, gap fairings, and trailer tail. Rolling resistance may be reduced using single wide tires or low-rolling resistance tires and automatic tire inflation systems on both the tractor and the trailer.~~ ~~**Tire Inflation Program**~~ ~~The strategy involves actions to ensure that vehicle tire pressure is maintained to manufacturer specifications.~~ **Blended Cements** ~~The strategy to reduce CO2 emissions involves the addition of blending~~Use blended materials such as limestone, fly ash, natural pozzolan, and/or slag to replace some of the clinker in the production of Portland cement. ~~**Anti-idling Enforcement**~~ ~~The strategy guarantees emission reductions as claimed by increasing compliance with anti-idling rules, thereby reducing the amount of fuel burned through unnecessary idling. Measures may include enhanced field enforcement of anti-idling regulations, increased penalties for violations of anti-idling regulations, and restriction on registrations of heavy-duty diesel vehicles with uncorrected idling violations.~~ **Carbon Offsets** 1. If, after analyzing and requiring all reasonable and feasible on-site mitigation measures for avoiding or reducing greenhouse gas-related impacts, the lead agency determines that additional mitigation is required, the agency may consider additional off-site mitigation. The project proponent could, for example, fund off-site mitigation projects (e.g., alternative energy projects, or energy or water audits for existing projects) that will reduce carbon emissions, conduct an audit of its other existing operations and agree to retrofit, or purchase carbon "credits" from another entity that will undertake mitigation. 2. ~~If requiring offsets, issues that the lead agency should consider in determining the amount of mitigation that will be provided include~~ The topic of offsets can be complicated, and a full discussion is outside the scope of this summary document. Issues that the lead agency should consider include: a. The location of the off-site mitigation. (If the off-site mitigation is far from the project, any additional, non-climate related benefits of the mitigation will be lost to the local community.) b. Whether the emissions reductions from off-site mitigation can be quantified and verified. c. Whether the mitigation ratio should be greater than 1:1 to reflect any uncertainty about the effectiveness of the offset. d. Whether the offset is real, additional, and permanent.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

~~21-2~~	• ~~Prepare a drainage or hydrology and hydraulics study that would assess the need and provide a basis for the design for flood protection of the facilities constructed along waterways. Prepare the study in accordance with applicable standards of Federal Emergency Management Agency (FEMA), USACE, DWR, Central Valley Flood Protection Board, San Francisco Bay Conservation and Development Commission (BCDC), as well as the local reclamation districts and flood control agencies and the counties and cities. Design subsequent mitigation measures in accordance with the final study and with the applicable standards of FEMA, USACE, DWR, Central Valley Flood Protection Board, and BCDC.~~ • ~~Design intakes/diversions and outfalls to be operated at multiple surface water elevations between existing conditions and maximum projected surface water elevations during a high flow event with sea level rise for the life of the facility.~~ • ~~Prepare a hydrogeologic study that would assess long-term groundwater recharge and safe yield of wells and wellfields under a sustainable groundwater management plan. If the wells can be used to a greater degree in some years in a manner that would support the sustainable groundwater management plan to avoid long-term groundwater overdraft, wells could be drilled to deeper depths than would be required under existing conditions.~~
~~21-3~~	• ~~Prepare a drainage or hydrology and hydraulics study that would assess the need and provide a basis for the design for ecosystem habitat restoration, including adjacent areas that would allow for migration of the habitat to higher elevations as the surface water elevations increase. Prepare the study in accordance with applicable standards of FEMA, USACE, DWR, and San Francisco Bay Delta Conservation and Development Commission (BCDC). Design subsequent mitigation measures in accordance with the final study and with the applicable standards of FEMA, USACE, DWR, Central Valley Flood Protection Board, and BCDC.~~
~~21-4~~	• ~~Prepare a drainage or hydrology and hydraulics study that would assess the need and provide a basis for the design for projects that reduce risks of floods in the Delta. Prepare the study in accordance with applicable standards of FEMA, USACE, DWR, and BCDC. Design subsequent mitigation measures in accordance with the final study and with the applicable standards of FEMA, USACE, DWR, Central Valley Flood Protection Board, and BCDC.~~ • ~~Based on the results of the drainage or hydrologic and hydraulic study, arrange the length of flood management facilities in the direction of the floodplain flow to maximize surface flows under flood conditions.~~ • ~~Install setback levees or bypass channels to maintain channel capacity and to mitigate hydraulic impacts of high flow events and higher surface water elevations due to climate change and sea level rise.~~ • ~~Channel modifications for restoration actions would be required to be implemented to maintain or improve flood management functions and would be coordinated with the USACE, DWR, Central Valley Flood Protection Board, BCDC, and other flood control agencies to assess the desirability and feasibility for channel modifications. To the extent consistent with floodplain land uses and flood control requirements, if applicable, woody riparian vegetation would be allowed to naturally establish.~~
Biological Resources – Aquatics	
4-1<u>(a)</u>	• ~~Avoid, minimize, and compensate for reduction in area and/or habitat quality of sensitive natural communities, including wetlands, by doing the following:~~ ~~Selecting project site(s) that would avoid~~ <u>Avoid siting project features that would result in the removal or degradation of</u> sensitive natural communities, including jurisdictional wetlands and other waters, vernal pools, alkali seasonal wetlands, riparian habitats, and inland dune scrub.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

4-1(b)	~~Designing, to the maximum extent practicable, project elements to avoid effects on sensitive natural communities.~~ Design the project to minimize effects on sensitive natural communities through one or more of the following measures: i. ~~Replacing, restoring, or enhancing~~ Replace, restore, or enhance on a "no net loss" basis (in accordance with U.S. Army Corps of Engineers (USACE) and State Water Resources Control Board (SWRCB) requirements), wetlands and other waters of the United States and waters of the State. ~~that would be removed, lost, and/or degraded. Where impacts to sensitive natural communities other than waters of the United States or State are unavoidable, compensating for impacts by restoring and/or preserving in-kind sensitive natural communities on-site, or off-site at a nearby site, or by purchasing in-kind restoration or preservation credits from a mitigation bank that services the project site and that is approved by the appropriate agencies, in consultation with applicable regulatory agencies (at ratios that offset temporal loss of habitat value).~~ ii. Restore and/or preserve in-kind sensitive natural communities on-site, or off-site at a nearby site. iii. Purchase in-kind restoration or preservation credits from a mitigation bank that services the project site and that is approved by the appropriate agencies, in consultation with applicable regulatory agencies (at ratios that offset temporary loss of habitat value).

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
4-1(c)	~~• Implement advanced mitigation planning for ecosystem restoration prior to construction.~~ ~~• Implement construction best management practices, including:~~ ~~○ Developing and implementing a Stormwater Pollution Prevention Plan (SWPPP).~~ ~~○ Minimizing soil disturbance, erosion, and sediment runoff from project site.~~ ~~○ Avoiding and minimizing contaminant spills.~~ ~~○ Minimizing visual and noise disturbance from construction activities.~~ ~~○ Conducting biological construction monitoring to ensure that implemented Best Management Practices (BMPs) are effective.~~ ~~• Restore areas temporarily affected by construction activities, including:~~ ~~i. Preparing restoration plan for temporary impacts sites for review by resource agencies.~~ ~~ii. Minimizing soil disturbance and stockpiling topsoil for later use in any areas to be graded.~~ ~~iii. Decompacting or amending soil if necessary before planting and use native species for revegetation.~~ ~~iv. Restoring natural communities with similar or improved function from communities that were affected.~~ Construct the project to minimize effects on sensitive natural communities through one or more of the following measures: i. Implement Mitigation Measure 3-1. ii. Restore natural communities disturbed or temporarily lost as a result of project construction activities. A restoration plan shall be prepared that is reviewed by resource agencies prior to implementation. The restoration plan would include, but might not be limited to: 1. Stockpiling of topsoil to be placed in graded areas. 2. Decompacting or amending soil if necessary before planting and use native species for revegetation. 3. Restoring natural communities with similar or improved function from communities that were affected.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

