CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS
AND STATEMENT OF OVERRIDING CONSIDERATIONS FOR THE
DELTA PLAN ECOSYSTEM AMENDMENT

I. INTRODUCTION

The Delta Stewardship Council (“Council”), as lead agency under the California Environmental Quality Act (“CEQA”), Public Resources Code section 21000 et seq., has prepared the Final Program Environmental Impact Report for the Delta Plan Ecosystem Amendment (State Clearinghouse No. 202050219) (“PEIR”). The PEIR is a program-level EIR pursuant to section 15168 of the Guidelines for implementation of the California Environmental Quality Act (“State CEQA Guidelines”). The PEIR consists of the September 2021 Delta Plan Ecosystem Amendment Draft Program EIR (“Draft PEIR”) and the June 2022 Delta Plan Ecosystem Amendment Final PEIR (“Final PEIR”).

In determining to approve the proposed Delta Plan Ecosystem Amendment and related regulations implementing the Delta Plan Ecosystem Amendment (“Project” or “Ecosystem Amendment”), which are described in more detail in Section II, below), the Council makes and adopts the following findings of fact and statement of overriding considerations, and adopts and incorporates into the Project the mitigation measures identified in the PEIR, all based on substantial evidence in the whole record of this proceeding (“administrative record”). Pursuant to section 15090(a) of the State CEQA Guidelines, the PEIR was presented to the Council, and the Council reviewed and considered the information contained in the PEIR prior to making the findings in Sections IV to XIV below. The conclusions presented in these findings are based upon the PEIR and other evidence in the administrative record.

II. PROJECT DESCRIPTION

The Delta Plan, which was adopted in 2013, is a comprehensive, long-term management plan for the Sacramento-San Joaquin Delta and the Suisun Marsh (collectively, “the Delta”) that furthers achievement of the coequal goals defined in the Sacramento-San Joaquin Delta Reform Act of 2009 (“Delta Reform Act”), Water Code (Wat. Code) section 85000 et seq. The coequal goals are: (1) to provide a more reliable water supply for California, and (2) to protect, restore, and enhance 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. Wat. Code § 85054. The Delta Reform Act identifies types of plans, programs, and projects that are “covered actions” within the Council’s jurisdiction. State and local agencies must determine which actions subject to their approval constitute covered actions and must certify that those covered actions are consistent with the Delta Plan before they implement them.

1 The State CEQA Guidelines are found at California Code of Regulations, title 14, section 15000 et seq.
As described in more detail in Chapter 2 of the Delta Plan (Delta Plan Background), the Council is proposing to amend Chapter 4 of the Delta Plan (Protect, Restore, and Enhance the Delta), adopted in 2013 to implement Wat. Code sections 86022(d) and sections 85302(a), (b), (c), (d)(1), (d)(3), and (e), to address the shift by the federal and state lead agencies from the Bay Delta Conservation Plan (BDCP) to EcoRestore and provide a more comprehensive approach to ecosystem protection, restoration, and enhancement in the Delta, as required to achieve the goals and strategies described in the Delta Reform Act. This section describes the proposed Project.

The proposed Project consists of:

An updated Chapter 4 of the Delta Plan including revisions to the text of Chapter 4, new and revised policies and recommendations some of which replace recommendations that have been removed;

- Three regulatory appendices (Appendices 3A and 4A, which include new definitions; and Appendix 8A which includes priority locations to evaluate physical expansion of channel width);

- Four technical appendices (Appendices Q1 through Q4 which include methods used to update ecosystem restoration maps, key considerations and best available science for Delta ecosystems, the identifying, mapping and quantifying of opportunities for landscape restoration, and conservation and recovery plan for target species);

- An appendix updated with new and revised ecosystem performance measures pertinent to the coequal goal of protecting, restoring, and enhancing the Delta ecosystem and indicating performance measures that have been removed (Appendix E); and

- Revisions to previously adopted Delta Plan mitigation measures to reflect updated formatting and current standards.

The analysis in the PEIR assumes that the proposed Ecosystem Amendment and the rest of the currently adopted Delta Plan would be implemented and achieve their desired outcomes, regardless of whether the outcomes are expressed as policies or recommendations. Accordingly, the PEIR evaluates the potential impacts of the types of projects that the proposed Ecosystem Amendment and the Delta Plan would encourage and promote in the Primary, Delta Watershed and Extended Planning Areas. A description of the general types of activities, potential projects, and construction methods that could result from implementation of the proposed Ecosystem Amendment is provided in Chapter 4 of the PEIR, General Types of Activities, Potential Projects, and Construction Methods that Could Result with Implementation of the proposed Ecosystem Amendment.

The Ecosystem Amendment includes new, revised, and removed policies, recommendations, and performance measures within Chapter 4 and Appendix E of the Delta Plan. Delta Plan policies, recommendations, and performance measures that are not revised or removed under the proposed Ecosystem Amendment would remain unchanged. The potential significant impacts associated with implementing the existing, unchanged Delta Plan policies, recommendations, and performance measures were evaluated at a program level in the 2013 Delta Plan PEIR and the 2018 Delta Plan Amendments PEIR, as certified by the Council in 2013 and 2018, respectively.
The proposed new, revised, removed, and existing policies, recommendations, and performance measures are grouped within five core strategies to achieve the coequal goal of protecting, restoring, and enhancing the Delta ecosystem set forth in the Delta Reform Act (Wat. Code section 85054):

1. Create more natural, functional flows.
2. Restore ecosystem function.
3. Protect land for restoration and safeguard against land loss.
4. Protect native species and reduce the impact of nonnative invasive species.
5. Improve institutional coordination to support implementation of ecosystem protection, restoration, and enhancement.

As set forth in Section 3.1 of the Draft PEIR, the project objectives common to the Delta Plan are to further the achievement of the coequal goals in Wat. Code section 85054 and the eight “inherent” objectives in Wat. Code section 85020 in a manner that:

1. Furthers the statewide policy to reduce reliance on the Sacramento-San Joaquin Delta (“Delta”) in meeting the state’s future water supply needs through regional self-reliance (Wat. Code section 85021);
2. Is consistent with specific statutory content requirements for the Delta Plan (Wat. Code sections 85302(c) through (e) and 85303-85308);
3. Is implementable in a comprehensive, concurrent, and interrelated fashion, and
4. Is accomplished as rapidly as realistically possible without jeopardizing ultimate success.

The Delta Reform Act calls for the Delta Plan to include strategies to assist in guiding State of California (State) and local agency actions related to the Delta (Wat. Code section 85300(a)). The following project objectives are specific to the proposed Ecosystem Amendment and are derived from the core strategies, which are derived from the Delta Reform Act (Wat. Code section 85302) and form the basis for the proposed amendment:

1. Create more natural, functional flows across a restored landscape to support native species recovery and provide the flexibility needed for water supply reliability.
2. Implement large-scale restoration projects that restore ecosystem function, increase resilience to climate change, are compatible with adjacent land uses, and that support the cultural, recreational, agricultural, and natural resource values of the Delta as an evolving place.
3. Protect opportunities to restore ecosystems and safeguard against land loss by taking sea level rise and long-term flood risk into consideration; protecting land from development; reducing, halting, or reversing subsidence; and incentivizing agricultural land management practices that support native wildlife and counter subsidence.

4. Prevent introduction of non-native invasive species; manage non-native invasive species impacts; and improve fish management to support the reproductive success and survival of native fish.

5. Facilitate implementation of ecosystem protection, enhancement, restoration, and mitigation projects in the Delta by improving the efficiency and effectiveness of actions by public agencies and private organizations engaged in proposing, approving, and permitting such projects.

The location of the Project is defined by the purposes and uses of the Delta Plan, which are described in the Delta Reform Act, and, for the purpose of this CEQA analysis, includes the area affected by the proposed Ecosystem Amendment. This area consists of the Primary Planning Area and the Extended Planning Area. The Primary Planning Area shares the legal boundaries of the Delta and the Suisun Marsh as defined in Water Code Section 85058. The Extended Planning Area is defined by the watersheds that contribute flows to the Delta and the areas of California receiving water from or conveyed through the Delta. The Primary and Extended Planning Areas are defined in greater detail in Sections 3.3.1 and 3.3.2 of the PEIR.

The Project does not involve construction or operation of specific facilities or other specific physical actions by the Council. For purposes of ensuring a conservative analysis of environmental impacts in this PEIR, the PEIR assumes that the Delta Plan and the proposed Ecosystem Amendment are implemented and achieve their desired outcomes, regardless of whether the outcomes are expressed as policies or recommendations. Accordingly, the PEIR evaluates the potential impacts of the types of projects that the Delta Plan, as amended by the proposed Ecosystem Amendment, would encourage and promote in the Primary and Extended Planning Areas. Once proposals for specific projects consistent with the proposed Ecosystem Amendment are developed, their impacts will be more fully evaluated in future project-level CEQA documents by the lead agencies for the proposed projects.

The Council, as the CEQA lead agency, determined that a program EIR was the appropriate CEQA document for the proposed Ecosystem Amendment, and the PEIR was prepared in conformance with CEQA and the State CEQA Guidelines. The impact analysis in the PEIR addresses construction, constructed facilities, and operations activities. Mitigation measures have been previously adopted and incorporated into the Delta Plan, as amended April 26, 2018 (“Delta Plan Mitigation Measures”). As part of the Project, the Delta Plan Mitigation Measures have been revised and are part of the analysis in each resource section in Chapter 5 of the PEIR to reflect updated formatting and current standards, as relevant (“revised mitigation measures”). The revised mitigation measures are equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measures. For covered actions constructed in the Primary and Extended Planning Areas in response to the
proposed Ecosystem Amendment, other entities would be required to implement the revised mitigation measures or equally effective measures, if feasible, as required by Delta Plan policy GP 1 (Cal. Code of Regs., title 23, § 5002(b)(2)).

III. ENVIRONMENTAL REVIEW PROCESS

On May 11, 2020, the Council filed a Notice of Preparation (“NOP”) of the Draft PEIR with the State Clearinghouse in the Governor’s Office of Planning and Research, and distributed copies of the NOP to public agencies, and to organizations and individuals that requested receipt of the Council’s public notices. In compliance with Executive Orders N-54-20 and N-8-21, section 8(a), the Council posted the NOP on the Council’s website on May 11, 2020. The issuance of the NOP began a 60-day public comment period. The Council submitted the NOP electronically to the State Clearinghouse’s CEQA Net Web Portal (State Clearinghouse #2020050219).

The filing of the NOP began the 60-day public comment period, which closed on July 10, 2020 and provided notification of a public scoping meeting to be conducted by the Council. A virtual public scoping meeting was held on Thursday, May 28, 2020, from 4:00 to 5:30 p.m. in accordance with Governor’s Executive Orders N-25-20, N-29-20, and N-8-213. The purpose of the scoping meeting was to solicit the views of public agencies and the public prior to publishing the Draft PEIR and provide a brief overview of the proposed Ecosystem Amendment to the public. Oral comments were recorded at the scoping meeting and written comments were accepted by both mail and email.

On May 15, 2020, the Council sent an Assembly Bill (“AB”) 52 notice by email and FedEx to the tribes that requested notification of all Council activities, were determined to be reside within impacted counties, or have previously commented on the Delta Plan. That same day, the Council sent a separate letter containing the NOP to the same tribes by email and FedEx. In addition to the AB 52 notice, the Council also requested a list of California Native American tribes within the Primary and Extended Planning Area from the California Native American Heritage Commission (“NAHC”) in an effort to provide non–AB 52 notification of the proposed Ecosystem Amendment in the event that tribes would like to provide comments on the Project. Based on the information received from the NAHC, the Council sent non–AB 52 notification letters by email to 120 tribal contacts in May 2020. None of the tribes that received an AB 52 notice or non-AB 52 notice requested tribal consultation at this time.

The Draft PEIR was published and made available to local, State, and federal agencies and to organizations and individuals for review and comment in accordance with CEQA requirements.

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2 As used in the PEIR and throughout these Findings, the term “entity” is defined as a public agency or a nongovernmental organization or person that is engaged in carrying out, approving, or funding projects in response to the proposed Ecosystem Amendment and that meets either of the following criteria:

- Is a State or local agency that proposes to carry out, approve, or fund all or a portion of a project.
- Is a nongovernmental organization or person that carries out a project and would coordinate with a State or local agency with principal responsibility to approve, supervise, or fund that project, as described in CEQA Guidelines section 15051.
Notice of Completion of the Draft EIR was sent to the State Clearinghouse on September 27, 2021 and Notice of the Availability of the Draft PEIR was also sent directly to persons and agencies that commented on the NOP on the same date. A 64-day public review period to receive comments on the Draft PEIR began on Monday, September 27, 2021, and ended on Tuesday, November 30, 2021. The Draft PEIR was made available at the locations identified in Appendix A of the PEIR, as well as on the Council website at: deltacouncil.ca.gov.

The Council held a public workshop for the Draft PEIR on November 18, 2021 during the public review period. During the workshop, the Council solicited oral comments on the Draft PEIR.

Written comments from the public and public agencies were accepted throughout the public review period. At the end of the public review period for the Draft PEIR, a total of 19 comment letters and e-mails were received. There were two commenters at the public workshop.