4-1(e)	Develop and implement an ~~An~~ invasive species management plan ~~shall be developed and implemented~~ for any project whose construction or operation could lead to introduction or facilitation of invasive species establishment. The plan shall ensure that invasive plant species and populations are kept below preconstruction abundance and distribution levels. The plan shall be based on the best available science and developed in consultation with ~~Department of Fish and Wildlife (~~DFW~~)~~ and local experts, such as the University of California Extension, county agricultural commissioners, representatives of County Weed Management Areas (WMA), California Invasive Plant Council, and California Department of Food and Agriculture. The invasive species management plan ~~will~~ shall include the following elements: i. Non-native species eradication methods (if eradication is feasible) ii. Non-native species management methods iii. Early detection methods iv. Notification requirements v. Best management practices for preconstruction, construction, and post-construction periods vi. Monitoring, remedial actions and reporting requirements vii. Provisions for updating the target species list over the lifetime of the project as new invasive species become potential threats to the integrity of the local ecosystems
4-2(a)	Select project site(s) that would avoid habitats of special-status species (which may include foraging, sheltering, migration, and rearing habitat in addition to breeding or spawning habitat), and to the maximum extent practicable, (re)design project elements to avoid effects on such species.
4-2(b)	Schedule construction to avoid special-status species' breeding, spawning, or migration locations during the seasons or active periods that these activities occur.
4-2(c)	Conduct preconstruction surveys (by a qualified biologist) for special-status species in accordance with U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS) and DFW survey methodologies and appropriate timing to determine presence and locations of any special-status species and their habitat, and avoid, minimize, or compensate for impacts to special-status species in coordination with DFW and USFWS or NMFS.
4-2(d)	Conduct construction monitoring (by a qualified biologist) to ensure effectiveness of avoidance and minimization measures and implement remedial measures if necessary.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
4-2(e)	Where impacts to special-status species are unavoidable, compensate for impacts by restoring or preserving in-kind suitable habitat on-site, or off-site, or by purchasing restoration or preservation credits (in compliance with the California Endangered Species Act (CESA) and federal Endangered Species Act (ESA) for affected State- or federally-listed species from a mitigation bank that serves the project site and that is approved by the appropriate agencies, in consultation with the appropriate regulatory agencies (at ratios that offset the temporary loss of habitat value).
4-3(a)	Select project site(s) that would avoid a substantial reduction in fish and wildlife species habitat, which may include foraging, sheltering, migration, and breeding habitat.
4-3(b)	To the maximum extent practicable, design project elements to avoid effects that would lead to a substantial loss of fish and wildlife habitat.
4-3(c)	Replace, restore, or enhance habitats for fish and wildlife species that would be lost.
4-3(d)	Where substantial loss of habitat for fish and wildlife species is unavoidable, compensate for impacts by preserving in-kind habitat.
4-4(a)	Protect migratory pathways for migratory aquatic species such as salmon, steelhead, and sturgeon including those that use Delta tributaries and floodplain habitats by screening new diversions, and screening existing diversions and removing existing migration barriers if the specific proposed project/activity (e.g., increased intake volume through an existing unscreened diversion, new diversion, new barrier, new barrier near an existing unscreened diversion, etc.) exacerbates the negative effect on migratory aquatic species caused by the existing barrier or unscreened diversion.
4-4(b)	Avoid ~~or minimize~~ alteration of flow patterns and water quality effects that could disrupt migratory cues for migratory aquatic species by implementing water management measures and establishing programs to reduce water pollution. If avoidance is not feasible, implement the following minimization measures: i. Implement Mitigation Measure 3-1. ii. Prior to dewatering, a qualified biologist shall conduct fish rescues within any cofferdammed areas. 1. A dewatering and fish rescue plan shall be developed prior to fish rescues and approved by appropriate State federal agencies. 2. Pump intakes shall be fitted with agency-approved fish screens to prevent fish from becoming entrained. iii. If nighttime work is necessary, lights on work areas shall be shielded and focused to minimize lighting of fish habitat. iv. Hydroacoustic monitoring of underwater sound levels shall be performed to ensure compliance with established thresholds and minimize harm to special-status fish species. v. Monitoring of turbidity levels during constructions shall be conducted and a monitoring plan will be developed in consultation with the applicable Regional Water Board.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
Biological Resources – Terrestrial	
4-1(a) through (c) and (e)	Refer to Mitigation Measure 4-1(a) through (c) and (e), as described in Biological Resources-Aquatics
4-1(d)	If a project may result in conversion of oak woodlands, as identified in section 21083.4 of the Public Resources Code, one or more of the following mitigation measures shall be implemented: i. Conserve oak woodlands, through the use of conservation easements, at a target ratio of 1:1. ii. Plant an appropriate number of trees, as determined by the lead agency in consultation with CDFW, including maintaining plantings and replacing dead or diseased trees. iii. Contribute funds to the Oak Woodlands Conservation Fund, as established under Fish & Game Code section 1363 subdivision (a)~~of section 1363 of the Fish and Game Code~~.
4-2(f)	Select project site(s) that would avoid habitats of special-status plant species.
4-2(g)	To the maximum extent practicable, design project elements to avoid effects that would lead to a substantial loss of special-status plant species.
4-2(h)	Conduct preconstruction surveys (by a qualified botanist) to evaluate the potential for special-status plant habitat at the project site, should suitable habitat for any special-status plant species be identified. Protocol-level surveys shall be conducted in accordance with the latest edition of DFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities.*
4-2(i)	Establish buffers around special-status plant species ~~habitats to exclude effects~~ in advance of construction activities. The size of the buffer shall be in accordance with USFWS and DFW protocols for the applicable special-status plant species. ~~If nest tree removal is necessary, remove the tree only after the nest is no longer active, as determined by a qualified biologist.~~ The buffer shall be demarcated with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., walkway). The size and shape of the buffer may be adjusted if a qualified botanist determines that such a smaller buffer is adequate.
4-2(j)	Conduct construction monitoring (by qualified ~~biologist~~ botanist) to ensure effectiveness of avoidance and minimization measures and implement remedial measures if necessary.
4-2(k)	When appropriate, relocate special-status plant ~~and animal species or their habitats~~ from project sites following USFWS, ~~NMFS~~ CNPS, and DFW protocols ~~(e.g., for special-status plant species or elderberry shrubs)~~.
4-2(l)	If relocation of the special-status plant species cannot be achieved, compensate for impacts through purchase of mitigation credits or placement of a conservation easement on property with known populations of the affected species.
4-3(a) and (b)	Refer to Mitigation Measure 4-3(a) and (b), as described in Biological Resources-Aquatics
4-3(e)	Schedule construction to avoid special-status species' breeding or migration locations during the seasons or active periods that these activities occur.
4-3(f)	Conduct preconstruction surveys (by a qualified biologist) for special-status species in accordance with USFWS and DFW survey methodologies and appropriate timing to determine presence and locations of any special-status species and their habitat, and avoid, minimize, or compensate for impacts to special-status species in coordination with DFW and USFWS.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

4-3(g)	Establish buffers around special-status species habitats to exclude effects of construction activities. The size of the buffer shall be in accordance with USFWS and DFW protocols for the applicable special-status species. If nest tree removal is necessary, remove the tree only after the nest is no longer active, as determined by a qualified biologist.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
4-3(h)	Conduct construction monitoring (by qualified biologist) to ensure effectiveness of avoidance and minimization measures and implement remedial measures if necessary.
4-3(i)	When appropriate, relocate special-status plant and animal species or their habitats from project sites following USFWS and DFW protocols (e.g., for elderberry shrubs).
4-3(j)	Where impacts to special-status species are unavoidable, compensate for impacts by restoring or preserving in-kind suitable habitat on-site, or off-site, or by purchasing restoration or preservation credits (in compliance with the California Endangered Species Act (CESA) and federal Endangered Species Act (ESA) for affected State- or federally listed species from a mitigation bank that serves the project site and that is approved by the appropriate agencies, in consultation with the appropriate regulatory agencies (at ratios that offset the temporary loss of habitat value).
4-4(c)	Protect habitat for migratory waterfowl and shorebirds by expanding existing wildlife refuges and management areas, and establishing new ones, in or near wetland areas used by migratory waterfowl and shorebirds. Manage these areas by establishing suitable vegetation, hydrology, and other habitat components to optimize the use by migratory waterfowl and shorebirds.
4-4(d)	Protect, restore, and enhance connectivity of habitats, including but not limited to wetland and riparian habitats that function as migration corridors for wildlife species (similar to how it has been implemented through programs such as the California Essential Habitat Connectivity Project). Acquire areas with potential to increase connectivity between existing habitats, protect these areas in perpetuity through the acquisition of conservation easements, deed restrictions, or similar tools, and restore the habitat for wildlife species in these areas. As an alternative, participate in existing mitigation banks or HCPs that provide suitable habitat for affected wildlife species. Habitat restoration might be accomplished by establishing suitable hydrology or other physical conditions for desirable vegetation, planting desirable vegetation, fencing and managing grazing, and other means.
4-5(a)	Prior to construction, evaluate impacts to trees or other biological resources protected by local policies and ordinances, and abide by any permit requirements associated with these policies and ordinances.
Cultural Resources	
10-1(a)	California Native American tribes with which the lead agency is required to consult with under AB52 that are on the contact list of traditionally or culturally affiliated tribes of the Delta maintained by the California Native American Heritage Commission (pursuant to Pub. Res. Code § 21073), and have requested to be notified of all projects (pursuant to Pub. Res. Code 21080.3.1) shall be coordinated with early in the process during the design phase of ecosystem restoration projects. This coordination is intended to improve design, project resiliency, and respect, as well as enhance cultural values, and integrate traditional and local ecological knowledge.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
10-1(b)	Prior to project construction, a qualified archaeologist, defined as one meeting the U.S. Secretary of the Interior's Professional Qualifications Standards for Archeology and with expertise in California archaeology, in coordination with California Native American tribes traditionally and culturally affiliated with the Delta, shall develop a Cultural Resources/ Tribal Cultural Resources Awareness and Sensitivity Training Program for all construction and field workers involved in project-related ground-disturbing activities. The program shall include a presentation that covers, at a minimum, the types of cultural resources and tribal cultural resources common to the area, regulatory protections for such resources, and the protocol for unanticipated discovery of archaeological resources and potential tribal cultural resources. An archaeologist and representative from a culturally affiliated California Native American Tribe shall provide an in-person or, if in-person is not feasible, video-conference-based training presenting the Cultural Resources/Tribal Cultural Resources Awareness and Sensitivity Training Program to all personnel working in areas of project ground-disturbing activities prior to working in these areas. Written materials associated with the Program shall be provided to project personnel, as appropriate.
10-1(c)	Before any ground-disturbing activities begin, conduct intensive archaeological surveys, ~~including~~ and subsurface investigations if warranted, to identify the locations, extent, and integrity of presently undocumented archaeological, tribal cultural, and landscape resources that may be located in areas of potential disturbance. Conduct tribal consultation to identify and evaluate the presence and significance of tribal cultural resources and landscapes. Surveys and subsurface investigations where tribes have identified tribal cultural resources shall include tribal monitors in addition to archaeologists. In addition, if ground-disturbing activities are planned for an area where a previously documented prehistoric archaeological site has been recorded but no longer may be visible on the ground surface, conduct test excavations to determine whether intact archaeological subsurface deposits are present. Also conduct surveys at the project site for the possible presence of cultural landscapes and traditional cultural properties.
10-1(d)	If potentially ~~California Register of Historical Resources (~~CRHR~~)~~-eligible prehistoric or historic-era archeological, tribal cultural, or landscape resources are discovered during the survey phase, additional investigations may be necessary. These investigations ~~could~~ should include, but not necessarily be limited to, measures providing resource avoidance, archival research, archaeological testing and CRHR eligibility evaluations, and contiguous excavation unit data recovery. In addition, upon discovery of potentially CRHR- eligible prehistoric resources, coordinate with the NAHC and the Native American community to provide for an opportunity for suitable individuals and tribal organizations~~, including federally-recognized tribes,~~ to comment on the proposed research.
10-1(e)	If CRHR-eligible archaeological resources, tribal cultural resources, or cultural landscapes/properties are present and would be physically impacted, specific strategies to avoid or protect these resources should be implemented if feasible. These measures may include: i. Planning construction to avoid the sensitive sites ii. Deeding the sensitive sites into permanent conservation easements iii. Capping or covering archaeological sites iv. Planning parks, green space, or other open space to incorporate the sensitive sites ~~• Granting of cultural easements to Native American tribes for the purpose of protecting cultural resource properties~~

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

10-1(f)	If federal agencies are participants in the ~~activity~~ project and Section 106 of the National Historic Preservation Act applies, conduct formal consultation with the State Historic Preservation Officer~~, Tribal Historic Preservation Office (THPO) or Tribal Administrator for tribes that do not have a THPO,~~ and the California Native American ~~community~~ tribes. Potential adverse effects on cultural resources recommended as eligible for listing in the ~~National Register of Historic Places (~~NRHP~~)~~ will be resolved through the development of a memorandum of agreement and/or a program-level agreement.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
10-1(g)	As part of efforts to identify, evaluate, and consider cultural resources, including prehistoric sites, Native American human remains, and traditional cultural properties, California Native ~~Americans~~ American tribes shall be consulted. The California Native American Heritage Commission (NAHC) ~~would~~ shall be asked to provide a list of contacts for Native ~~Americans~~ American tribes who should be contacted concerning an identified future project. The NAHC ~~would~~ shall also be asked to search its Sacred Lands Files. California Native ~~Americans~~ American tribes identified by the NAHC ~~would~~ shall be contacted by letter to ~~request information~~ consult on the identification, evaluation, and treatment of tribal cultural resources of importance. ~~They also would be asked to identify concerns they have about the project. THPOs and Tribal Administrators of federally recognized tribes would be contacted and asked to search their files and provide information necessary for the identification and consideration of cultural resources.~~
10-1(h)	Before any project-specific ground-disturbing activities begin, conduct investigations to identify submerged cultural resources. These investigations would include review of State Lands Commission (SLC) Shipwrecks Database and other SLC files, and remote sensing surveys conducted under the direction of a qualified maritime archaeologist. Title to all abandoned shipwrecks, archaeological sites, and historic cultural resources on or in the tide and submerged lands of California is vested in the State and under the jurisdiction of the SLC. If avoidance of significant submerged cultural resources is not feasible, a permit from SLC may be necessary to conduct resource documentation and possible salvage of artifacts, ship components, and other data and objects.
10-1(i)	If potentially CRHR-eligible Native American or historic-era archaeological resources, including submerged or buried shipwrecks or other maritime-related cultural resources, are discovered during construction activities, work ~~should~~ shall halt within 100 feet of the discovery until the find can be evaluated by a qualified archaeologist or maritime archaeologist as appropriate. A qualified archaeologist, which is defined as a person meeting the U.S. Secretary of the Interior's Professional Qualifications Standards for Archeology and with expertise in California archaeology, shall be immediately informed of the discovery. In addition, SLC shall be consulted. The qualified archaeologist shall inspect the discovery. If the qualified archeologist determines that the resource is or is potentially Native American in origin, culturally affiliated California Native American Tribes shall be contracted to assess the find and determine whether it is potentially a tribal cultural resource.
10-2(a)	~~The identification, evaluation, and determination of disposition of Native American human remains shall be conducted in accordance with Native American consultation procedures described below and in Mitigation Measure 10-1. The location, content, and character of Native American human remains are confidential and shall not be released to the public. Native American human remains and associated funerary objects shall be treated with the utmost respect and in accordance with the direction of the identified Most Likely Descendant (MLD).~~ In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, the contractor shall immediately halt all ground disturbing activities within 100 feet of the burial and notify the county coroner to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (Health & Saf. Code section 7050.5[b]). If the coroner determines that the remains are those of a Native American, the coroner must contact the NAHC by telephone within 24 hours of making that determination (Health & Saf. Code section 7050[c]). Native American human remains are potentially considered Tribal Cultural Resources, and in the event of their discovery, Mitigation Measure 10-1(b) through (e) shall apply as appropriate.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

10-2(b)	~~If human remains are encountered during ground-disturbing construction activities, stop work that would potentially affect the find and contact the county coroner.~~ ~~In accordance with the California Health and Safety Code and the California Native American Grave Protection and Repatriation Act (CNAGPRA), if human remains are uncovered during ground-disturbing activities, the contractor shall immediately halt potentially damaging excavation in the area of the burial and notify the county coroner, a professional archaeologist to determine the nature of the remains, and a representative of California Indian tribes. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (Health and Safety Code section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by telephone within 24 hours of making that determination (Health and Safety Code section 7050[c]).~~ Following the coroner's findings, the property owner, contractor or project proponent, an archaeologist, and the NAHC-designated Most Likely Descendent (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in ~~California~~ Public Resources Code section 5097.9. The location, content, and character of Native American human remains are confidential and shall not be released to the public. Native American human remains and associated funerary objects shall be treated with the utmost respect and in accordance with the direction of the identified MLD.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
10-2(c)	Upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity (according to generally accepted cultural or archaeological standards and practices) is not damaged or disturbed by further development activity until consultation with the MLD has taken place. The MLD shall have 48 hours to complete a site inspection and make recommendations after being granted access to the site.
10-2(d)	A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment, may be discussed. ~~California~~ Public Resources Code section 5097.9 suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. The following is a list of site protection measures that the landowner shall employ: i. Record the site with the NAHC or the appropriate information center. ii. Use an open space or conservation zoning designation or easement. iii. Record a document with the county in which the property is located.
10-2(e)	The landowner or their authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD or if the MLD fails to make a recommendation within 48 hours after being granted access to the site. The landowner or their authorized representative may also reinter the remains in a location not subject to further disturbance if they reject the recommendation of the MLD and mediation by the NAHC fails to provide measures acceptable to the landowner.
10-2(f)	If the discovery of human remains occurs on lands owned and administered by a federal agency, the provisions of the Native American Graves Protection and Repatriation Act (NAGPRA) will apply. NAGPRA requires federal agencies and certain recipients of federal funds to document Native American human remains and cultural items in their collections, notify native groups of their holdings, and provide an opportunity for repatriation of these materials. The act also requires planning for dealing with potential future collections of Native American human remains and associated funerary objects, sacred objects, and objects of cultural patrimony.
10-3(a)	Inventory and evaluate historic-era buildings, structures, ~~and~~ linear features, and cultural landscapes. Conduct cultural resources studies to determine whether historic-era buildings, structures, ~~and~~ linear features, and cultural landscapes in the project area are eligible for listing in the CRHR.
10-3(b)	Before construction activities begin, an inventory and evaluation of historic-era resources in the project area ~~should~~ shall be conducted under the direct supervision of an architectural historian meeting the Secretary of the Interior's Professional Qualification Standards for history or architectural history. The documentation should include conducting an intensive field survey, background research on the history of the project area, and property-specific research. Based on this research, the eligibility of historic-era resources located in the project area should be evaluated by the architectural historian using criteria for listing in the CRHR. The resources would be recorded on DPR 523 forms and the findings documented in a technical report. If federal funding or approval is required, then the project implementation agencies would comply with Section 106 of the National Historic Preservation Act.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
10-3(c)	Identify measures to avoid significant historic resources. Avoidance through project redesign is the preferred mitigation measure for mitigating potential effects on historic-era buildings, structures, linear features, and archaeological sites that appear to be eligible for listing in the NRHP or CRHR.
10-3(d)	Record photographic and written documentation to Historic American Building Survey (HABS)/Historic American Engineering Record (HAER) standards. If avoidance of a significant historic resource is not feasible, the lead agency should ensure that HABS/HAER documentation is completed. Through HABS/HAER documentation, a qualified architectural historian and qualified photographer shall formally document the historic resource through large-format photography, measured drawings, written architectural descriptions, and historical narratives. The completed documentation should be submitted to the Library of Congress.
10-3(e)	~~Conform to the~~ Comply with the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings in the event of relocation of a historic resource. If any historic buildings, structures, or levees are relocated or altered, the lead agency ~~should~~ shall ensure that any changes to significant buildings or structures conform to the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. Implementation of this measure can mitigate potential changes to significant architectural resources.
10-3(f)	~~Conform to~~ Comply with the Secretary of the Interior's Guidance for the Treatment of Cultural Landscapes to preserve landscapes' historic form, features, and details that have evolved over time.
~~10-4~~	~~Mitigation Measures 10-1 and 10-3 will also mitigate Impact 10-4, Disturbance or Destruction of Cultural Landscapes and Traditional Cultural Properties (from the 2013 Delta Plan Program EIR).~~
Geology ~~and~~, Soils and Mineral Resources	
11-1(a)	For construction that occurs in an Alquist-Priolo Special Studies Zone, a determination must be made by a licensed practitioner (California Certified Engineering Geologist) that no fault traces are present within the building footprint of any structure intended for human occupancy. The standard of care for such determinations includes direct examination of potentially affected subsurface materials (soil and/or bedrock) by logging of subsurface trenches. Uncertainties regarding the exact locations of future ground ruptures associated with such determinations generally are resolved by providing a minimum setback of 50 feet from any known surface trace of an active fault. ~~For critical structures, such as hospitals, dams, and emergency facilities, more stringent mitigation measures are required, including but not limited to greater structural setbacks and heavier reinforcement against strong ground motion, in compliance not only with California regulations but in many cases in compliance with additional Federal regulations.~~
11-1(b)	Lead agencies shall ensure that geotechnical design recommendations are included in the design of facilities and construction specifications to minimize the potential impacts from seismic events and the presence of adverse soil conditions. Recommended measures to address adverse conditions shall conform to applicable design codes, guidelines, and standards.
11-2(a)	Require adherence, at minimum, to the precepts of the current approved version of the International Building Code (IBC). Included in the IBC are measures for mitigation of the impacts of strong ground motion on constructed works. ~~In addition to the California-required conformance with the IBC, for critical structures, such as dams (including levees), hospitals, and emergency facilities, additional construction requirements are codified in federal statutes and the regulations of various federal agencies. Lead agencies will, by force of law, require conformance with these codified mitigation measures.~~