In addition, AB 52 and non-AB 52 tribes received a Notice of Availability of the Draft PEIR,³ Two tribes requested consultation. Consultation over video conferencce was held between November 2021 to January 2022.⁴ Correspondence over email communication also occurred during and after this time period.

Section 3 of the Final PEIR provides responses to written and oral comments received during the comment period on the Draft PEIR. Beginning on June 13, 2022, the Final PEIR was made available on the Council website at: deltacouncil.ca.gov.

IV. FINDINGS

These findings summarize the environmental determinations of the PEIR about project impacts before and after mitigation and do not attempt to repeat the full analysis of each environmental impact contained in the PEIR. Instead, these findings provide a summary description of and basis for each impact in the PEIR, describe the applicable the Delta Plan Mitigation Measures describe the applicable mitigation measures identified in the PEIR, and state the Council’s findings and rationale therefor on the significance of each impact with the adopted mitigation measures. A full explanation of these environmental findings and conclusions can be found in the PEIR, and these findings hereby incorporate by reference the discussion and analysis in the PEIR supporting the PEIR’s determinations regarding mitigation measures and the Project’s impacts.

In referring to the previously adopted PEIR mitigation measures and adopting new mitigation, as set forth below, the Council intends to refer to each of the previously adopted PEIR mitigation measures and to adopt new mitigation measures identified in the certified PEIR. Accordingly, in the event a mitigation measure identified in the certified PEIR has inadvertently been omitted from these findings, such mitigation measure is hereby referred to, adopted, and incorporated in

³ Although not required, tribal consultation under AB52 was offered to tribes on the Delta Stewardship Council’s AB52 list at the time the Notice of Availability was sent out.
⁴ Two tribes, Yocha Dehe Wintun Nation and Buena Vista Rancheria of Me-Wuk Nation, requested tribal consultation under AB 52. Consultation by video conference was held with the Yocha Dehe Wintun Nation on 11/29/21 and 1/19/22, and with Buena Vista Rancheria of Me-Wuk Indians on 11/23/21 and 12/15/21.
the findings below by reference. In addition, in the event the language of a mitigation measure set forth below fails to accurately reflect the mitigation measure in the certified PEIR due to a clerical error, the language of the mitigation measure as set forth in the certified PEIR shall control unless the language of the mitigation measure has been specifically and expressly modified by these findings.

Sections V through VIII, below, provide brief descriptions of the impacts that the PEIR identifies as either significant and unavoidable or less than significant, including cumulative and growth inducing impacts, and describes any mitigation measures identified in the PEIR for each significant impact.

V. SIGNIFICANT AND UNAVOIDABLE ADVERSE IMPACTS AND DISPOSITION OF RELATED MITIGATION MEASURES

The PEIR identifies the following significant and unavoidable adverse impacts associated with the approval of the Delta Plan Ecosystem Amendment, some of which can be reduced, although not to a less-than-significant level, through implementation of mitigation measures identified in the PEIR. (Pub. Resources Code §21081(a)(1)). It is hereby determined that these significant and unavoidable adverse impacts are acceptable for the reasons specified in Section X, below. (Pub. Resources Code §21081(a)(3)). As explained in Section XI, below, the findings in this Section are based on the PEIR, the discussion and analysis in which is hereby incorporated in full by this reference.

A. Impact 5.2-1. Implementation of projects in response to the proposed Ecosystem Amendment could substantially degrade the existing visual character or quality of public views of the site and its surroundings in non-urbanized areas.

The PEIR finds that the Ecosystem Amendment could cause substantial degradation of visual qualities, including significant temporary, long-term, or permanent adverse effects on the visual qualities and character of the surrounding landscape in the Primary Planning Area (including rural and agricultural landscape in the Delta) and of the visual qualities and character of the surrounding landscape in the Extended Planning Area. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other entities in response to the Ecosystem Amendment, including construction of new levees within an island, new surface water intakes, fish passage facilities, and hatchery management projects. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 8-1, which was previously adopted and incorporated into the Delta Plan, has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 8-1. Revised Mitigation Measure 8-1(a) through (j), which are hereby adopted and incorporated into the Delta Plan, would apply to covered actions and is recommended to be adopted by other agencies for non-covered actions. This mitigation measure would minimize degradation of visual quality due to actions taken by other entities in response to the Ecosystem Amendment.
However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 8-1(a) through (j), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

**2022 PEIR Mitigation Measure 8-1(a) through (j):** Implementation of projects in response to the proposed Ecosystem Amendment could substantial degrade the existing visual character or quality of public views of the site and its surroundings in non-urbanized areas.

- **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 should 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. Temporarily disturbed areas shall be restored to pre-construction conditions.

- **8-1(g)** Conduct only partial vegetative clearing of the construction footprint rather than 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.

- **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, use cast natural form elements or natural materials for facing to achieve texture and color compatible with the adjacent landscape; and use natural materials 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 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 turnouts and scenic viewpoints 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 pole or non-specular steel electric transmission towers for proposed large electrical transmission lines, and specular conductors, and put transmission lines underground along areas with high visibility and high public use.

B. Impact 5.2-2. Implementation of projects in response to the proposed Ecosystem Amendment could result in a substantial adverse effect on a scenic vista or could substantially damage scenic resources within a State scenic highway.

The PEIR finds that the Ecosystem Amendment could cause significant temporary, long-term, or permanent adverse changes to scenic vistas that are visible from designated scenic roads and highways in the Primary Planning Area (because views from roads and highways are typically broad and expansive over the relatively flat topography of the Delta) and to scenic vistas that are visible from designated scenic roads and highways in the Extended Planning Area. These impacts are likely to be caused primarily by construction activities and constructed facilities and their operation associated with projects implemented by other entities in response to the Ecosystem Amendment, including new levees, screened diversions, modified fishways, and modified or relocated bridges or stream crossings. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 8-2, which was previously adopted and incorporated into the Delta Plan, has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 8-1. Revised Mitigation Measure 8-2(a) and (b) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. This mitigation measure would minimize impacts on scenic vistas and scenic resources due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 8-2(a) and (b), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 8-2 (a) and (b): Implementation of projects in response to the proposed Ecosystem Amendment could result in a substantial adverse effect on a scenic vista or could substantially damage scenic resources with a State scenic highway.

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.

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.
C. Impact 5.2-3. Implementation of projects in response to the proposed Ecosystem Amendment could result in new sources of light and glare.

The PEIR finds that the Ecosystem Amendment could cause significant temporary, long-term, or permanent adverse effects from new sources of light and glare in the Primary and Extended Planning Areas, particularly in rural areas where ambient light levels are low. These impacts could be caused by construction activities with projects implemented by other entities in response to the Ecosystem Amendment, including construction of new setback levees, restoration projects that involve vegetation enhancement and erosion control, subsidence reversal projects, fish screen intake facilities, bridges or crossings that may be constructed for fish passage-related projects, and hatchery management projects. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 8-3 and 5.2-1, which were previously adopted and incorporated into the Delta Plan, have been revised to reflect updated formatting and current standards. The revised mitigation measures set forth below are equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 8-3 and 5.2-1. Revised Mitigation Measures 8-3 and 5.2-1 would apply to covered actions and are recommended to be implemented by other entities for non-covered actions. These mitigation measures would minimize impacts associated with new sources of light and glare due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measures would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measures 8-3 and 5.2-1, or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measures 8-3 and 5.2-1 Implementation of projects in response to the proposed Ecosystem Amendment could result in new sources of light and glare.

8.3 Projects shall utilize angled or shielded exterior lighting and ensure that lighting is directed downward and inward toward the facilities.

5.2-1 Use non-specular steel electrical conductors for transmission lines and distribution lines to reduce glare.

D. Impact 5.3-1. Implementation of projects in response to the proposed Ecosystem Amendment could convert Farmland to nonagricultural use or could conflict with a Williamson Act contract or zoning for agricultural use.

The 2022 PEIR finds that the Ecosystem Amendment could cause significant temporary, long-term, or permanent conversion of Farmland and conflict with Williamson Act contracts and agricultural zoning in the Primary Planning Area (where over fifty percent of the land is prime farmland, farmland of statewide importance, and unique farmland) and the Delta Watershed Planning Area. These impacts could be caused by construction activities associated with projects
implemented by other entities in response to the Ecosystem Amendment, including excavation and grading activities, dust abatement activities, new and modified levees, restoring natural communities, monitoring of natural structures, operation and management of surface water diversions, fish screens, fish passage improvement projects, and hatchery management projects. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and the Delta Watershed Planning Areas.

Delta Plan Mitigation Measures 7-1 and 7-2, which were previously adopted and incorporated into the Delta Plan, have been revised to reflect updated formatting and current standards. Revised Mitigation Measure 7-1 has been revised to incorporate Mitigation Measure 7-2. The revised Mitigation Measure 7-1 set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measures 7-1 and 7-2. Revised Mitigation Measure 7-1(a) through (h) would apply to covered actions and are recommended to be implemented by other entities for non-covered actions. These revised mitigation measures would minimize impacts associated with the conversion of Farmland, land zoned for agricultural and land subject to a Williamson Act contract to nonagricultural uses due to actions taken by other entities in response to the proposed Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 7-1, or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 7-1(a) through (h): Implementation of projects in response to the proposed Ecosystem Amendment could convert Farmland to non-agricultural use or could conflict with a Williamson Act Contract or zoning for agricultural use.

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.

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.

E. Impact 5.3-2. Implementation of projects in response to the proposed Ecosystem Amendment could conflict with existing zoning for forestland, timberland, or timberland zoned Timberland Production or result in loss of forestland from conversion of land to non-forest use.

The 2022 PEIR finds that the Ecosystem Amendment could cause conversion of forestland to non-forest use in the Primary Planning Area (which contains over 14,000 acres of forestland, including stands of blue oak, coastal oak, and valley oak trees) with significant temporary, long-term, or permanent adverse effects on forestland. The Primary Planning Area does not contain any timberland or timberland zoned Timberland Production. The 2022 PEIR also finds that the Ecosystem Amendment could cause conversion of forestland, timberland, and timberland zoned Timberland Production to non-forest or non-timber uses in the Extended Planning Area, with temporary, long-term, or permanent adverse effects on forestland and timberland. These impacts could be caused by construction activities associated with projects implemented by other public agencies in response to the Ecosystem Amendment, including levee modification, habitat restoration, installation or relocation of fishways, and subsidence reversal projects, including raising or strengthening levees. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and the Delta Watershed Planning Areas.

Delta Plan Mitigation Measures 7-3 and 7-4, which were previously adopted and incorporated into the Delta Plan, have been revised to reflect updated formatting and current standards.
Mitigation Measure 7-3 has also been revised to incorporate Mitigation Measure 7.4. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than previously adopted Mitigation Measures 7-3 and 7-4. Revised Mitigation Measure 7-3(a) through (d) would apply to covered actions and are recommended to be implemented by other entities for non-covered actions. These mitigation measures would minimize conflicts with existing zoning of forestland or timberland due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measures 7-3(a) through (d) or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 7-3(a) through (d): Implementation of projects in response to the proposed Ecosystem Amendment could conflict with existing zoning for forestland, timberland, or timberland zoned Timberland Production or result in loss of forestland from conversion of land to non-forest use.

7-3(a) Avoid protected forestland and timberland through site selection and/or project design.

If protected forestland and timberland cannot be avoided, covered actions shall implement the following minimization measures:

7-3(b) When selecting a project site, project proponents shall take into consideration the value of the forest, not only in terms of direct products such as wood but also as part of the watershed ecosystem.

7-3(c) For projects that will result in permanent conversion of Forestland, project proponents shall acquire, at a fair market value, other forestland that shall be preserved in perpetuity through a conservation easement or 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.

F. Impact 5.3-3. Implementation of projects in response to the proposed Ecosystem Amendment could result in changes in the existing environment that, because of their location or nature, could indirectly result in conversion of Farmland to non-agricultural use or conversion of forestland to non-forest use.

The 2022 PEIR finds that the Ecosystem Amendment could cause activities that adversely affect the viability of surrounding agricultural or forest uses, that impede access to agricultural areas, or that disrupt agricultural infrastructure in both the Primary and Extended Planning Areas. Consequently, these activities could indirectly result in significant temporary, long-term, or permanent adverse impacts related to the conversion of Farmland to non-agricultural use or
forestland to non-forest use in both the Primary and Delta Watershed Planning Area. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including modifying, breaching, or removing levees; construction of fish passage improvements; and grading, backfilling, and other construction activities associated with habitat restoration. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and the Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 7-1(a) through (h), set forth above in the discussion of Impact 5.3-1, would apply to covered actions and are recommended to be implemented by other entities for non-covered actions. Revised Mitigation Measure 7-1(a) through (h) would minimize conversion of Farmland to nonagricultural uses due to actions taken by other entities in response to the proposed Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that revised Mitigation Measure 7-1(a) through (h) would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measures 7-1(a) through (h) or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

G. Impact 5.4-1. Implementation of projects in response to the proposed Ecosystem Amendment could conflict with an applicable air quality plan.