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

11-3(a)	For projects that would result in significant or potentially significant grading operations, a geotechnical investigation shall be performed and a geotechnical report prepared. The geotechnical report shall include a quantitative analysis to determine whether excavation or fill placement would result in a potential for damage due to soil subsidence during and/or after construction. Project designs shall incorporate measures to reduce the potential damage to an insignificant level, including but not limited to removal and recompaction of existing soils susceptible to subsidence, ground improvement (such as densification by compaction or grouting, soil cementation), and reinforcement of structural components to resist deformation due to subsidence. The site-specific potential for and severity of cyclic seismic loading shall be analyzed in the assessment of subsidence for specific projects.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
11-3(b)	A geotechnical investigation shall be performed by an appropriately licensed professional engineer and/or geologist to determine the presence and thickness of potentially liquefiable sands that could result in loss of bearing value during seismic shaking events. Project designs shall incorporate measures to mitigate the potential damage to an insignificant level, including but not limited to ground improvement (such as grouting or soil cementation), surcharge loading by placement of fill, excavation, soil mixing with non-liquefiable finer-grained materials and replacement of liquefiable materials at shallow depths, and reinforcement of structural components to resist deformation due to liquefaction. An analysis of site-specific probable and credible seismic acceleration values, in accordance with current applicable standards of care, shall be performed to provide for suitable project design.
11-3(c)	For projects that would result in construction of wells intended for groundwater extraction, a hydrogeological/geotechnical investigation shall be performed in accordance with the current standards of care for such work by an appropriate licensed professional engineer or geologist to identify and quantify the potential for groundwater extraction-induced subsidence. The study shall include an analysis of existing conditions and modeling of future conditions to assess the potential for aquifer compaction/consolidation.
11-3(d)	For projects that would result in construction of surface reservoirs and canals, a hydrogeological/geotechnical investigation shall be performed by a licensed professional engineer or geologist to identify and quantify the potential for seeps and springs to develop mitigation measures. Mitigation of such seepage could include, without limitation, additives to concrete that reduce its permeability, construction of impervious liner systems, and design and construction of subdrainage (passive control) or dewatering systems (active control). Geotechnical investigations and preparation of geotechnical reports shall be performed in the responsible care of California licensed geotechnical professionals including professional civil engineers, certified geotechnical engineers, professional geologists, certified engineering geologists, and certified hydrogeologists, all of whom should be practicing within the current standards of care for such work.
11-4(a)	Any covered action that would have significant soil erosion and topsoil loss impacts ~~(Impact 11-4)~~ shall incorporate specific measures for future projects that would expand the use of BMPs or optional erosion control measures listed in the stormwater pollution prevention plan (SWPPPs). The SWPPP shall identify an effective combination of BMPs to reduce erosion during construction and to prevent erosion during operation. Examples of typical BMPs include: i. Erosion control measures such as silt fencing, sand-bags, straw bales and mats, and rice straw wattles shall be placed to reduce erosion and capture sediment. Straw used for erosion control shall be new cereal grain straw derived from rice, wheat, or barley; free of mold and noxious weed seed; and neither derived from dry-farmed crops nor previously used for stable bedding. Clearance shall be obtained from the County Agricultural Commissioner before straw obtained from outside the county is delivered to the work site. Monitoring requirements of the newly revised General Construction Permit shall be implemented, and more effective BMPs shall be identified and installed if runoff samples indicate excessive turbidity.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
11-4(a) (contd.)	ii. During construction activities, topsoil shall be removed, stockpiled, and saved for reapplication following completion of construction. The top 6 inches shall be salvaged and reapplied to a comparable thickness. Soil material shall be placed in a manner that minimizes compaction and promotes plant reestablishment. iii. If catch basins are used for sediment capture, the site shall be graded to ensure stormwater runoff flows into the basins, and basins shall be designed for the appropriate storm interval as provided in the General Construction Permit. iv. Temporary work areas shall be surfaced with a compacted layer of well-graded gravel. They may be covered with a thin asphalt binder. Where expansive or compressible soils are present in temporary work areas, construction trailers shall be supported with concrete pads or footings. v. Dust control shall conform to all federal, State, and local requirements and may include use of water trucks, street sweepers, or other methods described in the SWPPP. vi. Spoils shall be placed in 12-inch-thick loose lifts and compacted to reduce erosion and minimize future subsidence. Placement of peat spoils shall be on agricultural land where possible. Following construction, spoils sites shall be restored to avoid erosion.
11-5(a)	In areas where expansive clays exist, a hydrogeological/geotechnical investigation shall be performed by a licensed professional engineer or geologist to identify and quantify the potential for expansion, particularly differential expansion of clayey soils due to leakage and saturation beneath new improvements. Measures could include, but are not limited to removal and recompaction of problematic expansive soils, soil stabilization, and/or reinforcement of constructed improvements to resist deformation due to expansion of subsurface soils.
11-6(a)	For projects that would result in construction of canals, storage reservoirs, and other surface impoundments, project design shall provide for protection from leakage to the subsurface. Measures could include, but are not limited to rendering concrete less permeable by specifying concrete additives such as bentonite, design of impermeable liner systems, design of leakage collection and recovery systems, and construction of impermeable subsurface cutoff walls.
11-6(b)	For ecosystem restoration projects that might cause subsurface seepage of nuisance water onto adjacent lands: i. Perform seepage monitoring studies by measuring the level of shallow groundwater in the adjacent soils, to evaluate the baseline conditions. Continue monitoring for seepage during and after the project implementation. ii. Develop a seepage monitoring plan if subsurface seepage constitutes nuisance water to the adjacent land. iii. Implement seepage control measures if adjacent land is not useable, such as installing subsurface agricultural drainage systems to avoid raising water levels into crop root zones. Cutoff walls and pumping wells can also be used to mitigate for the occurrence of subsurface nuisance water.
11-7(a)	For projects that would result in construction of levees, surface impoundments, and other fill embankments, project design shall incorporate fill placement in accordance with local and State regulations and in accordance with the prevailing standards of care for such work. Measures could include, but are not limited to blending of soils most susceptible to landsliding with soils having higher cohesion characteristics, installation of slope stabilization measures, designing top-of-slope berms or v-ditches, terrace drains and other surface runoff control measures, and designing slopes at lower inclinations.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
~~11-8~~	~~A geotechnical investigation shall be performed and a geotechnical report prepared. The geotechnical report shall include a quantitative analysis to determine whether on-site soils would be suitable for an on-site wastewater treatment system. If it is determined that the soil could not support a conventional on-site treatment system, non- conventional systems shall be analyzed. Potential alternative systems include (SWRCB, 2011, Onsite Wastewater Treatment System Scoping Document. April 4, 2011. Site accessed September 1, 2011. http://www.swrcb.ca.gov/water_issues/programs/owts/index.shtml):~~ ~~• Containment systems that do not generate waste~~ ~~• Anoxic and anaerobic systems~~ ~~• Attached and suspended growth aerobic treatment systems~~ ~~• Natural treatment systems~~ ~~• Disinfection systems~~ ~~• Engineered-fill leach fields~~ ~~• Monitoring control systems~~
11-9(a)	For projects that would result in significant or potentially significant risk to structures due to the presence of highly organic soils, lead agencies shall require geotechnical evaluation prior to construction to identify measures to mitigate organic soils. The following measures may be considered: i. Over-excavation and import of suitable fill material ii. Structural reinforcement of constructed works to resist deformation iii. Construction of structural supports below the depth of highly organic soils into materials with suitable bearing strength
~~Paleontological Resources~~	
12-1(a)	During the project-level analysis, a Paleontological Resources Monitoring and Recovery Plan (PRMRP) shall be developed and implemented for all actions. The PRMRP shall include protocols for paleontological resources monitoring in those areas where sediment with moderate to high paleontological sensitivity would be affected by construction-related excavations. The PRMRP also shall set forth the following procedures: i. Confirming the paleontological sensitivity (high, moderate, or low) of the areas to be impacted through review of project-level geological and geotechnical data ii. Determining the qualifications of the paleontologist as established by the Society of Vertebrate Paleontology. ~~(SVP) (SVP, 1991. Standard Measures for assessment and mitigation of adverse impacts to nonrenewable paleontological resources. Society of Vertebrate Paleontology News Bulletin 152:2 – 5; SVP, 1995. Assessment and mitigation of adverse impacts to nonrenewable paleontological resources: Standard guidelines. Society of Vertebrate Paleontology News Bulletin 163: 22 – 27; SVP, 1996. Conditions of Receivership for Paleontologic Salvage Collections. Society of Vertebrate Paleontology News Bulletin. Vol. 166, pp. 31 – 32)~~ iii. The assessment and recovery of discovered fossil resources iv. The preparation and curation of fossil finds

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

12-1(b)	The PRMRP ~~would~~shall provide guidelines for the establishment of a yearly or biannual monitoring program led by a qualified paleontologist to determine the extent of fossiliferous sediment being exposed and affected by erosion, and determine whether paleontological resources are being lost. If loss of scientifically significant paleontological resources can be documented, then a recovery program should be implemented.
Mineral Resources	
13-1(a)	Ensure land use ~~compatibility between existing mineral resource extraction activities and projects, activities or actions that may be implemented as the result of the Proposed Project.~~changes in designated mineral resource extraction areas are compatible with and do not prohibit existing mineral resource extraction activities.
13-1(b)	Maintain adequate buffers between future projects and designated MRZ-2 sectors.
13-1(c)	Explore opportunities to classify and designate new MRZ-2 sectors (e.g., in existing MRZ-3 sectors) to ensure that important mineral resources are conserved and continue to be available for future construction needs.
~~13-1~~	~~Ensure future land use changes within designated mineral resource extraction areas recognize mineral resource extraction as a compatible use.~~
~~13-1~~	~~Limit use of construction aggregate to local sources with sufficient capacity to meet both project and future local development needs, to the extent possible.~~
13-1(d)	Use recycled aggregate, where possible, to decrease the demand for new aggregate.
13-2(a)	Ensure access is maintained to existing, active mineral resource extraction sites both during and after project construction.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
13-2(b)	Implement recommendations identified in the ~~Division of Oil, Gas, and Geothermal Resources of the State Department of Conservation (DOGGR) construction site well review program~~ Geologic Energy Management Division of the State Department of Conservation (CalGEM) construction site well review program (DOC, 2007. Well Review Program: Introduction and Application), such as: i. For all future projects, identify all existing natural gas well sites and oil production facilities within or in close proximity to the project area. ii. Identify any oil and natural gas well within 100 feet of any navigable body of water or watercourse perennially covered by water or any officially recognized wildlife preserve as a "critical well" (California Code of Regulations, Title 14, Chapter 4, Article 2, Section 1720(a)(2)(B) and (C)). The State Department of Conservation (DOC) requires that a "critical well" include more stringent blowout prevention equipment than non-critical wells based on pressure testing and rating. iii. Identify safety measures to prevent unauthorized access to equipment. iv. Include safety shut-down devices on oil and natural gas wells and other equipment, as appropriate. v. Notify DOC of new oil and natural gas wells or changes in oil and natural gas well operations or physical conditions, receive written approval from DOC of the changes, and receive written notification of DOC's inspection of new or changed equipment. The approvals will be primarily related to the ability to: (1) protect all subsurface hydrocarbons and fresh water, (2) protect the environment, (3) use adequate blowout prevention equipment, and (4) use approved drilling and cementing techniques. vi. If any plugged/abandoned or unrecorded oil and natural gas wells are uncovered during construction, the DOC should be notified, the wells should undergo remedial well plugging actions, and no structures should be constructed over the abandoned oil and natural gas wells. vii. If oil and natural gas wells are under the jurisdiction or a lease from the California State Lands Commission, project proponents should provide additional plans and environmental documentation as required prior to modification of the oil or natural gas wells.
Hazards and Hazardous Materials	
14-1(a)	Refueling and maintenance of vehicles and equipment ~~to~~shall occur only in designated areas that are either bermed or covered with concrete, asphalt, or other impervious surfaces to control potential spills.
14-1(b)	Refueling of vehicles and equipment ~~to~~shall occur only when employees are present.
14-1(c)	Vehicle and equipment service and maintenance shall be conducted only by authorized personnel.
14-1(d)	Refueling shall be conducted only with approved pumps, hoses, and nozzles.
14-1(e)	Catch-pans shall be placed under equipment to catch potential spills during servicing.
14-1(f)	All disconnected hoses shall be placed in containers to collect residual fuel from the hoses.
14-1(g)	Vehicle engines shall be shut down during refueling. Smoking shall be limited to designated areas that have been selected to reduce the risk of wildfire ignition (e.g., paved areas).
14-1(h)	No smoking, open flames, or welding shall be allowed in refueling or service areas.
14-1(i)	Refueling shall be performed away from bodies of water to prevent contamination of water in the event of a leak or spill.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
14-1(j)	When refueling is completed, the service truck ~~to~~shall leave the project site.
14-1(k)	Service trucks shall be provided with fire extinguishers and spill containment equipment, such as absorbents.
14-1(l)	Should a spill contaminate soil, the soil shall be placed in containers and disposed of as appropriate. All containers used to store hazardous materials ~~to~~shall be inspected at least once per week for signs of leaking or failure. All maintenance and refueling areas ~~to~~shall be inspected monthly. Results of inspections ~~to~~shall be recorded in a logbook maintained onsite.
14-1(m)	~~Provision of a~~An automatic sprinkler system ~~for~~shall be installed in indoor hazardous material storage areas.
14-1(n)	~~Provision of a~~An exhaust system ~~for~~shall be installed in indoor hazardous material storage areas.
14-1(o)	~~Separation of i~~Incompatible materials shall be separated by isolating them from each other with a noncombustible partition.
14-1(p)	Implement a ~~Spill~~ spill control in all storage, handling, and dispensing areas.
14-1(q)	Separate secondary containment shall be provided for each chemical storage system. ~~The secondary~~ Secondary containment is required to hold the entire contents of the tank plus the volume of water for the fire suppression system that could be used for fire protection for a period of 20 minutes in the event of a catastrophic spill.
14-1(r)	In the unlikely event of a spill, the spill shall be reported to the appropriate regulatory agencies and contaminated soil shall be cleaned, treated, and/or removed in accordance with regulatory requirements. Small spills shall be contained and cleaned up immediately by trained, onsite personnel. Larger spills shall be reported via emergency phone numbers to obtain help from offsite containment and cleanup crews. All personnel working on the project during the construction phase shall be trained in handling hazardous materials and the dangers associated with hazardous materials. An onsite health and safety person shall be designated to implement health and safety guidelines and to contact emergency response personnel and the local hospital, if necessary.
14-1(s)	If there is a large spill from a service or refueling truck, contaminated soil shall be placed into barrels or trucks by service personnel for offsite disposal at an appropriate facility in accordance with the law. If a spill involves hazardous materials quantities equal to or greater than the specific Reportable Quantities as required by regulatory agencies (42 gallons for petroleum products), all federal, State, and local reporting requirements shall be followed. In the event of a fire or injury, the local fire department shall be called.
14-2(a)	To reduce the risk due to increased exposure to materials that could be released during soil disturbance, worker training programs and breathing apparatus shall be provided. Monitoring programs shall be implemented as areas are excavated to determine the potential for exposure to soil organisms or other constituents.
14-2(b)	To reduce risk to the community due to increased exposure to materials that could be released during soil disturbance, public outreach programs shall be conducted to educate the public of the types of construction activities and risks that could occur. In areas near extreme hazards, such as construction in areas with identified petroleum-product pipelines or soils with high concentrations of petroleum products, warning sirens shall be used at construction sites to immediately notify workers and residents. Emergency procedures shall be included in the education and outreach programs for the workers and the community.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
14-3(a)	Freshwater habitat management activities ~~to~~shall include water-control-structure management, vegetation management, mosquito predator management, drainage improvements, and/or other best management practices, ~~and coordination with the DFW and local mosquito and vector control agencies regarding these strategies and specific techniques to help minimize mosquito production.~~ to be carried out by lead agencies or entities with designated management responsibility. These activities will be carried out in coordination with the DFW and local mosquito and vector control agencies regarding these strategies and specific techniques to help minimize mosquito production.
14-3(b)	~~Maintenance of permanent~~Permanent ponds ~~that increase~~ shall be maintained in a manner that both increases the diversity of waterfowl ~~yet~~ and decreases the introduction of vectors through constant circulation of water, vegetation control, and periodic draining of ponds. These activities will be carried out by lead agencies or entities with designated management responsibility.
14-3(c)	Tidal management ~~focused on~~ activities shall include actions to minimize mosquito problems arising from the residual tidal and floodwaters remaining in depressions and cracked ground ~~(Solano County Mosquito Abatement District (SCMAD), 2011. Site accessed February 6, 2011. http://www.solanomoquito.com.)~~. These activities will be carried out by lead agencies or entities with designated management responsibility.
14-3(d)	Lead agencies or entities with designated management responsibility shall avoid ~~Avoidance of~~ ponding in tidal marsh habitat or in areas within the waterside of setback levees. Lead agencies or entities with designated management responsibility will ensure ~~Design~~design of ecosystem restoration areas, waterfowl hunting areas, setback levees, parks, canals, and surface water storage facilities ~~to~~minimize standing water, or use other methods such as mosquito fish to reduce mosquito breeding.
14-4(a)	Avoid creating hazardous wildlife attractants within a distance of 10,000 feet of an Airport Operations Area.
14-4(b)	Maintain a distance of ~~5 statute~~ five miles between the farthest edge of the Airport Operations Area and hazardous wildlife attractants.
14-5(a)	~~Prepare and implement a fire management plan to minimize potential for wildland fires.~~Refer to Mitigation Measure 14-5(a), as described in Wildfire.
17-1(a)	Develop worker training programs to reduce construction and operations risks.
17-1(b)	Develop adequate emergency access routes and equipment for both land and water access, if applicable (such as in the Delta), that provide for adequate response time. If use of an existing emergency access route becomes limited due to new or modified facilities, additional routes or placement of duplicate equipment on each side of the route limitation could be considered if needed to maintain emergency access.
17-1(c)	Develop traffic plans and emergency response plans for construction and operations phases of new facilities that contain plans for maintaining accessibility of evacuation routes.
17-1(d)	Develop all facilities, including parks and ecosystem restoration areas, in accordance with applicable fire codes and regulations, and with adequate fire equipment access routes, occupancy limitations, and fire-protection equipment.
19-3(a)	Coordinate with responsible local agencies to establish adequate emergency routes during construction activities and before existing emergency routes are reclassified to a nonemergency route use.
19-3(b)	Phase construction activities, and use multiple routes to and from offsite locations to minimize the daily amount of traffic on individual roadways, including roadways used as evacuation routes.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

19-3(c)	Post warnings about the potential presence of slow-moving vehicles.
19-3(d)	Use traffic-control personnel when appropriate.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
19-3(e)	Place and maintain barriers, and install traffic-control devices necessary for safety, as specified in Caltrans' Manual of Traffic Controls for Construction and Maintenance Work Zones and in accordance with city and county requirements.
19-3(f)	Notify appropriate emergency service providers of project construction throughout the construction period to ensure that emergency access through construction areas is maintained.
Hydrology and Water Quality	
3-1(a)	For construction of new facilities, all typical construction mitigation measures shall be required. Typical mitigation measures include the following construction-related Best Management Practices (BMPs): i. Gravel bags, silt fences, etc., shall be placed along the edge of all work areas in order to contain particulates prior to contact with receiving waters. ii. All concrete washing and spoils dumping shall occur in a designated location. iii. Construction stockpiles shall be covered in order to prevent blowoff or runoff during weather events. iv. Severe weather event erosion control materials and devices shall be stored onsite for use as needed. v. Soil stabilization, sediment control, wind erosion control, tracking control, non-storm water management, and waste management/materials pollution control.
3-1(b)	Implementation of ~~Apply~~ other BMPs shall be required as determined necessary by the regulating entity (city, county).
3-1(c)	Any new facility with introduced impervious surfaces shall include stormwater control measures that are consistent with the Regional Water Quality Control Board (RWQCB) National Pollutant Discharge Elimination System (NPDES) municipal stormwater runoff requirements. The stormwater control measures shall be designed and implemented to reduce the discharge of stormwater pollutants to the maximum extent practical. Stormwater controls such as bioretention facilities, flow-through planters, detention basins, vegetative swales, covering pollutant sources, oil/water separators, and retention ponds shall be designed to control stormwater quality to the maximum extent practical.
3-1(e)	~~Mitigate sediment contaminant bioavailability impacts through (a) the exclusion of bird use or nesting areas from areas that may have excessive selenium or mercury; (b) minimization of methylmercury production; and/or (c) maximization of contaminant degradation before discharge of water, as appropriate.~~ For any construction activities with the potential to cause in-river sediment disturbance associated with construction: i. Apply BMPs to avoid or reduce temporary increases in suspended sediment. These BMPs for in-channel construction and levee disturbance may include, but are not limited to, silt curtains, cofferdams, the use of environmental dredges, erosion control on all inward levee slopes, and various levee-stabilization techniques, including revegetation. As required by project permits, ~~All~~ all construction sites ~~will~~ shall include preparation and implementation of a Storm Water Pollution Prevention Plan and BMPs designed to capture spills and prevent erosion to the waterbody. Turbidity shall be monitored up- and downstream of construction sites as a measure of impact. ii. Apply bank stabilization BMPs, as needed, for any in-channel disturbance, such as: 1. Where appropriate, ~~A~~ a 100-foot vegetative or engineered buffer shall be maintained between the construction zone and surface water body.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
3-1(e) (contd.)	2. Native and annual grasses or other vegetative cover shall be established on construction sites immediately upon completion of work causing disturbance, to reduce the potential for erosion close to a waterway or water body. 3. Where ~~Dredging~~ dredging would be particularly prone to the production of re-suspended sediment and contaminants, ~~but~~ potential impacts ~~could~~ shall be reduced~~, but not necessarily fully mitigated~~ through the use of submerged dredge cutter heads, silt curtains, and cofferdams, depending upon the site-specific soil conditions in the channel.
~~3-2~~	~~♦ Prior to construction, a survey should be made of all wells located adjacent to the construction site to determine location and depths of the wells and the groundwater surface. During construction of any project that requires dewatering of groundwater, monitoring wells should be installed adjacent to the groundwater dewatering wells or pumps. If the adjacent groundwater declines in a manner that would adversely affect adjacent wells following implementation of dewatering, the dewatering operations should be halted until the following measures are be implemented:~~ ~~• Install sheet piles to reduce the area influenced by shallow groundwater level declines.~~ ~~• In case sheet piles are not an option and domestic well yields are affected, water supplies shall be trucked in to satisfy the well user's water supply needs.~~ ~~• If sheet piles are not effective and the impact on the well yield is important, such that the trucking in of water is not economically feasible, the affected well shall be deepened. Another option for a well that is deep enough would be to lower the pump bowl such that deepened water can be pumped out of the well. If these two options are not feasible, a new, deeper, replacement well shall be installed for groundwater production.~~
5-1(a)	Prepare and implement a drainage or hydrology and hydraulic study that would assess the need and provide a basis for the design of drainage-related mitigations, such as new onsite drainage systems or new cross drainage facilities. Prepare the study in accordance with applicable standards of Federal Emergency Management Agency (FEMA), USACE, Department of Water Resources (DWR), ~~Central Valley Flood Protection Board~~ (CVFPB~~)~~, as well as the local reclamation districts and flood control agencies and the counties and cities. Design subsequent mitigation measures in accordance with the final study and with the applicable standards of FEMA, USACE, DWR, and CVFPB. The study would identify potential increases in flood risks, including those that may result from new facilities.
5-1(b)	Provide ~~temporary~~ drainage bypass facilities during construction that ~~would~~ reroute drainage around, along, or over the Proposed Project facilities and construction sites. The temporary bypass facilities would be designed in accordance with the results and recommendations of a drainage or hydrologic and hydraulic study and would be in place and fully functional until long-term replacement facilities are completed.
5-1(c)	Provide on-site stormwater detention storage at construction and project facility sites that would reduce project-caused short- or long-term increases in drainage runoff. The storage space placement and capacity would be designed based on the drainage or hydrologic and hydraulic study.
5-1(d)	Based on the results of the drainage or hydrologic and hydraulic study, arrange the length of any stockpiles or other construction features in the direction of the floodplain flow to maximize surface flows under flood flow conditions.
5-1(e)	At in-stream construction sites that might reduce channel capacity, install setback levees or bypass channels to maintain channel capacity and to mitigate hydraulic impacts.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