The 2022 PEIR finds that the Ecosystem Amendment could result in emissions-generating activities that would cause a significant adverse impact related to conflicts with applicable air quality plans in both the Primary and Delta Watershed Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including improvements to fish passage facilities, modifications to improve hydrologic surface water connectivity, hatchery management projects, increases in the frequency of seasonal inundation, levee modifications or construction, and habitat restoration. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 9-1, which was previously adopted and incorporated into the Delta Plan, has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than previously adopted Mitigation Measure 9-1. Revised Mitigation Measure 9-1(a) through (n) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. This mitigation measure would minimize conflict with an applicable air quality plan due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 9-1(a) through (n), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.
2022 PEIR Mitigation Measure 9-1(a) through (n): Implementation of projects in response to the proposed Ecosystem Amendment could conflict with an applicable air quality plan.

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 shall reduce NOX and PM from diesel-fueled on-road and off-road vehicles and equipment.

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 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.

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 shall include applicable recommendations or requirements of the local air district(s) 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.

vii. 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.

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. 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 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 and PM.

xiii. Require all contractors to use equipment that meets ARB's most recent certification standard for off-road heavy duty diesel engines.

H. Impact 5.4-2. Emissions associated with construction of projects in response to the proposed Ecosystem Amendment could violate an air quality standard, contribute substantially to an air quality violation, and/or result in a short-term cumulatively considerable net increase of nonattainment pollutants.

The 2022 PEIR finds that the Ecosystem Amendment could cause temporary emissions of air pollutants associated with construction that would result in significant adverse impacts related to the violation of air quality standards, substantial contribution to an air quality violation, and/or a short-term cumulatively considerable net increase of non-attainment pollutants in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem
Amendment, including levee modifications, removal, and movement of habitat restoration projects, modified of fishways, removal of small dams, installation of fish screens. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary Planning Area and the Delta Watershed Planning Area.

Delta Plan revised Measure 9-1(a) through (n), set forth above in the discussion of Impact 5.4-1, would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. Revised Mitigation Measure 9-1(a) through (n) would minimize air quality standard violations pertaining to short term increases of nonattainment pollutants due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that revised Mitigation Measure 9-1(a) through (n) would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 9-1(a) through (n) or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

I. Impact 5.4-3. Emissions associated with operation of projects in response to the proposed Ecosystem Amendment could violate an air quality standard, contribute substantially to an air quality violation, and/or result in a cumulatively considerable net increase of nonattainment pollutants.

The 2022 PEIR finds that the Ecosystem Amendment could cause long-term emissions of air pollutants that would result in significant adverse impacts related to the violation of an air quality standard, the substantial contribution to an air quality violation, and/or a short-term cumulatively considerable net increase of nonattainment pollutants in both the Primary and Extended Planning Areas. These events would likely result in a smaller amount of air pollutant emissions over shorter periods of time, and some activities may result in a cumulatively considerable net increase of nonattainment pollutants. These impacts could be caused by activities associated with operation and maintenance of facilities in response to the Ecosystem Amendment, including fish passage project activities such as new fishways or improvement projects, removal of small dams, and installation of fish screens. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 9-1, which was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised Mitigation Measure 9-1(a) through (n) described under Impact 5.4-1 is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 9-1. Revised Mitigation 9-1(a) through (n) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. The revised mitigation measure would minimize violations of an air quality standard, substantial contributions to an air quality violation, and/or a cumulatively considerable net increase of nonattainment pollutants due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that revised Mitigation Measure 9-1(a) through (n) would reduce significant impacts of covered actions to a less-than-significant level in all cases.
Furthermore, implementation and enforcement of revised Mitigation Measure 9-1(a) through (n) or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

**J. Impact 5.4-4. Emissions associated with construction projects in response to the proposed Ecosystem Amendment could expose sensitive receptors to substantial pollutant concentrations.**

The 2022 PEIR finds that the Ecosystem Amendment could cause construction-generated air pollutant emissions, such as emissions of fugitive dust, CO, and toxic air contaminants (“TAC”), that could result in significant adverse impacts related to the exposure of sensitive receptors (including rural residences) to substantial pollutant concentrations in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including new screened diversions, or modification or relocation of fishways, culverts, stream crossings or bridges. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 9-3, which was previously adopted and incorporated into the Delta Plan, has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation 9-3. Revised Mitigation Measure 9-3(a) through (c) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. This mitigation measure would minimize exposure of sensitive receptors to substantial pollutant concentrations due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the revised Mitigation Measure 9-3(a) through (c) would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 9-3(a) through (c) or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

**2022 PEIR Mitigation Measure 9-3(a) through (c): Emissions associated with construction of projects in response to the proposed Ecosystem Amendment could expose sensitive receptors to substantial pollutant concentrations.**

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 5.4-4, Construction or Operation of Projects Would Expose Sensitive Receptors to Substantial Pollutant Concentrations:

i. Implement revised Mitigation Measure 9-1 (a) through (n) 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 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.

K. Impact 5.4-6. Implementation of projects in response to the proposed Ecosystem Amendment could conflict with an applicable plan, policy or regulation adopted for the purpose of reducing emissions of GHGs.

The 2022 PEIR finds that the Ecosystem Amendment could cause significant adverse impacts related to conflicts with GHG reduction policies, plans, and regulations in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities implemented by other entities in response to the Ecosystem Amendment, including fish passage improvement projects, new fishways or improvement projects, removal of small dams, installation of fish screens, screen diversions, and modifications to improve hydrologic surface water connectivity and increase the frequency of seasonal inundation. Activates by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 21-1, which was previously adopted and incorporated into the Delta Plan, has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 21-1. Revised Mitigation Measure 21-1 would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. The revised mitigation measure would minimize conflicts with applicable GHG reduction plans, policies or regulations adopted for the purpose of reducing emissions of GHGs due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 21-1, or equally effective
feasible measures would be within the responsibility and jurisdiction of other public agencies and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

**2022 PEIR Mitigation Measure 21-1** Implementation of projects in response to the proposed Ecosystem Amendment could conflict with an applicable plan, policy or regulation adopted for the purpose of reducing emissions of GHGs.

21-1 Implement GHG mitigation measures listed in the most recent applicable air district, state, regional, or state-of-the art guidance.

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. 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.

**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.

**Renewable Energy**

1. Install solar and wind power systems.
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. 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. 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.

**Solid Waste**
Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).

**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.

**Blended Cements**
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.

**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:
   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.

L. Impact 5.4-7. Construction of projects in response to the proposed Ecosystem Amendment could result in an increase in GHG emissions that may have a significant impact on the environment.

The 2022 PEIR finds that the Ecosystem Amendment could cause a significant adverse impact related to an increase in construction-generated GHG emissions in both the Primary and Extended Planning Areas. This impact could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including fish passage improvement projects, new fishways and improvement projects, removal of small dams, and installation of fish screens and hatchery management projects which could result in GHG emissions from fuel combustion during the use of construction equipment as well as some maintenance and repair activities, such as levee maintenance, sediment removal, vegetation clearing, and transport of fill material. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 21-1, set forth above in the discussion of Impact 5.4-6 would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. Revised Mitigation Measure 21-1 is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 21-1. Revised Mitigation 21-1 would minimize an increase in GHG emissions due to construction of projects that may have a significant impact on the environment due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that revised Mitigation Measure 21-1 would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measures 21-1, or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.
M. Impact 5.4-8. Operation of projects in response to the proposed Ecosystem Amendment could result in an increase in GHG emissions that may have a significant impact on the environment.

The 2022 PEIR finds that the Ecosystem Amendment could cause a significant adverse impact related to an increase in operation of projects generating GHG emissions in both the Primary and Extended Planning Areas. These impacts could be caused by operation activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including clearing of non-native vegetation, dredging and sediment removal, placement of fill material, bank stabilization, erosion control measures, drain and pressure relief, levee maintenance, instrument installation and maintenance, habitat structure maintenance and repair, fishway improvements, and screened diversions. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 21-1, set forth above in the discussion of Impact 5.4-6 would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. Revised Mitigation Measure 21-1 would minimize an increase in GHG emissions due to operation of projects that may have a significant impact on the environment due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that revised Mitigation Measure 21-1 would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measures 21-1, or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

N. Impact 5.5-1: Implementation of projects in response to the proposed Ecosystem Amendment could adversely affect special-status fish species directly, or indirectly through habitat modifications.

The 2022 PEIR finds that the Ecosystem Amendment could adversely affect special-status fish species directly, or indirectly through habitat modifications associated with special-status fish species, including Delta Smelt, Chinook Salmon, steelhead, green sturgeon, Sacramento splittail, longfin smelt, and others in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including construction, modification, breaching, or removal of levees to improve the function and connectivity of floodplain habitat; fish passage improvement projects; grading, backfilling and construction associated with restoration and enhancement of habitat; fishway improvements; removal of small dams; installation of fish screens; and hatchery management projects. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and the Delta Watershed Planning Areas.

Delta Plan Mitigation Measures 4-1, 4-2, 4-3, and 4-4, which were previously adopted and incorporated into the Delta Plan, have been revised to reflect updated formatting and current standards. The revised mitigation measures set forth below are equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan
Mitigation Measures. Revised Mitigation Measures 4-1(a) through (c) and (e), 4-2(a) through (e), 4-3(a) through (d) and 4-4(a) through (b) would apply to covered actions and are recommended to be implemented by other entities for non-covered actions. These mitigation measures minimize adverse effects to special-status fish species directly, or indirectly through habitat modifications due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that revised Mitigation Measures 4-1(a) through (c) and (e), 4-2(a) through (e), 4-3(a) through (d) and 4-4(a) through (b) would reduce significant impacts to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measures 4-1(a) through (c) and (e), 4-2(a) through (e), 4-3(a) through (d) and 4-4(a) through (b), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 4-1(a) through (c) and (e): Implementation of projects in response to the proposed Ecosystem Amendment could adversely affect special-status fish species directly, or indirectly through habitat modifications.

4-1(a) Avoid siting project features that would result in the removal or degradation of sensitive natural communities, including jurisdictional wetlands and other waters, vernal pools, alkali seasonal wetlands, riparian habitats, and inland dune scrub.

If sensitive natural communities cannot be avoided, implement the following minimization measures:

4-1(b) Design the project to minimize effects on sensitive natural communities through one or more of the following measures:

i. 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.

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).

4-1(c) 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.

4-1(e) Develop and implement an invasive species management plan 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 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 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 postconstruction 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

2022 PEIR Mitigation Measure 4-2(a) through (e): Implementation of projects in response to the proposed Ecosystem Amendment could adversely affect special-status fish species directly, or indirectly through habitat modifications.

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.
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).

2022 PEIR Mitigation Measure 4-3(a) through (d): Implementation of projects in response to the proposed Ecosystem Amendment could adversely affect special-status fish species directly, or indirectly through habitat modifications.

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.

If special-status species habitat cannot be avoided, implement the following minimization measures:

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.

2022 PEIR Mitigation Measure 4-4(a) and (b): Implementation of projects in response to the proposed Ecosystem Amendment could adversely affect special-status fish species directly, or indirectly through habitat modifications

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 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 entrapped.

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 construction shall be conducted and a monitoring plan will be developed in consultation with the applicable Regional Water Board.

O. Impact 5.5-2. Implementation of projects in response to the proposed Ecosystem Amendment could result in adverse direct effects on the movement of native resident or migratory fish species.

The 2022 PEIR finds that the Ecosystem Amendment could cause adverse direct effects on the movement of native resident or migratory fish species, including disturbance and/or direct mortality, to special-status fish species in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including fish passage facilities, enhancement of wetlands or floodplain habitat, removal of dams or legacy structures, and fish screens and fishway improvements. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary Planning Area and Delta Watershed Planning Areas.

Delta Plan Mitigation Measures 4-2(a) through (e); 4-3(a) through (d); and 4-4(a) and (b) set forth above in the discussion of Impact 5.5-1 would apply to covered actions and are recommended to be implemented by other entities for non-covered actions. Revised Mitigation Measures 4-2(a) through (e); 4-3(a) through (d); and 4-4(a) and (b) would minimize adverse direct effects on the movement of native resident or migratory fish species due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the revised mitigation measures would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measures 4-2(a) through (e); 4-3(a) through (d); and 4-4(a) and (b) or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

P. Impact 5.6-1. Implementation of projects in response to the proposed Ecosystem Amendment could result in adverse effects on sensitive natural communities, including wetlands and riparian habitat.

The 2022 PEIR finds that the Ecosystem Amendment could cause significant adverse effects on sensitive natural communities including wetlands and riparian habitat in both the Primary and Extended Planning Areas. Impacts could include the permanent loss of different sensitive natural communities. These impacts could be caused by construction activities associated with projects
implemented by other entities in response to the Ecosystem Amendment, including constructing, modifying, breaching, or removing levees; grading, backfilling, and construction activities for restoration projects, fishway improvements, modification or removal of culverts, and screening of unscreened diversions. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan revised Mitigation Measure 4-1(a) through (c) and (e) set forth above in the discussion of Impact 5.5-1 and revised Mitigation Measure 4-1(d) set forth below would apply to covered actions and are recommended to be implemented by other entities for non-covered actions. Mitigation Measure 4-1 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 4-1. Revised Mitigation Measure 4-1(a) through (e) would minimize adverse effects on sensitive natural communities, including wetlands and riparian habitat, due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that these mitigation measures would reduce significant impacts of covered actions to a less than significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 4-1 (a) through (e), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 4-1(d): Implementation of projects in response to the proposed Ecosystem Amendment could result in adverse effects on sensitive natural communities, including wetlands and riparian habitat.

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).

Q. Impact 5.6-2. Implementation of projects in response to the proposed Ecosystem Amendment could result in adverse effects on special-status plant species.

The 2022 PEIR finds that the Ecosystem Amendment could result in adverse effects on special-status plant species in both the Primary and Extended Planning Areas. Impacts could include the permanent loss of special-status plants or their habitat. Such permanent impacts represent mortality of special-status plants or a conversion of the type of habitat upon which these species
depend that persists through the life of the project. These impacts could be caused by
collection activities associated with projects implemented by other entities in response to the
Ecosystem Amendment, including wetland restoration, floodplain restoration, channel margin
restoration, fishway improvements, and modification or removal of culverts. Activities by other
entities in response to the Ecosystem Amendment would occur in the Primary and Delta
Watershed Planning Areas.

Delta Plan Mitigation Measure 4-2 was previously adopted and incorporated into the Delta Plan
and has been revised to reflect updated formatting and current standards. The revised mitigation
measure set forth below is equally effective and would not result in any new or substantially
more severe impacts than the previously adopted Delta Plan Mitigation Measure 4-2. Revised
Mitigation Measure 4-2(f) through (l) would apply to covered actions and is recommended to be
implemented by other entities for non-covered actions. The revised mitigation measure would
minimize adverse effects on special-status plant species due to actions taken by other entities in
response to the Ecosystem Amendment. However, because the extent and location of such
actions are not yet known, it is not possible to conclude that the mitigation measure would
reduce significant impacts of covered actions to a less-than-significant level in all cases.
Furthermore, implementation and enforcement of revised Mitigation Measure 4-2(f) through (l)
or equally effective feasible measures, is within the responsibility and jurisdiction of public
agencies other than the Council and can and should be adopted by those other agencies.
Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 4-2(f) through (l) Implementation of projects in response to
the proposed Ecosystem Amendment could result in adverse effects on special-status plant
species.

4-2(f) Select project site(s) that would avoid habitats of special-status plant species.

If special-status plant species habitat cannot be avoided, implement the following
minimization measures:

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 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. 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 botanist) to ensure effectiveness of
avoidance and minimization measures and implement remedial measures if necessary.
4-2(k) When appropriate, relocate special-status plant species from project sites following USFWS, CNPS, and DFW protocols.

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.

R. Impact 5.6-3. Implementation of projects in response to the proposed Ecosystem Amendment could result in adverse effects on special-status terrestrial wildlife species.

The 2022 PEIR finds that the Ecosystem Amendment could cause significant adverse impacts to special-status terrestrial wildlife species in the Primary Planning Area (including vernal pool invertebrates, valley elderberry longhorn beetles, giant garter snake, northwestern pond turtle, burrowing owl, and Swainson’s hawk) and the Extended Planning Area (including California tiger salamander, California red-legged frog, and San Joaquin kit fox). Impacts could include permanent loss of special-status terrestrial wildlife. Such permanent impacts represent mortality of special-status terrestrial wildlife species or a conversion of the type of habitat upon which these species depend that persists through the life of the project. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including restoring seasonal floodplain, freshwater tidal marsh, or seasonal wetlands; fishway improvements; and modification or removal of culverts. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan revised Mitigation Measures 4-3(a) and (b), as discussed above in the discussion of Impact 5.5-1, and revised Mitigation Measure 4-3 (e) through (j), set forth below, would apply to covered actions and are recommended to be implemented by other entities for non-covered actions. The revised Mitigation Measure 4-3 (a) and (b), and (e) through (j) are equally effective, would not result in any new or substantially more severe than the previously adopted Dela Plan Mitigation Measure 4-3, and would minimize significant adverse impacts to special-status terrestrial wildlife species due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the revised mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 4-3 (a) and (b) and (e) through (j), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 4-3(e) through (j) Implementation of projects in response to the proposed Ecosystem Amendment could result in adverse effects on special static terrestrial wildlife species.

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.

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.

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).

S. Impact 5.6-4. Implementation of projects in response to the proposed Ecosystem Amendment could interfere with the movement of native resident or migratory wildlife species.

The 2022 PEIR finds that the Ecosystem Amendment could cause temporary significant adverse impacts to wildlife movement corridors and permanent changes to migratory movement corridors in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including fishway improvements, modification or removal of culverts, and hydrologic connectivity improvements. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Extended Planning Areas.

Delt Plan Mitigation Measure 4-4 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 4-4. Revised Mitigation Measure 4-4(c) and (d) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. This mitigation measure would minimize interference with the movement of native resident or migratory wildlife species due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant impact level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 4-4(c) and (d), or equally effective feasible measures, would be within the responsibility and
jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 4-4(c) and (d) Implementation of projects in response to the proposed Ecosystem Amendment could interfere with the movement of native resident or migratory wildlife species.

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.

T. Impact 5.6-5. Implementation of projects in response to the proposed Ecosystem Amendment could conflict with any local policies or ordinances protecting biological resources or the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat protection plan.

The 2022 PEIR finds that the Ecosystem Amendment could cause significant adverse impacts related to conflicts with local policies or ordinances protecting biological resources in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendments, including seasonal floodplain restoration, setback levee projects, fishway improvements, and modification or removal of culverts. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Area.

Delta Plan Mitigation Measure 4-5 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 4-5. Revised Mitigation Measure 4-5(a) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. This mitigation measure would minimize conflict with any local policies or ordinances protecting biological resources or the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional or State habitat protection plan due to actions taken by other entities in response
to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 4-5(a), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

**2022 PEIR Mitigation Measure 4-5(a)** Implementation of projects in response to the proposed Ecosystem Amendment could conflict with any local policies or ordinances protecting biological resources or the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat protection plan.

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.

**U. Impact 5.7-1. Implementation of projects by other public agencies in response to the proposed Ecosystem Amendments could result in a substantial adverse change to significant historic buildings, structures, linear features, or cultural landscapes.**

The PEIR finds that the Ecosystem Amendment could cause significant permanent adverse impacts to historic built resources, as well as to the historic setting of significant built resources in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including construction of new levees, relocation or modification of existing levees, fish passage improvement projects, fishway improvements, wetland restoration projects, removal of small dams, hatchery management projects, and installation of fish screens. Construction activities are more likely than operational activities to cause these impacts. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 10-3 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 10-3. Revised Mitigation Measure 10-3(a) through (f) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. This mitigation measure would minimize substantial adverse change to significant historic buildings, structures, linear features, or cultural landscapes due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 10-3(a) through (f), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can
and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 10-3(a) through (f) Implementation of projects in response to the proposed Ecosystem Amendment could result in a substantial adverse change to significant historic buildings, structures, linear features or cultural landscapes.

10-3(a) Inventory and evaluate historic-era buildings, structures, linear features, and cultural landscapes. Conduct cultural resources studies to determine whether historic-era buildings, structures, 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 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.

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) 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 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) 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.
V. Impact 5.7-2. Implementation of projects in response to the proposed Ecosystem Amendment could result in the disturbance or destruction of prehistoric and historic-era archeological resources, including submerged resources.

The 2022 PEIR finds that the Ecosystem Amendment could cause significant permanent adverse impacts to archaeological resources through their damage or destruction in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including construction of new levees, relocation or modification of existing levees, fish passage improvement projects, fishway improvements, wetland restoration projects, removal of small dams, hatchery management projects, and installation of fish screens. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 10-1 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 10-1. Revised Mitigation Measure 10-1(c) through (j) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. This mitigation measure would minimize disturbance or destruction of prehistoric and historic-era archaeological resources, including submerged resources due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 10-1(c) through (j), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 10-1(c) through (i): Implementation of projects in response to the proposed Ecosystem Amendment could result in the disturbance or destruction of prehistoric and historic-era archeological resources, including submerged resources.

10-1(c) Before any ground-disturbing activities begin, conduct intensive archaeological surveys, 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 CRHR-eligible prehistoric or historic-era archaeological, tribal cultural, or landscape resources are discovered during the survey phase, additional investigations may be necessary. These investigations 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 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

10-1(f) If federal agencies are participants in the project and Section 106 of the National Historic Preservation Act applies, conduct formal consultation with the State Historic Preservation Officer and the California Native American tribes. Potential adverse effects on cultural resources recommended as eligible for listing in the NRHP will be resolved through the development of a memorandum of agreement and/or a program-level agreement.

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 American tribes shall be consulted. The California Native American Heritage Commission (NAHC) shall be asked to provide a list of contacts for Native American tribes who should be contacted concerning an identified future project. The NAHC shall also be asked to search its Sacred Lands Files. California Native American tribes identified by the NAHC shall be contacted by letter to consult on the identification, evaluation, and treatment of tribal 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 site, 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 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 Archaeology 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 archaeologist determines that the resource is or is not 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.

W. Impact 5.7-3. Implementation of projects in response to the proposed Ecosystem Amendment could result in the disturbance or destruction of buried human remains.

The 2022 PEIR finds that the Ecosystem Amendment could cause significant permanent adverse impacts to buried human remains through their damage or destruction in both the Primary and Extended Planning Areas, where numerous early Native American human interments have been documented. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including construction of new levees, relocation or modification of existing levees, fish passage improvement projects, fishway improvements, wetland restoration projects, hatchery management projects, removal of small dams, and installation of fish screens. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Area.

Delta Plan Mitigation Measure 10-2 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 10-2. Revised Mitigation Measure 10-2(a) through (f) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. This mitigation measure would minimize disturbance or destruction of buried human remains due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 10-2(a) through (f), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 10-2(a) through (f): Implementation of projects in response to the proposed Ecosystem Amendment could result in the disturbance or destruction of buried human remains.

10-2(a) 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,

10-2(b) 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 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.

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. 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.

X. Impact 5.9-1: Implementation of projects in response to the proposed Ecosystem Amendment could result in substantial adverse effects, including the risk of loss, injury, or death due to fault rupture.

The 2022 PEIR finds that the Ecosystem Amendment could cause significant adverse impacts related to exposing people or structures to risk of loss, injury, or death associated with rupture of known earthquake faults in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including installation of fish screens, intakes/diversions, or stream crossings; fishway improvements; removal of small dams; and modifying, relocating, repairing or maintaining bridges. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 11-1 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 11-1. Revised Mitigation Measure 11-1(a) and (b) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. This mitigation measure would minimize substantial adverse effects, including the risk of loss, injury, or death due to fault rupture. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 11-1(a) and (b), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 11-1(a) and (b): Implementation of projects in response to the proposed Ecosystem Amendment could result in substantial adverse effects, including the risk of loss, injury, or death due to fault rupture.

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.

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.
Y. Impact 5.9-2: Implementation of projects in response to the proposed Ecosystem Amendment could result in substantial adverse effects, including the risk of loss, injury, or death due to strong seismic ground shaking.

The 2022 PEIR finds that the Ecosystem Amendment could cause significant adverse impacts associated with exposing people or structures to risk of loss, injury, or death due to strong seismic ground shaking in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including channel widening, fish passage improvement projects, hatchery management projects, wetland restoration, fishway improvements, removal of small dams, installation of fish screens, and modifying, relocating, repairing, or maintaining bridges. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 11-2 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 11-2. Revised Mitigation Measure 11-2(a) would minimize the potential impacts from strong ground shaking due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 11-2(a), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 11-2(a): Implementation of projects in response to the proposed Ecosystem Amendment could result in substantial adverse effects, including the risk of loss, injury, or death due to strong seismic ground shaking.

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.

Z. Impact 5.9-3. Implementation of projects in response to the proposed Ecosystem Amendment could result in substantial adverse effects, including the risk of loss, injury, or death due to unstable soil conditions.

The PEIR finds that the Ecosystem Amendment could cause result in substantial adverse effects including the risk of loss, injury, or death due to unstable soil conditions could result from exposure of structures to unstable soil conditions, including landslides, expansive soils, subsidence, high-organic-matter soils, and nuisance water in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including channel widening, fish passage improvement projects, hatchery management projects, wetland
restoration, fishway improvements, removal of small dams, installation of fish screens, and modifying, relocating, repairing, or maintaining bridges. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measures 11-3, 11-5, 11-6, 11-7, and 11-9 were previously adopted and incorporated into the Delta Plan and have been revised to reflect updated formatting and current standards. The revised mitigation measures set forth below are equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measures 11-3, 11-5, 11-6, 11-7, and 11-9. Revised Mitigation Measures 11-3(a) through (d), 11-5(a), 11-6(a) and (b), 11-7(a), and 11-9(a) would apply to covered actions and are recommended to be implemented by other entities for non-covered actions. These mitigation measures would minimize substantial adverse effects, including the risk of loss, injury or death due to unstable soil conditions due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the revised Mitigation Measures 11-3(a) through (d), 11-5(a), 11-6(a) and (b), 11-7(a), and 11-9(a) would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measures 11-3(a) through (d), 11-5(a), 11-6(a) and (b), 11-7(a), and 11-9(a), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

**2022 PEIR Mitigation Measures 11-3(a) through (d):** Implementation of projects in response to the proposed Ecosystem Amendment could result in substantial adverse effects, including the risk of loss, injury, or death due to unstable soil conditions.