5-1(f)	Where low channel velocities might result from construction, implement a sediment management program in order to maintain channel capacity.
5-1(g)	Provide cross drainage, replacement drainage paths and facilities, and enlarged flow paths to reroute drainage around, under, or over the Proposed Project facilities and to restore the function of any affected existing drainage or flow paths and facilities.
5-1(h)	Channel modifications for restoration actions shall ~~would~~ be required to be implemented to maintain or improve flood management functions and would be coordinated with the USACE, DWR, CVFPB, and other flood control agencies to assess the desirability and feasibility for channel modifications. To the extent consistent with floodplain land uses and flood control requirements, if applicable, woody riparian vegetation shall ~~would~~ be allowed to naturally establish.
5-1(i)	For areas that would be flooded as a result of the project, or where existing flooding would be increased in magnitude, frequency, or duration, purchase a flowage easement and/or property at the fair-market value.
5-1(j)	Provide a long-term sediment removal program at in-river structures.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
5-1(k)	To mitigate potential impacts of changes in the timing of reservoir releases or the possible combination of river peak flows, use forecasts to implement coordination of operations with existing reservoirs.
5-2(a)	Prepare a drainage or hydrology and hydraulics study that would assess the need and provide a basis for the design of drainage-related mitigations, such as new onsite drainage systems or new cross drainage facilities. Prepare the study in accordance with applicable standards of FEMA, USACE, DWR, CVFPB, as well as the local reclamation districts and flood control agencies and the counties and cities. Design subsequent mitigation measures in accordance with the final study and with the applicable standards of FEMA, USACE, DWR, and CVFPB.
5-2(b)	Provide on-site stormwater detention storage at construction and project facility sites that reduces project--caused, short--and long-term increases in drainage runoff. The storage space ~~would~~ shall be designed based on the drainage or hydrologic and hydraulic study.
5-4(a)	Prepare and implement a drainage or hydrology and hydraulics study ~~that would~~ to assess the need and provide a basis for the design of drainage-related mitigations, such as new onsite drainage systems or new cross drainage facilities. Prepare the study in accordance with applicable standards of FEMA, USACE, DWR, CVFPB, as well as the local reclamation districts and flood control agencies and the counties and cities. Design ~~subsequent~~ recommended drainage-related mitigation ~~measures~~ in accordance with the final study and applicable standards of FEMA, USACE, DWR, and CVFPB.
5-4(b)	Where high channel velocities might result from construction, provide bank protection, such as rip-rap, to protect levees from erosion.
5-4(c)	Where construction results in longer channel wind fetch lengths, install vegetative buffer zones or wave erosion protection on the water-side slope of levees, such as rock or grouted rip-rap, and increase levee freeboard to address higher wind and wave runup.
~~5-4~~	~~Based on the drainage or hydrology and hydraulics study, determine any resulting changes to available evacuation plans or emergency response times.~~
~~5-4~~	~~To reduce emergency response times and public safety risks, raise structures and major roads out of the floodplain.~~
~~5-4~~	~~Provide automated flood warning systems.~~
~~5-4~~	~~Develop and implement area-specific evacuation and emergency response plans.~~
~~5-4~~	~~Considering the results of the hydraulics study noted above, perform a seepage and stability analyses that would assess the need and act as a basis for design of other seepage- and stability-related mitigations, such as cutoff walls, adjacent levees, setback levees, berms, and subdrainage features. Perform the analyses in accordance with applicable standards of FEMA, USACE, and DWR.~~
~~5-4~~	~~Perform research and collect subsurface information in accordance with applicable standards of FEMA, USACE, and DWR and perform settlement analyses that would assess the need for monitoring and potential settlement-related mitigations, such as ground improvement or pre-construction surcharging. Perform the analyses in accordance with applicable standards of USACE.~~
~~5-4~~	~~Perform research and collect subsurface information in accordance with applicable standards of FEMA, USACE, and DWR and perform seismic and liquefaction analyses that would assess the need and provide the basis for design of other seismic-related mitigations, such as ground improvement. Perform the analyses in accordance with applicable standards~~

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

	~~of USACE and American Society of Civil Engineers and Southern California Earthquake Center.~~
~~5-4~~	~~Prepare and implement a plan for periodic maintenance, inspections, repair, and rehabilitation of new water storage and conveyance facilities that could cause flooding upon failure.~~
~~5-4~~	~~Provide redundancy and safety controls and devices on water storage and conveyance facilities (pump stations, canals, and tunnels) to protect against facility failure and subsequent flooding.~~
~~5-4~~	~~To limit flooding from the unlikely event of a conveyance facility failure, limit extensive flow escape with installation of safety devices such as gated checks.~~
~~5-4~~	~~Construct new evacuation roads and access roads, as necessary.~~
~~5-4~~	~~Conduct Golden Guardian emergency drills~~ [2]
5-5(a)	Prepare and implement a drainage or hydrology and hydraulics study that ~~would assess~~ assesses the need and provide a basis for the design of drainage-related mitigations, such as new on-site drainage systems or new cross drainage facilities. Prepare the study in accordance with applicable standards of FEMA, USACE, DWR, CVFPB, as well as the local reclamation districts and flood control agencies and the counties and cities. Design subsequent mitigation measures in accordance with the final study and with the applicable standards of FEMA, USACE, DWR, and CVFPB. Provide temporary drainage bypass facilities that would reroute drainage around, along, or over the Proposed Project facilities and construction sites. The temporary bypass facilities ~~would~~ shall be designed in accordance with drainage or hydrology and hydraulic study and ~~would~~ shall be in place and fully functional until long-term replacement facilities are completed.
5-5(b)	Based on the results of the drainage or hydrologic and hydraulic study, arrange the length of any stockpiles or other construction features in the direction of the floodplain flow to maximize surface flows under flood conditions.
5-5(c)	At in-stream construction sites that might reduce channel capacity, install setback levees or bypass channels to maintain channel capacity and to mitigate hydraulic impacts.
5-5(d)	Provide cross drainage, replacement drainage paths and facilities, and enlarged flow paths to reroute drainage around, under, or over the Proposed Project facilities and to restore the function of any affected existing drainage or flow paths and facilities.

~~Note:~~

~~[2] First implemented in 2004, Golden Guardian, California's Annual Statewide Exercise Series, has become the most comprehensive state-level exercise series program in the country. The goal of Golden Guardian is to exercise and assess emergency operations plans, policies, and procedures for all-hazards/catastrophic incidents at the local, regional, and state levels, as described in subsection 5.3.7.2.2 of the Recirculated Draft EIR.~~