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.

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 in areas adjacent to the proposed improvements and to propose 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.

2022 PEIR Mitigation Measure 11-5(a): Implementation of projects in response to the proposed Ecosystem Amendment could result in substantial adverse effects, including the risk of loss, injury, or death due to unstable soil conditions.

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.

2022 PEIR Mitigation Measure 11-6(a) and (b): Implementation of projects in response to the proposed Ecosystem Amendment could result in substantial adverse effects, including the risk of loss, injury, or death due to unstable soil conditions.

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.

2022 PEIR Mitigation Measure 11-7(a): Implementation of projects in response to the proposed Ecosystem Amendment could result in substantial adverse effects, including the risk of loss, injury or death due to unstable soil conditions.

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.

2022 PEIR Mitigation Measure 11-9(a): Implementation of projects in response to the proposed Ecosystem Amendment could result in substantial adverse effects, including the risk of loss, injury, or death due to unstable soil conditions.

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

AA. Impact 5.9-4: Implementation of projects in response to the proposed Ecosystem Amendment could result in substantial soil erosion or loss of topsoil.

The 2022 PEIR finds that the Ecosystem Amendment could cause significant adverse impacts associated with substantial soil erosion and the loss of topsoil in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including channel widening, fish passage improvement projects, hatchery management projects, wetland restoration, fishway improvements, removal of small dams, installation of fish screens, and
modifying, relocating, repairing, or maintaining bridges. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 11-4 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 11-4. Revised Mitigation Measure 11-4(a) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. This mitigation measure would minimize the potential impacts from erosion and loss of topsoil due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of cover actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 11-4(a), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 11-4(a): Implementation of projects in response to the proposed Ecosystem Amendment could result in substantial soil erosion or loss of topsoil.  

11-4(a) Any covered action that would have significant soil erosion and topsoil loss impacts 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 (SWPPP). 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, sandbags, 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.

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.

BB. Impact 5.9-5: Implementation of projects in response to the proposed Ecosystem Amendment could result in the loss of a known mineral resource.

The 2022 PEIR finds that the Ecosystem Amendment could cause significant adverse impacts related to the loss of a known mineral resource in both the Primary and Extended Planning Areas. Loss of a known mineral resource could occur both through potential placement of facilities in areas with known mineral resources whose extraction would be limited by the implementing projects and through demand for aggregate resources from project construction. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including channel widening, fish passage improvement projects, hatchery management projects, wetland restoration, fishway improvements, removal of small dams, installation of fish screen structure, and modifying, relocating, repairing, maintaining bridges. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 13-1 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 13-1. Revised Mitigation Measure 13-1(a) through (d) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. This mitigation measure would minimize the potential impacts from loss of a known mineral resource due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 13-1(a) through (d), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 13-1(a) through (d) Implementation of projects in response to the proposed Ecosystem Amendment could result in the loss of a known mineral resource.

13-1(a) Ensure land use 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 MRZ2 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(d) Use recycled aggregate, where possible, to decrease the demand for new aggregate.

CC. Impact 5.9-6: Implementation of projects in response to the proposed Ecosystem Amendment could result in the loss of an important mineral resource recovery site.

The 2022 PEIR finds that the Ecosystem Amendment could cause significant adverse impacts related to the loss of an important mineral resource recovery site in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including channel widening, fish passage improvement projects, hatchery management projects, wetland restoration, fishway improvements, removal of small dams, installation of fish screens, and modifying, relocating, repairing, or maintaining bridges. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 13-2 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 13-2. Revised Mitigation Measure 13-2(a) and (b) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. This mitigation measure would minimize the potential impacts from the loss of an important mineral recovery site due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 13-2(a) and (b), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 13-2(a) and (b): Implementation of projects in response to the proposed Ecosystem Amendment could result in the loss of an important mineral resource recovery site.

13-2(a) Ensure access is maintained to existing, active mineral resource extraction sites both during and after project construction.

13-2(b) Implement recommendations identified in the 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.

DD. Impact 5.9-7: Implementation of projects in response to the proposed Ecosystem Amendment could result in the disturbance or destruction of paleontological resources.

The 2022 PEIR finds that the Ecosystem Amendment could result in the disturbance or destruction of paleontological resources in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including channel widening, fish passage improvement projects, hatchery management projects, wetland restoration, fishway improvements, removal of small dams, installation of fish screens, and modifying, relocating, repairing, or maintaining bridges. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 12-1 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 12-1. Revised Mitigation Measure 12-1(a) and (b) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. This mitigation measure would minimize
the potential impacts from disturbance or destruction of paleontological resources due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 12-1 (a) and (b), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 12.1(a) and (b): Implementation of projects in response to the proposed Ecosystem Amendment could result in the disturbance or destruction or 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.

iii. The assessment and recovery of discovered fossil resources

iv. The preparation and curation of fossil finds

12-1(b) The PRMRP 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.

EE. Impact 5.10-1. Implementation of projects in response to the proposed Ecosystem Amendment could result in the routine transport, use, or disposal of hazardous materials that, if accidentally released, could create a hazard to the public or the environment or be located within one-quarter mile of a school.

The 2022 PEIR finds that the Ecosystem Amendment could cause a significant adverse impact related to routine transport, use or disposal of hazardous materials that if accidentally released could create a hazard to the public, schools, or the environment in both the Primary and Extended Planning Areas. In addition, if project sites are within 0.25 miles of an existing or proposed school, project-related activities could create a risk of exposing school occupants and school site users to accidental hazardous materials spills. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the
Ecosystem Amendment, including channel widening, fish passage improvement projects, fishway improvements, wetland restoration, modifying or removing culverts, and screened diversions. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 14-1 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 14-1. Revised Mitigation Measure 14-1(a) through (s) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. This mitigation measure would minimize impacts associated with routine transport, use, or disposal of hazardous materials that if accidentally released could create a hazard to the public or the environment or be located within one-quarter mile of a school due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 14-1 (a) through (s), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 14-1(a) through (s): Implementation of projects in response to the proposed Ecosystem Amendment could result in the routine transport, use, or disposal of hazardous materials that, if accidentally released, could create a hazard to the public or the environment or be located within one-quarter mile of a school.

14-1(a) Refueling and maintenance of vehicles and equipment 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 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.

14-1(j) When refueling is completed, the service truck 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 shall be inspected at least once per week for signs of leaking or failure. All maintenance and refueling areas shall be inspected monthly. Results of inspections shall be recorded in a logbook maintained onsite.

14-1(m) An automatic sprinkler system shall be installed in indoor hazardous material storage areas.

14-1(n) An exhaust system shall be installed in indoor hazardous material storage areas.

14-1(o) Incompatible materials shall be separated by isolating them from each other with a noncombustible partition.

14-1(p) Implement a spill control in all storage, handling, and dispensing areas.

14-1(q) Separate secondary containment shall be provided for each chemical storage system. 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.
FF. Impact 5.10-2. Implementation of projects in response to the proposed Ecosystem Amendment could result in ground-disturbing activities that could encounter previously unidentified contaminated soil and/or groundwater that could expose construction workers, the public and the environment to risks associated with hazardous materials.

The 2022 PEIR finds that the Ecosystem Amendment could cause significant adverse impacts related to the exposure of construction workers and the environment to existing and previously unidentified soil and/or groundwater contamination in both the Primary and Extended Planning Areas. These impacts could be caused by ground-disturbing construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including constructing, modifying, breaching, or removing levees; fish passage improvement projects; grading, backfilling, and construction activities to restore habitat; installing fish screens; and removing or modifying culverts. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 14-2 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 14-2. Revised Mitigation Measure 14-2(a) and (b) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. This mitigation measure would minimize impacts associated from ground-disturbing activities that could encounter previously unidentified contaminated soil and/or groundwater that could expose construction workers, the public and the environment to risks associated with hazardous materials due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 14-2 (a) and (b), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 14-2(a) and (b): Implementation of projects in response to the proposed Ecosystem Amendment could result in ground-disturbing activities that could encounter previously unidentified contaminated soil and/or groundwater that could expose construction workers and the environment to risks associated with hazardous materials.

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.

GG. Impact 5.10-3. Implementation of projects in response to the proposed Ecosystem Amendment could be located within 2 miles of an airport, resulting in a safety hazard or excess noise.

The 2022 PEIR finds that the Ecosystem Amendment could cause significant adverse impacts related to locating projects within two miles of an airport, resulting in a safety hazard by placing people in proximity to the hazards associated with airport operations, and resulting in an increased potential for collisions between aircraft and wildlife, in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including, floodplain widening, fish passage improvement projects, grading and breaching of levees, removing non-native terrestrial and aquatic invasive species, installing fish screens, and removing or modifying culverts. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 14-2 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 14-2. Revised Mitigation Measure 14-4(a) and (b) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. The mitigation measure would minimize a safety hazard located within two miles of an airport due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 14-4 (a) and (b), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 14-4(a) and (b): Implementation of projects in response to the proposed Ecosystem Amendment could be located within 2 miles of an airport, resulting in a safety hazard or excess noise.

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 five miles between the farthest edge of the Airport Operations Area and hazardous wildlife attractants.
HH. Implementation of projects in response to the proposed Ecosystem Amendment could interfere with emergency response access or with an adopted emergency response or evacuation plan (including those located in or near State responsibility areas or land classified as very high FHSZ) or result in inadequate emergency access.

The 2022 PEIR finds that the Ecosystem Amendment could cause a significant adverse impact related to emergency response access or with an adopted emergency response or evacuation plan in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including constructing, modifying, breaching or removing levees; fish passage improvement projects; grading, backfilling, and construction activities to restore habitat; installing fish screens, and removing or modifying culverts. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measures 17-1 and 19.3 were previously adopted and incorporated into the Delta Plan and have been revised to reflect updated formatting and current standards. The revised mitigation measures set forth below are equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measures 17-1 and 19.3. Revised Mitigation Measures 17-1(a) through (d) and 19-3(a) through (f) would apply to covered actions and are recommended to be implemented by other entities for non-covered actions. These mitigation measures would minimize impacts to emergency response access or adopted emergency response or emergency evacuation plans due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measures would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measures 17-1(a) through (d) and 19-3(a) through (f), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 17-1(a) through (d): Implementation of projects in response to the proposed Ecosystem Amendment could interfere with emergency response access or with an adopted emergency response or evacuation plan (including those located in or near State responsibility areas or land classified as very high FHSZ) or result in inadequate emergency access.

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.

2022 PEIR Mitigation Measure 19-3(a) through (f): Implementation of projects in response to the proposed Ecosystem Amendment could interfere with emergency response access or with an adopted emergency response or evacuation plan (including those located in or near State responsibility areas or land classified as very high FHSZ) or result in inadequate emergency access.

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.

19-3(c) Post warnings about the potential presence of slow-moving vehicles.

19-3(d) Use traffic-control personnel when appropriate.

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.

II. Impact 5.10-5. Implementation of projects in response to the proposed Ecosystem Amendment could expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

The 2022 PEIR finds that the Ecosystem Amendment could create a significant adverse impact related to an increased risk of exposing people or structures to significant risk of loss, injury, or death involving wildland fires due to equipment and vehicles coming into contact with vegetated areas in both the Primary and Extended Planning Areas, although the risk of wildland fire is considered to be low in the majority of the Primary Planning Area. In the Extended Planning Area, there is a greater risk that equipment and vehicles associated with projects could come into contact with vegetated areas, potentially igniting dry vegetation and resulting in fire. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including constructing, modifying, breaching, or removing levees; grading, backfilling, and construction activities to restore habitat; installing fish screens; and removing or modifying culverts. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.
Delta Plan revised Mitigation Measure 4-5(a) set forth below in discussion of Impact 5.19-1 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised Mitigation Measure 4-5(a) described under Impact 5-19.1 would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. Revised Mitigation Measure 4-5(a) would minimize exposure of people or structures to a significant risk of loss, injury or death involving wildland fires due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that revised mitigation measures would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 4-5(a) or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

**Jj. Impact 5.10-6. Implementation of projects in response to the proposed Ecosystem Amendment could create vector habitat that could pose a significant public health hazard.**

The 2022 PEIR finds that the Ecosystem Amendment could cause a significant adverse impact by creating vector habitat that would pose a significant public health hazard in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including constructing, modifying, breaching or removing levees; fish passage projects; hatchery management projects; grading, backfilling, and construction activities to restore habitat; installation of fish screens; and removal or modification of culverts creating temporary areas of standing water on construction sites. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas. Constructed facilities and operations in the Delta Watershed Planning Area would result in a less than significant impact because such facilities and operations would not create vector habitat.

Delta Plan Mitigation Measure 14-3 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 14-3. Revised Mitigation Measure 14-3(a) through (d) applies to covered actions and is recommended to be implemented by other entities for non-covered actions. This mitigation measure would minimize vector habitat that could pose a significant public health hazard due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the revised mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 14-3(a) through (d) or equally effective feasible measures would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.
2022 PEIR Mitigation Measure 14-3(a) through (d): Implementation of projects in response to the proposed Ecosystem Amendment could create vector habitat that would pose a significant public health hazard.