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
5-5(e)	Channel modifications for restoration actions ~~would~~ shall be required to be implemented to maintain or improve flood management functions and would be coordinated with the USACE, DWR, CVFPB, and other flood control agencies to assess the desirability and feasibility for channel modifications. To the extent consistent with floodplain land uses and flood control requirements, if applicable, woody riparian vegetation would be allowed to naturally establish.
Land Use and Planning	
6-2	Compensate for the loss or reduction in environmental values ~~protected by the subject plan or policy. For example, if the project would result in conversion of agricultural land to a non-agricultural use, potential mitigation actions could include:~~ due to a conflict with an adopted plan or policy by implementing the following or equally effective measures: (a) Recording a deed restriction that ensures permanent conservation and mitigation on other property of equal or greater environmental mitigation value; (b) Creating a buffer or barrier between uses; (c) Redesigning the project or selecting an alternate location that avoids or mitigates the impact; and/or (d) Restoring disturbed land to conditions to provide equal or greater environmental value to the land affected by the covered action.
19-1(f) and (g)	Refer to Mitigation Measure 19-1(f) and (g), as described in Transportation
Noise	
15-1(a)	Limit the hours of operation at noise-generation sources located near or adjacent to noise-sensitive areas, wherever practicable, to reduce the level of exposure to meet applicable local standards.
15-1(b)	Locate construction equipment away from sensitive receptors, to the extent feasible, to reduce noise levels below applicable local standards.
15-1(c)	Maintain construction equipment to manufacturers' recommended specifications, and equip all construction vehicles and equipment with appropriate mufflers and other approved noise-control devices.
15-1(d)	Limit idling of construction equipment to the extent feasible to reduce the time that noise is emitted.
15-1(e)	Conduct individual traffic noise analysis of identified haul routes and provide mitigation, such as reduced speed limits, at locations where noise standards cannot be maintained for sensitive receptors.
15-1(f)	Incorporate use of temporary noise barriers, such as acoustical panel systems, between construction activities and sensitive receptors if it is concluded that they would be effective in reducing noise exposure to sensitive receptors. ~~Near sensitive receptors, avoid or minimize use of construction equipment known to generate high levels of groundborne vibration (for example, pile drivers).~~
15-2(a)	Conduct a preliminary groundborne vibration analysis report to determine future construction-related groundborne vibration levels based on, but not limited to, a detailed equipment list, hours of operation, and distances to sensitive receptors located within 500 feet of project sites.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
15-2(b)	~~Provided that future groundborne vibration results in significant impacts at sensitive receptors, the following measures shall be implemented:~~ If the results of the analysis determine that groundborne vibration would exceed applicable thresholds at sensitive receptors, the following measures shall be implemented: i. Designate a ~~complaint~~ compliance coordinator and post this person's contact information in a location near construction areas where it is clearly visible to the nearby receptors most likely to be affected. The coordinator ~~will~~ shall manage complaints and concerns resulting from activities that cause vibrations. The severity of the vibration concern should be assessed by the coordinator and, if necessary, evaluated by a qualified noise and vibration control expert. ii. ~~Vibration~~ Conduct vibration monitoring ~~will be conducted~~ before and during vibration generating operations occurring within 100 feet of historic structures. Every attempt ~~will~~ shall be made to limit construction-generated vibration levels during pile driving and other groundborne noise and vibration-generating activities in the vicinity of the historic structures in accordance with recommendations of the appropriate agency with authority. iii. ~~Adjacent~~ Cover or temporarily shore adjacent historic features ~~will be covered or temporarily shored~~, as necessary, for protection from vibrations, in consultation with the appropriate cultural resources authority. iv. Avoid or minimize the use of construction equipment known to generate high levels of groundborne vibration (e.g., pile drivers). v. ~~Pile~~ Require that any pile driving ~~required~~ within a 50-foot radius of residences ~~will~~ use alternative installation methods where possible (e.g., pile cushioning, jetting, predrilling, cast-in-place systems, resonance-free vibratory pile drivers). ~~This would~~ to reduce the number and amplitude of blows required to seat the pile. vi. ~~Pile~~ Conducting pile-driving activities ~~conducted~~ within 285 feet of sensitive ~~receptors will occur during~~ shall be limited to daytime hours to avoid sleep disturbance during evening and nighttime hours.
15-3(a)	Identify noise-sensitive receptors in the vicinity of project activities and design projects to minimize exposure of sensitive receptors to long-term, operational noise sources (for example, water pumps) to reduce noise levels below applicable local standards.
15-3(b)	Conduct a preliminary noise analysis report to determine future operation-related noise and distances to sensitive receptors. ~~Provided~~ If results of the analysis determine that ~~future~~ operation-related noise ~~results in significant~~ levels would exceed applicable thresholds at sensitive receptors, ~~incorporate~~ noise-minimizing measures shall be incorporated into ~~construction~~ design ~~measures such as~~, including but not limited to building a structure ~~encasing~~ to encase the new noise generating infrastructure. Materials (masonry brick, metal shed, wood) used to house the infrastructure will be of solid construction and void of gaps at the ground, roof line, and joints. All vents will include acoustically rated louvers.
	~~Locate dog parks no closer than 200 feet from the nearest residential property line and at least 75 feet from habitat for noise-sensitive wildlife species.~~

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

	~~Locate parking lots no closer than 65 feet from the nearest residential property line and at least 25 feet from habitat for noise-sensitive wildlife species unless a detailed noise study is conducted that determines that placement of parking lots closer than the distances specified above will not result in noise levels that exceed 67 dBA at the nearest residential property line or 60 dBA from noise-sensitive habitat, or appropriate mitigation measures, including permanent noise barriers, can be incorporated to reduce noise levels to equal the ambient noise level or referenced thresholds for residential property and noise sensitive habitat.~~
15-3(d)	Locate parking lots no closer than 65 feet from the nearest residential property line and at least 25 feet from habitat for noise-sensitive wildlife species unless: i. a detailed noise study is conducted that determines that placement of parking lots closer than the distances specified above will not result in noise levels that exceed 67 dBA at the nearest residential property line or 60 dBA from noise-sensitive habitat; or ii. appropriate mitigation measures, including permanent noise barriers, can be incorporated to reduce noise levels to equal the ambient noise level or referenced thresholds for residential property and noise sensitive habitat.
Population and Housing	
16-1	i. Require compliance with applicable local policies and regulations regarding the provision of affordable housing. ii. Construct replacement housing if existing housing will be displaced.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
Public Services	
~~17-1~~	~~Establish construction fee schedules by local agencies for the new or modified facilities to fund additional emergency services potentially required during construction. If emergency services are not needed, a portion of the fees could be refunded.~~
17-1(a)	Develop worker training programs to reduce construction and operations risks.
17-1(b)	Develop ~~appropriate~~ adequate ~~emergency~~ access routes and equipment for both land and water access, if applicable (such as in the Delta), that provides for adequate response time. If use of an existing emergency access route becomes limited due to new or modified facilities, additional routes or placement of duplicate equipment on each side of the route limitation could be considered if needed to maintain emergency access.
17-1(c)	Develop traffic plans and emergency response plans for construction and operations phases of new facilities ~~that contain plans for maintaining accessibility of evacuation routes~~.
17-1(d)	Develop all facilities, including parks and ecosystem restoration areas, in accordance with applicable fire codes and regulations, and with adequate fire equipment access routes, occupancy limitations, and fire-protection equipment.
Recreation	
18-1(a)	Projects shall be sited in areas that will not impair, degrade, or eliminate recreational facilities and opportunities. If this is not feasible, projects shall be designed such that recreational facilities and access to recreational opportunities (including bird-watching, hunting, recreational fishing, walking, and on-water recreation (e.g., boating or kayaking)) will be avoided or minimally affected. Once project construction activities have been completed, any affected recreational facilities and opportunities should be restored to pre-construction conditions if possible. Where impacts to existing recreational facilities and opportunities are unavoidable, new permanent or replacement facilities shall be constructed that are similar in type and capacity, and access to recreational opportunities restored, if feasible. ~~• If the substantial impairment, degradation, or elimination of recreational facilities occurs, replacement facilities of equal~~ ~~• capacity and quality with ongoing funding provided for maintenance of these facilities.~~ ~~• If degradation or impairment of recreational facilities, settings, and activities occur from implementation of water use efficient practices and water conservation measures at recreational areas, the park and recreation areas shall be redeveloped with drought-tolerant plant materials, water efficient irrigation systems, and synthetic turf substitutes where appropriate, in such a way as to retain recreational facilities and use areas.~~ ~~• If the volume of water exported from the Delta declines over multiple years, the lead agencies that implement local water supplies may be unable to develop a long-term replacement water supply for the south-of-Delta surface water reservoirs with recreation uses. At these sites, facilities must be modified (including access facilities, as necessary) to accommodate lower water elevations or more frequent fluctuations in water elevations that could occur more frequently in the Proposed Project than under existing conditions~~
18-2(a)	If substantial temporary or permanent impairment, degradation, or elimination of recreational facilities causes users to be directed towards other existing facilities, lead agencies shall coordinate with impacted public and private recreation providers to direct displaced users to under-utilized recreational facilities~~.~~ through signage and public noticing, such as newsletters.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

18-2(b)	Lead agencies shall provide additional operations and maintenance of existing facilities in order to prevent deterioration of these facilities. ~~If possible, lead agencies shall provide temporary replacement facilities.~~
18-2(c)	If the increase in use is temporary, the condition of the facilities prior to construction shall be documented, and once use ~~is decreased back~~returns to existing conditions, degraded facilities shall be rehabilitated or restored~~.~~ to their pre-construction condition.
18-2(d)	Where impacts to existing facilities are unavoidable, affected facilities shall be restored to their pre-construction condition once project construction activities are complete. If this is not feasible, new permanent or replacement facilities shall be constructed that are similar in type and capacity. ~~compensate for impacts through mitigation, restoration, or preservation off-site or creation of additional permanent new replacement facilities.~~
~~18-3~~	• ~~Projects shall be sited in areas that would have minimal adverse physical effect on the environment.~~ • ~~Where impacts to the environment are unavoidable, compensate for impacts through mitigation, restoration, or preservation off-site or creation of additional permanent new replacement facilities.~~
Transportation	
19-1(a)	Design projects to avoid modifications to federal, State, and county highways, local roadways, and bridges that may reduce vehicle capacity, to the extent feasible.
19-1(b)	Develop and implement a traffic control plan to reduce effects of roadway construction activities, including full and partial lane closures, bicycle and pedestrian facility closures, and reduced access to adjacent properties. The traffic control plan shall identify the following or equally effective measures: minimize lane closures during morning and evening peak hours~~.~~; ~~Limit~~ limit lane closures near the affected segment~~.~~; ~~Reroute~~ reroute bicycle and pedestrian access around the project area~~.~~; ~~Prevent~~ prevent bicyclists and pedestrians from entering the work area~~.~~; and identify specific project-vehicle access routes that would avoid additional traffic in residential areas or would adversely affect other sensitive land uses, where feasible.
19-1(c)	Install roadway status signs at strategic locations in the Delta to inform the public of roadway closures and limits to ingress to/egress from Delta Islands. The signs shall include maps showing the relative locations of road closures and access restrictions to other Delta features.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
19-1(d)	For project operations that increase traffic, prepare a traffic study. The traffic study shall: ~~Determine~~ determine haul routes that would be used; ~~. Evaluate the levels of service at affected intersections and road segments during the peak a.m. and peak p.m. periods. . Model changes in traffic with project traffic. If the level of service is maintained at levels acceptable to the appropriate agency, then no additional mitigation is required. If project traffic causes an intersection or road segment to perform below the minimum level of service standard, then select an alternate route for project traffic or schedule project trips for non-peak-hour periods. If alternate routes are not feasible, then design and construct facility improvements to intersections or road segments to maintain the acceptable level of service.~~ evaluate the potential impact of project traffic with respect to VMT; and evaluate the potential impact of project traffic on roadway safety and accessibility for all users (i.e., passenger vehicles, public transit, emergency service providers, bicycles, and pedestrians). If project traffic would result in a significant VMT impact, then appropriate measures shall be implemented to reduce VMT to the extent feasible. If project traffic would result in impacts to any of the roadway users listed above, then an alternate route shall be selected for project traffic or schedule project trips for non-peak-hour periods. If alternate routes are not feasible, then facility improvements shall be designed and constructed at intersections or road segments to maintain safe travel conditions and accessibility.
19-1(e)	~~During the planning and analysis of site-specific actions,~~ Coordinate with Caltrans and/or other local agencies with jurisdiction over transportation system features during the planning and analysis of projects for the purpose of minimizing impacts on bridges, roadways, culverts, or other features that may be affected. Agencies responsible for constructing and maintaining levees on which a public roadway may be located shall also be consulted to ensure consistency with levee design criteria.
19-1(f)	For roads that will be flooded during floodplain operation, ~~prepare and implement vehicular traffic detour planning as necessary.~~ a vehicular traffic detour plan shall be prepared and shall be implemented prior to roadway inundation. The detour plan shall ~~Provide~~ provide convenient and parallel vehicular traffic detours for routes closed because of inundation. ~~A~~ The detour plan shall be prepared and implemented in accordance with current Caltrans Standard Plans and Specifications. (A temporary crossing structure, for example a Bailey Bridge, may be used to maintain circulation and avoid a detour plan.) ~~The detour plan shall be implemented before roadway inundation. The detour plan will include an assessment of existing roadway conditions, whether paved or unpaved, and provisions for repair and maintenance if the roadway conditions are substantially degraded from increased use.~~ After the detour route is identified and before flood flows are released that would overtop roads, the condition of the detour road surface shall be assessed and documented.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