14-3(a) Freshwater habitat management activities shall include water-control-structure management, vegetation management, mosquito predator management, drainage improvements, and/or other best management practices, 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) Permanent ponds shall be maintained in a manner that both increases the diversity of waterfowl 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 activities shall include actions to minimize mosquito problems arising from the residual tidal and floodwaters remaining in depressions and cracked ground. 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 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 of ecosystem restoration areas, waterfowl hunting areas, setback levees, parks, canals, and surface water storage facilities minimize standing water, or use other methods such as mosquito fish to reduce mosquito breeding.

KK. Impact 5.11-1. Implementation of projects in response to the proposed Ecosystem Amendment could result in the release of pollutants into surface and/or groundwater that could violate any water quality standards or waste discharge requirements or substantially degrade water quality or conflict with implementation of a water quality control plan.

The 2022 PEIR finds that the Ecosystem Amendment could cause a significant adverse impact related to release of pollutants into surface and/or groundwater that could violate water quality standards or waste discharge requirements or substantially degrade water quality or conflict with implementation of a water quality control plan in the Primary and Extended Planning Areas. While operational changes implemented by other entities in response to the proposed Ecosystem Amendment have the potential to result in localized, adverse temporary impacts on water quality (salinity and dissolved oxygen) in the Primary Planning Area, real-time operations of the CVP and SWP would prevent potential salinity violations resulting in less-than-significant impacts. Long-term changes in water temperatures and groundwater quality in the Extended Planning Area could result from higher flow objectives. Furthermore, impacts due to constructed facilities and operations in the Extended Planning Area could also result in long-term changes to water quality. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including channel widening, construction of new or modified levees, levee removal or degradation, fish passage...
improvement projects, hatchery management projects, stream and riparian habitat restoration and enhancement projects, fish habitat restoration and enhancement projects, fishway improvements, removal of small dams, and installation of fish screens. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 3-1 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 3-1. Revised Mitigation Measure 3-1(a) through (c) and (e) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. The mitigation measure would minimize the release of pollutants into surface and/or groundwater that could violate water quality standards, waste discharge requirements, substantially degrade water quality or conflict with implementation of a water quality control plan due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 3-1(a) through (c) and (e), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 3-1(a) through (c) and (e) Implementation of projects in response to the proposed Ecosystem Amendment could result in the release of pollutants into surface and/or groundwater that could violate any water quality standards or waste discharge requirements or substantially degrade water quality or conflict with implementation of a water quality control plan.

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 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) 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 construction sites 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 100-foot vegetative or engineered buffer shall be maintained between the construction zone and surface water body.

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 would be particularly prone to the production of re-suspended sediment and contaminants, potential impacts shall be reduced through the use of submerged dredge cutter heads, silt curtains, and cofferdams, depending upon the site-specific soil conditions in the channel.

L.L. Impact 5.11-3. Implementation of projects in response to the proposed Ecosystem Amendment could substantially increase the rate or amount of surface runoff in a manner which would exceed the capacity of existing or planned stormwater drainage systems, and/or result in flooding on- or off-site.

The 2022 PEIR finds that the Ecosystem Amendment could create a significant adverse impact related to temporarily or permanently changing drainage patterns and contributing surface runoff that could exceed existing or planned stormwater drainage systems and/or create or increase on- or off-site flooding in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including channel widening, construction of new or modified levees, levee removal or degradation, stream and riparian habitat restoration and enhancement projects, fish habitat restoration and enhancement projects, fishway improvements, removal of small dams, fish passage improvement projects, and installation of fish screens. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.
Delta Plan Mitigation Measures 5-1 and 5-2 were previously adopted and incorporated into the Delta Plan and have been revised to reflect updated formatting and current standards. The revised mitigation measures set forth below are equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measures 5-1 and 5-2. Revised Mitigation Measures 5-1(a) through (k) and 5-2(a) and (b) would apply to covered actions and are recommended to be implemented by other entities for non-covered actions. The mitigation measures would minimize exceedances of the capacity of existing or planned stormwater drainage systems and adverse surface runoff impacts due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measures would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measures 5-1(a) through (k) and 5-2(a) and (b), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

**2022 PEIR Mitigation Measures 5-1(a) through (k):** Implementation of projects in response to the proposed Ecosystem Amendment could substantially increase the rate or amount of surface runoff in a manner which would exceed the capacity of existing or planned stormwater drainage systems and/or result in flooding on- or off-site.

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), 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 drainage bypass facilities during construction that 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 instream construction sites that might reduce channel capacity, install setback levees or bypass channels to maintain channel capacity and to mitigate hydraulic impacts.
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 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 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.

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.

2022 PEIR Mitigation Measures 5-2(a) and (b): Implementation of projects in response to the proposed Ecosystem Amendment could substantially increase the rate or amount of surface runoff in a manner which would exceed the capacity of existing or planned stormwater drainage systems and/or result in flooding on- or off-site.

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 shall be designed based on the drainage or hydrologic and hydraulic study.

**MM. Impact 5.11-4. Implementation of projects in response to the proposed Ecosystem Amendment could impede or redirect flood flows.**

The 2022 PEIR finds that the Ecosystem Amendment could create a significant adverse impact related to impeding or redirecting flood flows and/or affect the system’s ability to handle flood flows in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and their operation in the Primary Planning Area and construction activities in the Delta Watershed Planning Area associated with projects implemented by other entities in response to the Ecosystem Amendment, including channel widening, new and/or
modified levees, removing or degrading levees, fish passage improvement projects, hatchery management projects, stream and riparian habitat restoration projects, fishway improvements, removing small dams, and installing fish screens creating temporary modifications to flood channel geometry, water volumes and stages that could temporarily increase or redirect flood flows. Constructed facilities and operations in the Delta Watershed Planning Area would result in a less than significant impact because such facilities would be designed and constructed consistent with regulatory requirements and would not result in unintended inundation or flooding.

Delta Plan Mitigation Measure 5-4 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 5-4. Revised Mitigation Measure 5-4(a) through (c) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. This mitigation measure would minimize adverse impacts related to impeding or redirecting flood flows due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent, and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 5-4(a) through (c), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measures 5-4(a) through (c): Implementation of projects in response to the proposed Ecosystem Amendment could impede or redirect flood flows.

5-4(a) Prepare and implement a drainage or hydrology and hydraulics study 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 recommended drainage-related mitigation 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 riprap, 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 waterside slope of levees, such as rock or grouted riprap, and increase levee freeboard to address higher wind and wave runup.

**Impact 5.11-5.** Implementation of projects in response to the proposed Ecosystem Amendment could risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones.

The 2022 PEIR finds that the Ecosystem Amendment could risk release of pollutants due to project inundation in flood hazard, tsunami, and seiche zones in both the Primary and Extended
Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation in the Primary Planning Area and construction activities in the Delta Watershed Planning Area associated with projects implemented by other entities in response to the Ecosystem Amendment, including channel widening, new and/or modified levees, removing or degrading levees, fish passage improvement projects, hatchery management projects, habitat restoration projects, fishway improvements, removing small dams, and installing fish screens could release construction-related pollutants in areas subject to seiche due to project inundation during construction. Constructed facilities and operations in the Delta Watershed Planning Area would result in a less than significant impact because such facilities would be designed and constructed to resist the potential risk of inundation.

Delta Plan revised Mitigation Measures 3-1(a) through (c) and (e) set forth above in the discussion of Impact 5.11-1 and revised Mitigation Measure 5-5(a) through (e), set forth below would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. The revised mitigation measures were previously adopted and incorporated into the Delta Plan and have been revised to reflect updated formatting and current standards. The revised mitigation measures are equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measures 3-1 and 5-5. Revised Mitigation Measures 3-1(a) through (c) and (e) and 5-5(a) through (e) would minimize risk of release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measures would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measures 3-1(a) through (c) and (e) and 5-5(a) through (e), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 5-5(a) through (e): Implementation of projects in response to the proposed Ecosystem Amendment could risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones.

5-5(a) Prepare and implement a drainage or hydrology and hydraulics study that 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 shall be designed in accordance with drainage or hydrology and hydraulic study and 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 instream 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.

5-5(e) Channel modifications for restoration actions 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.

OO. Impact 5.12-1. Implementation of projects in response to the proposed Ecosystem Amendment could physically divide or isolate an established community.

The 2022 PEIR finds that the Ecosystem Amendment could cause significant adverse impacts related to the division of established communities, isolation of industry from services within communities, and disruption of development patterns in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities in the Primary Planning Area associated with projects implemented by other entities in response to the Ecosystem Amendment, including setback, breaching, and removal of levees, berms and dikes, and hydraulic reconnection and revegetation. Construction activities and constructed facilities and their operation in the Delta Watershed Planning Area would result in a less than significant impact because future facilities encouraged by the Ecosystem Amendment would be constructed adjacent to or in waterways, and not in locations that would physically divide established communities.

Delta Plan revised Mitigation Measure 19-1(f) and (g), set forth below in the discussion of Impact 5.16-1 would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. Revised Mitigation Measure 19-1(f) and (g) would minimize impacts on physically dividing a community or isolating an established community due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level with mitigation in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 19-1(f) and (g), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council; therefore, impacts in the Primary Planning Area could remain significant and unavoidable.
PP. Impact 5.12-2. Implementation of projects in response to the proposed Ecosystem Amendment could result in a significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted to avoid or mitigate an environmental effect.

The 2022 PEIR finds that the Ecosystem Amendment could result in a significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted to avoid or mitigate an environmental effect both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including improving hydrologic surface water connectivity and increasing the frequency of seasonal inundation; fish passage improvement projects; hatchery management projects; restoring habitat in the Delta; improving fishways; removing small dams; installing fish screens; developing temporary facilities such as staging areas, access haul roads, work areas, and borrow sites; temporary site fencing and signage; removing soil and vegetation; and excavation and grading activities. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 6-2 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure set for below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 6-2. Revised Mitigation Measure 6-2(a) through (d) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. The mitigation measure would minimize significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted to avoid or mitigate an environmental effect due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent, and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of a covered action to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 6-2(a) through (d), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 6-2(a) through (d): Implementation of projects in response to the proposed Ecosystem Amendment could result in a significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted to avoid or mitigate an environmental effect.

6-2 Compensate for the loss or reduction in environmental values 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.

QQ. Impact 5.13-1. Implementation of projects in response to the proposed Ecosystem Amendment could result in the generation of a substantial temporary or permanent increase in noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

The 2022 PEIR finds that the Ecosystem Amendment could result in the generation of a substantial temporary or permanent increase in noise levels in excess of local general plan standards, or noise ordinance, or applicable standards of other agencies in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including floodplain widening, grading or breaching of levees for wetlands, fish passage improvement projects, hatchery management projects, removing non-native terrestrial and aquatic invasive species, fishway improvements, removal of small dams, and installation of fish screens. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measures 15-1 and 15-3 were previously adopted and incorporated into the Delta Plan and have been revised to reflect updated formatting and current standards. The revised mitigation measures set forth below are equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measures 15-1 and 15-3. Revised Mitigation Measures 15-1(a) through (f) and 15-3(a) and (b) and (d) would apply to covered actions and are recommended to be implemented by other entities for non-covered actions. The mitigation measures would minimize significant environmental impact due to the generation of temporary or permanent increases of noise levels in excess of local general plan standards, noise ordinances, or applicable standards due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent, and location of such actions are not yet known, it is not possible to conclude that the mitigation measures would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measures 15-1(a) through (f) and 15-3(a) and (b) and (d), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 15-1(a) through (f): Implementation of projects in response to the proposed Ecosystem Amendment could result in the generation of a substantial temporary or permanent increase in noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

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.

2022 PEIR Mitigation Measure 15-3(a) and (b) and (d): Implementation of projects in response to the proposed Ecosystem Amendment could result in the generation of a substantial temporary or permanent increase in noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

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. If results of the analysis determine that operation-related noise levels would exceed applicable thresholds at sensitive receptors, noise-minimizing measures shall be incorporated into design, including but not limited to building a structure 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.

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.
Impact 5.13-2 Implementation of projects in response to the proposed Ecosystem Amendment could result in the generation of excessive groundborne vibration or groundborne noise levels.

The 2022 PEIR finds that the Ecosystem Amendment could result in the generation of excessive groundborne vibration or groundborne noise levels in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including constructing, modifying, breaching, or removing levees; fish passage improvement projects, hatchery management projects; grading, backfilling, and construction activities associated with habitat restoration; fishway improvements; removing small dams, and installing fish screens. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 15-2 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 15-2. Revised Mitigation Measure 15-2(a) and (b) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. This mitigation measure would minimize generation of excessive groundborne vibration or groundborne noise levels due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 15-2(a) and (b), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 15-2(a) and (b): Implementation of projects in response to the proposed Ecosystem Amendment could result in the generation of excessive groundborne vibrations or groundborne noise levels.

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.

15-2(b) 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 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 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. Conduct vibration monitoring before and during vibration generating operations occurring within 100 feet of historic structures. Every attempt 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. Cover or temporarily shore adjacent historic features, 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. Require that any pile driving within a 50-foot radius of residences use alternative installation methods where possible (e.g., pile cushioning, jetting, predrilling, cast-in-place systems, resonance-free vibratory pile drivers) to reduce the number and amplitude of blows required to seat the pile.

vi. Conducting pile-driving activities within 285 feet of sensitive receptors shall be limited to daytime hours to avoid sleep disturbance during evening and nighttime hours.