19-1(g)	If roadways are to be partially or totally blocked during construction activities, a detour plan shall be prepared prior to beginning construction. The detour plan shall include an assessment of existing roadway conditions, whether paved or unpaved, and provisions for repair and maintenance if the roadway conditions are substantially degraded from increased use. The documentation shall be submitted to the local agency responsible for maintenance of the road. After the detour is no longer needed, the condition of the road surface ~~will~~ shall be assessed again and documented. The documentation ~~will~~ shall identify substantial changes in the condition of the road surface, such as potholing or rutting. ~~Repair and maintenance actions needed to restore the road surface to predetour conditions will be identified. In coordination with the local maintenance agency, the repair and maintenance actions may be conducted by the agency conducting the floodplain operation or by the local maintenance agency to be proportionately reimbursed by the flood management authority.~~ If substantial damage to roads and/or driveways occurs, repairs shall be implemented to restore the roads and/or driveways to their previous condition. Roadside drainage structures and road drainage features (e.g., rolling dips) shall be protected by regrading and reconstructing roads to restore the drainage structures and features to their previous condition. The detour plan shall prioritize paved roads for use as detour routes. If use of paved roadway detours is not feasible during flood flow road inundation periods, the detour plan ~~will~~ shall require that visible dust emissions from unpaved detour routes ~~will~~ be limited to the percent opacity indicated by the appropriate air pollution control district. The following dust control measures may be used to stabilize unpaved roadways: • Watering • Uniform layer of washed gravel • Roadmix • Paving Any other method that can be demonstrated to the satisfaction of the appropriate air pollution control district that effectively limits visible dust emission to the local percent opacity standard and meets the conditions of a stabilized unpaved road.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
19-1(h)	Traffic impact reports shall be prepared that meet the applicable agencies' standards to assess potential impacts on appropriate street segments ~~and~~, intersections, and highway/freeway on- and off-ramps. The traffic impact reports shall identify impacts that exceed the agencies' guidelines for significance and identify appropriate mitigation. Acceptable mitigation measures may include: • Turn restrictions • Roadway widening to add lanes or shoulders • Redesign of freeway on- and off-ramps • Median construction/modification to restrict access • Flaring of intersections to add turn lanes • Provision of passing lanes or turnouts • Acceleration and deceleration lanes • Removal of obstructions • Roundabouts • Restriping to add lanes with or without parking removal and restrictions • Protected left-turn pockets or free right-turn lanes • Parking restrictions, daily or during peak hours • Fair-share contributions to approved projects identified in the agency's Capital Improvement Plan • Fair-share contributions to traffic signals identified in the agency's traffic signal plan

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
19-1(i)	Prepare and implement a waterway traffic control plan to ensure safe and efficient vessel navigation during construction in waterways. The plan shall identify vessel traffic control measures to minimize congestion and navigation hazards to the extent feasible. Construction areas in the waterway ~~will~~ shall be barricaded or guarded by readily visible barriers or other effective means to warn boaters of their presence and restrict access. Warning devices and signage shall be consistent with the California Uniform State Waterway Marking System and effective during non-daylight hours and periods of dense fog. The waterway traffic control plan shall contain the following: i. Where temporary partial channel closure is necessary, a temporary channel closure plan shall be developed. The waterway closure plan will identify and implement alternate detour routing and procedures for notifying boaters of construction activities and partial closures, including coordination with the U.S. Coast Guard, local boating organizations, and marinas. ii. To the extent feasible, ensure that safe boat access to public launch and docking facilities, businesses, and residences is maintained. iii. Coordinate with transit system operators to establish appropriate alternate transit system routes to be rerouted during construction activities, as appropriate. iv. Boat passage facilities shall be provided as an integral component of operable gate facilities, when feasible. Boat passage facilities shall be designed to provide uninterrupted boat passage when ~~gate~~ gates are in the "up" position. Floating docks with mooring bits shall be provided along the shoreline on both sides of the boat passage facility for boaters to use while they await passage. Floating barriers will guide boats into the passage facility chambers. v. Implement a program to provide boater education on procedures for waiting at and using the boat passage facility. vi. Minimize impacts on bicycle and pedestrian circulation where feasible by avoiding impacts, minimizing closure of paths, and providing for temporary or permanent relocation of the facility to the extent feasible. Consult with the appropriate public works department to determine the most feasible alignment for facility relocation.
19-2(a)	Develop and implement a program that shall include procedures for routine inspections and emergency facility operation to allow safe navigation should the facility become damaged or malfunction. The program ~~will~~ shall include the following specific components: i. Routine inspections and correction procedures to ensure that facility safety features are in good working order. ii. Routine inspections and correction procedures for navigational hazards around facilities, including floating or submerged debris and the formation of shoals. iii. Contingency and emergency operating procedures to address the possibility that a boat colliding with the flow control facilities ~~will~~ could damage the facilities or otherwise render them unable to operate as engineered, and provisions to allow safe navigation.

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

~~19-3~~	~~♦ Coordinate with responsible local agencies to establish appropriate emergency routes during construction activities and before existing emergency routes are reclassified to a nonemergency route use.~~ ~~♦ Phase construction activities, and use multiple routes to and from offsite locations to minimize the daily amount of traffic on individual roadways.~~ ~~♦ Post warnings about the potential presence of slow-moving vehicles.~~ ~~♦ Use traffic-control personnel when appropriate.~~ ~~♦ Place and maintain barriers, and install traffic-control devices necessary for safety, as specified in Caltrans' Manual of Traffic Controls for Construction and Maintenance Work Zones and in accordance with city and county requirements.~~ ~~♦ Notify appropriate emergency service providers of project construction throughout the construction period to ensure that emergency access through construction areas is maintained.~~
~~19-4~~	~~Implement Mitigation Measure 19-1, above. The portion of the measure that addresses minimizing impacts on bicycle and pedestrian circulation also would apply to Impact 19-4a through e.~~
Tribal Cultural Resources	
10-1(a) through (i)	Refer to Mitigation Measure 10-1(a) through (i), as described in Cultural Resources
10-2(a) through (f)	Refer to Mitigation Measure 10-2(a) through (f), as described in Cultural Resources

Table 1: Delta Plan Ecosystem Amendment PEIR Mitigation Measures (contd.)

Delta Plan Ecosystem Amendment Mitigation Measure Number	Delta Plan Ecosystem Amendment Mitigation Measure
Utilities and Public Services	
~~20-1~~	~~Establish construction debris disposal fee schedules to promote recycling and minimize solid waste.~~
20-1(b)	Limit disposal of construction debris and other solid waste at local landfills if the landfills have limited capacity.
20-1(c)	Dispose of all construction debris at landfills and disposal facilities that are licensed for the type of wastes to be disposed. If the landfills and disposal facilities are not located near future construction sites, include analysis of transportation of solid waste in future environmental documentation for specific projects.
20-1(d)	Require construction contractors to prepare construction debris management plans and require reuse or recycling of construction debris.
20-1(e)	Develop project-specific solid waste plans to maximize practices that reduce and recycle solid waste and sludge generated by water, wastewater, and stormwater treatment facilities; and collect, recycle, or compost litter and solid waste generated at new facilities designed for visitor use (such as parks and visitor centers).
~~20-2~~	~~♦Relocate or modify existing water, wastewater, and stormwater facilities or electricity transmission systems in a manner that does not affect current operational reliability to existing and projected users.~~ ~~♦ Coordinate utility relocation and modification with utility providers and local agencies to integrate potential other construction projects and minimize disturbance to the communities.~~ ~~♦ Verify utility locations through field surveys and services such as Underground Service Alert.~~
Wildfire	
14-1(a) through (s)	Refer to Mitigation Measure 14-1(a) through (s), as described in Hazards and Hazardous Materials
14-5(a)	Prepare and implement a fire management plan to minimize potential for wildland fires. The plan shall include requirements for carrying emergency fire equipment, conducting "tailgate meetings" that include discussions about fire safety, and restricting construction during red flag warnings. Measures in the plan shall include the following strategies for reducing the potential for fire: i. Store fire suppression tools in or near work activities. ii. Train construction crews and other on-site personnel on fire prevention and suppression for the project. Hold a fire prevention discussion as part of each day's safety meeting. iii. Identify a person responsible for monitoring fire-safe practices to ensure implementation of measures and to communicate with emergency responders in the case that there is a fire. iv. Require installation and maintenance of spark arresters and other fire-reducing measures on equipment.
17 1(a) through (d)	Refer to Mitigation Measure 17-1(a) through (d), as described in Hazards and Hazardous Materials

Note:
[1] The Council is responsible for making sure that the identified mitigation measures are fully enforceable by adopting and incorporating them into the Delta Plan (Pub. Resources Code section 21081.6(b). Delta Plan Policy G P1 requires implementation of mitigation measures for covered actions pursuant to regulatory requirements (23 Cal. Code of Regs. section 5002(b)(2)), if applicable and feasible, unless equally effective substitute mitigation is implemented. Monitoring and/or reporting on implementation of the adopted mitigation measures is accomplished through the Certification of Consistency process required by policy G P1 (Cal. Code of Regs. title 23 section 5002).