RR. Impact 5.15-1. Implementation of projects in response to the proposed Ecosystem Amendment could increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated.

The 2022 PEIR finds that the Ecosystem Amendment could increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendments, including changes in existing water flow; fish passage improvement projects; restoring natural communities; subsidence reversal activities; protecting native species and managing non-native invasive species; constructing new infrastructure and improving existing infrastructure including screened diversions, fishway improvements, removing small dams, and installing fish screens. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 18-2 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 18-2. Revised Mitigation Measure 18-2(a) through (d) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. This mitigation measure would minimize significant adverse effects on the use of existing neighborhood and regional parks and other recreational facilities such as substantial physical deterioration of the facility would occur due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent, and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-
significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 18-2(a) through (d), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 18-2(a) through (d): Implementation of projects in response to the proposed Ecosystem Amendment could increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

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.

18-2(b) Lead agencies shall provide additional operations and maintenance of existing facilities in order to prevent deterioration of these 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 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.

SS. Impact 5.15-2. Implementation of projects in response to the proposed Ecosystem Amendment could include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

The 2022 PEIR finds that the Ecosystem Amendment could result in construction or alteration of recreational facilities which might have an adverse physical effect on the environment in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including floodplain widening projects, fish passage improvement projects, removing small dams, and separating streams from artificial impoundment. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 18-1 was previously adopted and incorporated into the Delta Plan, and has been revised to reflect updated formatting and current standards. The revised Mitigation Measure 18-1 set forth below, is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 18-1. Revised Mitigation Measure 18-1(a) would apply to covered actions and is recommended
to be implemented by other entities for non-covered actions. Revised Mitigation Measure 18-1 (a) would minimize impacts of construction or alteration of recreational facilities which might have an adverse physical effect on the environment due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measures would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of Revised Mitigation Measure 18-1 (a), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 18-1(a): Implementation of projects in response to the proposed Ecosystem Amendment could include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

18-1(a) Projects shall be sited in areas that will not impair, degrade, or eliminate recreational facilities and access to recreational (including bird-watching, hunting, recreational fishing, walking, and on-water recreation (e.g., boating or kayaking)) 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.

TT. Impact 5.15-3. Implementation of projects in response to the proposed Ecosystem Amendment could directly impair, degrade, or eliminate recreational facilities and opportunities.

The 2022 PEIR finds that the Ecosystem Amendment could directly impair, degrade, or eliminate recreational facilities and opportunities in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including changes in existing water flows; restoration of natural communities; subsidence reversal activities; fish passage improvement projects; protecting native species and managing non-native, invasive species; constructing new infrastructure and improving existing infrastructure, including screened diversions and fishway improvements; removing small dams, and installing fish screens. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan revised Mitigation Measure 18-1(a), set forth above in the discussion of Impact 5.15-2, would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. Revised Mitigation Measure 18-1(a) would minimize direct impairment, degradation, or elimination of recreational facilities and opportunities due to actions taken by
other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of Mitigation Measure 18-1(a), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

UU. Impact 5.16-1. Implementation of projects in response to the proposed Ecosystem Amendment could conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

The 2022 PEIR finds that the Ecosystem Amendment could cause significant adverse impacts related to conflicts with a program, plan, ordinance, or policy addressing the circulation system including transit, roadway, bicycle, and pedestrian facilities in the Primary and Extended Planning Areas. Impacts could include road closures or relocation, increased traffic congestion from an increase in the numbers of trucks at intersections and on road segments, temporary railroad track closures and rerouting of passengers and freight, and potential impacts on navigation. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including floodplain widening; grading or breaching levees; removing non-native terrestrial and aquatic invasive species; fish passage improvement projects; fishway improvements; installing fish screens; modifying or relocating culverts, stream crossings, or bridges; and modifying dams, gates, weirs, and legacy structures. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 19-1 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 19-1. Revised Mitigation Measure 19-1(a) through (i) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. The mitigation measure would minimize impacts due to conflicts with a program, plan, ordinance, or policy addressing the circulation system including transit, roadway, bicycle, and pedestrian facilities due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measures would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 19-1(a) through (i), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 19-1(a) through (i): Implementation of projects in response to the proposed Ecosystem Amendment could conflict with a program, plan, ordinance, or policy addressing the circulation system including transit, roadway, bicycle, and pedestrian facilities.
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 lane closures near the affected segment; reroute bicycle and pedestrian access around the project area; 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.

19-1(d) For project operations that increase traffic, prepare a traffic study. The traffic study shall: determine haul routes that would be used; 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) 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, a vehicular traffic detour plan shall be prepared and shall be implemented prior to roadway inundation. The detour plan shall provide convenient and parallel vehicular traffic detours for routes closed because of inundation. 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.) 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.

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 shall be assessed again and documented. The documentation shall identify substantial changes in the condition of the road surface, such as potholing or rutting. 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 shall require that visible dust emissions from unpaved detour routes 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.

19-1(h) Traffic impact reports shall be prepared that meet the applicable agencies’ standards to assess potential impacts on appropriate street segments, 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

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 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 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.

VV. Impact 5.16-3. Implementation of projects in response to the proposed Ecosystem Amendment could substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

The 2022 PEIR finds that the Ecosystem Amendment could create a significant adverse impact caused by an increase in hazards due to a geometric design feature or incompatible uses in the Primary and Extended Planning Areas. Construction activities associated with projects could affect transportation infrastructure such as roads, bridges, railroads, and navigable waterways. Also, construction activities could affect navigation in waterways and deep water channels and cause the potential for an increased hazard related to geometric design or incompatible uses.
exposing boaters navigating in the channels to additional hazards, such as debris, increased water velocities, or collisions with other vessels or structures. Construction activities could cause hazards to oncoming vehicles, bicyclists, and pedestrians. However, because facilities would be designed to meet safety criteria, there is a limited potential for an increase hazard. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including floodplain widening, new or modified levees, levee removal, grading or breaching of levees, and removing non-native terrestrial and aquatic invasive species. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas. Impacts associated with constructed facilities and their operations would be less than significant.

Delta Plan revised Mitigation Measures 19-1(a) through (i), set forth above in the discussion of Impact 5.16-1, and revised Mitigation Measure 19-2(a), set forth below, would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. These revised mitigation measures were previously adopted and incorporated into the Delta Plan and have been revised to reflect updated formatting and current standards. The revised mitigation measures are equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measures 19-1 and 19-2. Revised Mitigation 19-1(a) through (i) and 19-2(a) would minimize adverse impacts caused by an increase in hazards due to a geometric design feature or incompatible uses due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 19-1(a) through (i) and 19-2(a), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 19-2(a): Implementation of projects in response to the proposed Ecosystem Amendment could create a significant adverse impact caused by an increase in hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

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 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 could damage the facilities or otherwise render them unable to operate as engineered, and provisions to allow safe navigation.
Impact 5.17-1. Implementation of projects in response to the proposed Ecosystem Amendment could result in a substantial adverse change in the significance of a tribal cultural resource.

The 2022 PEIR finds that the Ecosystem Amendment could result in a substantial change in the significance of tribal cultural resources in both the Primary and Extended Planning Areas. These impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other entities in response to the Ecosystem Amendment, including construction of new levees, channel widening, fish passage improvement projects, hatchery management projects, wetland restoration projects, fishway improvements, removing small dams, and installing fish screens. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Mitigation Measures 10-1 and 10-2 were previously adopted and incorporated into the Delta Plan and have been revised to reflect updated formatting and current standards and were renumbered. Revised Mitigation Measure 10-1 also includes new measures (a) and (b) that were added in response to tribal consultation and input during preparation of the Final PEIR. These revisions will be adopted and incorporated into the Delta Plan. Revised Mitigation Measure 10-1 and Revised Mitigation Measure 10-2 would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 10-1 and Mitigation Measure 10-2. Revised Mitigation Measure 10-1 and revised Mitigation Measure 10-2 would apply to covered actions and are recommended to be implemented by other entities for non-covered actions. Revised Mitigation Measures 10-1 and 10-2 would minimize impacts to substantial adverse change in the significance of tribal cultural resources due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measures would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of Revised Mitigation Measure 10-1 and Revised Mitigation Measure 10-2, or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 10-1 (a) and (b): Implementation of projects in response to the proposed Ecosystem Amendment could result in a substantial adverse change in the significance of a tribal cultural resource.

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.
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 Archaeology 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-disturbance 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.

XX. Impact 5.18-1. Implementation of projects in response to the proposed Ecosystem Amendment could exceed the wastewater treatment capacity of existing providers, or require or result in the construction or relocation of new water or expanded water, wastewater treatment or storm drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

The 2022 PEIR finds that the Ecosystem Amendment could require or result in the relocation of storm drainage, electrical power, natural gas, or telecommunications facilities, which could cause impacts due to construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including; fish passage improvement projects; hatchery management projects; fishway improvements; removing small dams; and installing fish screens. These types of activities could have potentially significant environmental effects, which are addressed by revised mitigation measures proposed for construction impacts in the other resource sections of the PEIR described in the discussions of impacts in Sections 5.2 through 5.19. Construction activities would not include the development of occupied structures and/or induce substantial population growth that would increase demand for new or expanded water systems and utilities and exceed wastewater treatment capacity because the of the minimal increase in workforce and temporary and short-term impact required by the Project (as discussed in Section 5.14 (Population and Housing) of the PEIR. Construction activities undertaken by other entities (e.g. stormwater outfalls or utilities) could require being relocated if those facilities are located near or in the footprint of the Project. Depending on the location of the relocated facilities significant impacts could occur. However, because the types of projects, design of projects, the specific locations, and project scales are factors necessary to identify the type and significance of potential environmental effects on other resource areas (e.g., effects on cultural or tribal cultural resources, special-status species and habitat, erosion, water quality, air quality) are not yet known, it is not possible to conclude that revised mitigation measures proposed for construction in the other resource sections of the PEIR and in the discussion of impacts in section 5.2 through 5.19 would reduce significant impacts of covered actions to a less than significant level in all cases. Furthermore, implementation and enforcement of the revised Mitigation Measures
presented in the findings for construction impacts analyzed in Sections 5.2 through 5.19 of the PEIR, or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council. Therefore, this impact could remain significant and unavoidable.

YY. Impact 5.18-3. Implementation of projects in response to the proposed Ecosystem Amendment could generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, or not comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

The 2022 PEIR finds that the Ecosystem Amendment could cause generation of solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, or not comply with federal, state, and local management and reduction statutes and regulations related to solid waste in the Primary and Extended Planning Areas. These impacts could be caused by construction activities including modifying, breaching, or removing levees; fish passage improvement projects; hatchery management projects; grading, backfilling, and construction activities associated with habitat restoration, and maintaining and clearing fish screens/fishways. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan Mitigation Measure 20-1 was previously adopted and incorporated into the Delta Plan and has been revised to reflect updated formatting and current standards. The revised mitigation measure set forth below is equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 20-1. Revised Mitigation Measure 20-1(b) through (e) would apply to covered actions and is recommended to be implemented by other entities for non-covered actions. The revised mitigation measure would minimize impacts of activities that would generate temporary or permanent solid waste in excess of federal, state or local standards and capacity of local infrastructure or impair the attainment of solid waste reduction goals due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measures would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore, implementation and enforcement of revised Mitigation Measure 20-1(b) through (e), or equally effective feasible measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those agencies. Therefore, this impact could remain significant and unavoidable.

**2022 PEIR Mitigation Measure 20-1(b) through (e):** Implementation of projects in response to the proposed Ecosystem Amendment could generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, or not comply with federal, State, and local management and reduction statutes and regulations related to 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).

ZZ. Impact 5.19-1. Implementation of projects in response to the proposed Ecosystem Amendment, including installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities), could exacerbate wildfire risks due to slope, prevailing winds, and other factors, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

The 2022 PEIR finds that the Ecosystem Amendment could result in impacts associated with installation of infrastructure that could exacerbate wildfire risk, thereby exposing project occupants to pollutant concentration from a wildfire in the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including widening channels, restoring wetlands, improving fishways, removing small dams, and installing fish screens. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

Delta Plan revised Mitigation Measures 14-1(a) through (s), set forth above in the discussion of Impact 5.10-1; revised Mitigation Measures 17-1(a) through (d), set forth above in the discussion of Impact 5.10-4 above; and revised Mitigation Measure 14-5(a) set forth below would apply to covered actions and are recommended to be implemented by other entities for non-covered actions. These revised mitigation measures were previously adopted and incorporated into the Delta Plan and have been revised to reflect updated formatting and current standards. The revised mitigation measures are equally effective and would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measures 14-1, 14-5, and 17-1. Revised Mitigation Measures 14-1(a) through (s), 14-5(a), and 17-1(a) through (d) would minimize adverse impacts caused by installation or maintenance of infrastructure that would exacerbate wildfire risk, thereby exposing project occupants to pollutant concentrations form wildfire events due to actions taken by other entities in response to the Ecosystem Amendment. However, because the extent and location of such actions are not yet known, it is not possible to conclude that the mitigation measure would reduce significant impacts of covered actions to a less-than-significant level in all cases. Furthermore,
implementation and enforcement of revised Mitigation Measures 14-1(a) through (s), 14-5(a),
and 17-1(a) through (d), or equally effective feasible measures, would be within the
responsibility and jurisdiction of public agencies other than the Council and can and should be
adopted by those other agencies. Therefore, this impact could remain significant and
unavoidable. ; therefore, this impact could remain significant and unavoidable.

2022 PEIR Mitigation Measure 14-5(a): Implementation of projects in response to the
proposed Ecosystem Amendment, including installation or maintenance of associated
infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other
utilities), could exacerbate wildfire risks due to slope, prevailing winds, and other factors, and
thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled
spread of a wildfire.

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.

VI. LESS THAN SIGNIFICANT IMPACTS

The PEIR identifies the following as less than significant impacts or as having no impact.
Mitigation to further reduce less than significant impacts is not required by CEQA. The findings
in this Section are based on the PEIR, the discussion and analysis in which is hereby
incorporated in full by this reference.

A. Impact 5.4-5. Emissions associated with implementation and operation of
projects undertaken in response to the proposed Ecosystem Amendment
could create objectionable odors affecting a substantial number of people.

The 2022 PEIR finds that the Ecosystem Amendment is not likely to cause a significant adverse
impact related to objectionable odorous emissions affecting a substantial number of people in the
Primary and Extended Planning Areas. Operation associated with projects implemented by other
entities in response to the Ecosystem Amendment, including new screened diversions,
modifications to improve hydrologic surface water connectivity and increase frequency of
seasonal inundation, modified fishways, removal of small dams, and screened diversions are not
likely to result in odorous emissions that would affect a substantial number of people in the Primary Planning Area due to their probable location in sparsely populated areas. Projects operated by other entities in response to the Ecosystem Amendment may result in temporary odorous emissions affecting a substantial number of people in the Extended Planning Area due to the greater number of communities of significant size and density there. Because of the temporary and intermittent nature of the impacts, and the rapid dissipation of odors over a short distance, objectionable odor is unlikely to affect a substantial number of people.

This impact would be less than significant; therefore, no mitigation is required.

**B. Impact 5.8-1. Implementation of projects in response to the proposed Ecosystem Amendment could result in a potentially environmental impact due to wasteful, inefficient, or unnecessary consumption of energy or change to hydropower generation.**

The 2022 PEIR finds that the Ecosystem Amendment is not likely to result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy or change to hydropower generation in both the Primary and Extended Planning Areas. Construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment include construction of new levees, fish passage improvement projects, levee modification or rehabilitation, hatchery management projects, habitat restoration, fishway improvements, removal of small dams, and screened diversions. Activities would include use of best management practices and all feasible control measures to reduce impacts associated with construction and operation of projects in the Primary and Delta Watershed Planning Area.

This impact would be less than significant; therefore, no mitigation is required.

**C. Impact 5.8-2: Implementation of projects in response to the proposed Ecosystem Amendment could conflict with or obstruct a State or local plan for renewable energy or energy efficiency.**

The 2022 PEIR finds that the Ecosystem Amendment is not likely to conflict with or obstruct a State or local plan for renewable energy or energy efficiency in the Primary and Extended Planning Areas. Construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, include factors necessary to identify specific conflicts or obstructions included in the design footprint itself. Project-level impacts would be addressed in future site-specific environmental analysis conducted by lead agencies at the time such projects are proposed in the Primary and Delta Watershed Planning Areas.

This impact would be less than significant; therefore, no mitigation is required.
D. Impact 5.8-3. Implementation of projects in response to the proposed Ecosystem Amendment could result in increased energy consumption due to growth inducement that conflicts with applicable plans, policies, or regulations of local county and/or State energy standards that have been adopted for the purpose of improving energy efficiency or reducing consumption of fossil fuels.

The 2022 PEIR finds that the Ecosystem Amendment is not likely to cause significant adverse impacts related to increased energy consumption due to growth inducement that conflicts with applicable plans, policies, or regulations of local county and/or State energy standards that have been adopted for the purpose of improving energy efficiency or reducing consumption of fossil fuels in either the Primary or Extended Planning Areas. Though projects implemented by other entities in response to Ecosystem Amendment including monitoring of vegetation, irrigation systems, or other natural structures; operation and maintenance of new surface water diversions, fish screens or facilities; and fish collection and transport may indirectly cause increased energy use, it is anticipated that construction activities including channel widening, levee modification or rehabilitation, and habitat restoration projects will conform to applicable plans, policies, or regulations of local county and/or State energy standards that have been adopted for the purpose of improving energy efficiency or reducing consumption of fossil fuels. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

This impact would be less than significant; therefore, no mitigation would be required.

E. Impact 5.11-2. Implementation of projects in response to the proposed Ecosystem Amendment could substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin or conflict with implementation of a sustainable groundwater management plan.

The PEIR finds that the Ecosystem Amendment is likely not to substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project would impede implementation of a sustainable groundwater management plan in the Primary and Extended Planning Areas. These impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment including, channel widening, construction of new or modified levees, levee removal or degradation, stream and riparian habitat restoration and enhancement projects, fish habitat restoration and enhancement projects, fishway improvements, removal of small dams, and installation of fish screens that could result in temporary changes in groundwater levels and groundwater recharge that would persist throughout project construction. The construction and operation of fish passage improvement projects in the Delta Watershed Planning Area as a result of the Ecosystem Amendment are unlikely to result in the depletion of groundwater supplies or to interfere substantially with implementation of a sustainable groundwater management plan. Operational activities associated with projects implemented by entities in response to the Ecosystem Amendment are unlikely to result in changes to groundwater levels and recharge. Negative impacts are unlikely due to the objectives of the SGMA and requirements for its implementation.
Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

This impact would be less than significant; therefore, no mitigation would be required.

F. Impact 5.14-1. Implementation of projects in response to the proposed Ecosystem Amendment could induce substantial unplanned population growth in an area, either directly or indirectly.

The 2022 PEIR finds that the Ecosystem Amendment is not likely to induce substantial unplanned population growth in an area, either directly or indirectly in the Primary and Extended Planning Areas. The specific locations and scale of possible future facilities are not known at this time. Factors necessary to identify specific impacts include the number of construction and operation workers employed, the duration of project construction, and the location of projects in relation to population centers implemented by other entities in response to the Ecosystem Amendment. Project-level impacts would be addressed in future site-specific environmental analysis conducted by lead agencies at the time such projects are proposed. Given the existing population throughout the Primary and Delta Watershed Planning Areas, the temporary nature of any worker relocation during construction activities, and the minimal number of additional staff members likely needed for operations is not likely to induce substantial unplanned population growth in the area.

This impact would be less than significant; therefore, no mitigation would be required.

G. Impact 5.14.2. Implementation of projects in response to the proposed Ecosystem Amendment could displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

The 2022 PEIR finds that the Ecosystem Amendment is not likely to displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere in the Primary and Extended Planning Areas. The specific locations and scale of possible future facilities are not known at this time. Therefore, the specific resources present within the project footprint of construction sites and new facilities within the Primary and Delta Watershed Planning area cannot be determined. Factors necessary to identify specific impacts include the type of projects and the location of construction in relationship to housing implemented by other entities in response to the Ecosystem Amendment. Project-level impacts would be addressed in future site-specific environmental analysis conducted by lead agencies at the time such projects are proposed. Even though the extent and location of such actions are not known, these impacts are expected to be negligible because it is likely that projects would be sited in unpopulated or sparsely populated areas, limiting the potential displacement and relocation of people or housing. Furthermore, there would be sufficient existing housing to accommodate the temporary or permanent relocation of people (see PEIR Table 5.14-2). Additionally, activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

This impact would be less than significant; therefore, no mitigation is required.
H. Impact 5.16-2. Implementation of projects in response to the proposed Ecosystem Amendment could conflict with or be inconsistent with CEQA Guidelines Section 15064.3(b).

The 2022 PEIR finds that the Ecosystem Amendment is not likely to conflict with or be inconsistent with CEQA Guidelines Section 15064.3(b) in the Primary and Extended Planning Areas. Potential impacts would be associated with workers’ vehicle miles traveled (VMT) to and from construction activities and constructed facilities during operations associated with projects implemented by other entities in response to the Ecosystem Amendment including floodplain widening, grading or breaching levees, fish passage improvement projects, and removing non-native terrestrial and aquatic invasive species. Construction activities associated with projects would be temporary, and it is expected that once construction is completed, the existing workforce would be relocated to its next assignment. Projects due to actions taken by other entities would require their own project-level VMT analyses. Operational and maintenance activities for projects undertaken by other entities are not likely to require a large amount of automobile travel. Furthermore, operation and maintenance activities would be temporary and would occur on an as-needed basis. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Watershed Planning Areas.

This impact would be less than significant; therefore, no mitigation is required.

I. Impact 5.18-2. Implementation of projects in response to the proposed Ecosystem Amendment could result in insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years or significant changes to water supply availability to users of Delta water.

The 2022 PEIR finds that the Ecosystem Amendment is not likely to result in impacts associated with insufficient water supplies available to serve the project and future projects during normal, dry and multiple dry years or significant changes to water supply available to users of Delta water in both the Primary and Extended Planning Areas. Potential impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including widening floodplains, grading or breaching levees, and removing non-native terrestrial and aquatic invasive species. However, construction and operational activities associated with projects implemented by other entities are not anticipated to change water supply availability to users of Delta Water within the Primary and Delta Watershed Planning Areas or the Extended Planning Area outside the Delta Watershed Area. Restored streams and habitats, constructed facilities, and operational changes implemented by other entities in response to the Ecosystem Amendment have the potential to affect water supply availability to users of water diverted upstream from the Delta or exported through the Delta. These impacts are anticipated to be within typical historical ranges and would not substantially change water supply availability to users of Delta water. Because the extent and location of such actions in relationship to existing water supplies are not yet known, and given the temporary nature of construction activities and the minimal additional water use for operators, these activities would not add substantial new water demands to existing water supplies resulting in insufficient water supplies. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.
This impact would be less than significant; therefore, no mitigation is required.

**J. Impact 5.18-4. Implementation of projects in response to the proposed Ecosystem Amendment could result in substantial adverse physical impacts associated with construction of new or modified fire protection, police protection, schools, parks, and other public facilities.**

The 2022 PEIR finds that the Ecosystem Amendment is not likely to result in substantial adverse physical impacts associated with construction of new or modified fire protection, police protection, schools, parks, and other public facilities in the Primary and Extended Planning Areas. Potential impacts could include new demand for police and fire protection services generated by new facilities and temporarily increased response times for fire protection, law enforcement, and emergency medical services due to increased construction traffic. These potential impacts could be caused by construction activities and constructed facilities and their operation associated with projects implemented by other entities in response to the Ecosystem Amendment, including constructing, modifying, breaching, or removing levees; fish passage improvement projects; hatchery management projects; grading, backfilling, and construction activities associated with habitat restoration; fishway improvements; removing small dams; and installing fish screens which could require additional staff to operate the facilities. Construction and operation activities associated with projects implemented by other entities in response to the Ecosystem Amendment could result in negligible levels of temporary and permanent population growth. However, a minor increase in population would not add substantial new demands to public services or require new or altered public services facilities. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

This impact would be less than significant; therefore, no mitigation is required.

**K. Impact 5.19-2. Implementation of projects in response to the proposed Ecosystem Amendment could, as a result of post-fire runoff, slope instability, or drainage changes, expose people or structures to significant risks, including downslope or downstream flooding or landslides.**

The 2022 PEIR finds that the Ecosystem Amendment is not likely to result in actions that cause post-fire runoff, slope instability, or drainage changes, that could expose people or structures to significant risks, including downslope or downstream flooding or landslides in both the Primary and Extended Planning Areas. Potential impacts could be caused by construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment, including channel widening, fish passage improvement projects, hatchery management projects, wetland restoration, fishway improvements, removing small dams, and installing fish screens. The potential for post-fire runoff, slope instability, or drainage changes to result in substantial impacts in the Primary and Extended Planning Areas is limited due to gentle slopes of the area. However, the specific locations and scale of possible future constructed facilities and construction activities associated with projects implemented by other entities in response to the Ecosystem Amendment including construction of new levees, new surface water intakes, fish passage facilities and hatchery management projects are not known at this time. Therefore, the exact risk within the project footprint or construction sites and new facilities in the
Primary and Extended Planning Areas cannot be determined. Activities by other entities in response to the Ecosystem Amendment would occur in the Primary and Delta Watershed Planning Areas.

This impact would be less than significant; therefore, no mitigation is required.

VII. CUMULATIVE IMPACTS

An EIR is required to discuss the cumulative impacts of a project when the project’s incremental effect is cumulatively considerable. State CEQA Guidelines §15130(a). “Cumulatively considerable” means that the incremental effects of the project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects. State CEQA Guidelines § 15065(a)(3); Pub. Resources Code § 21083(b)(2). Chapter 7 of the PEIR analyzes the cumulative impacts of the Ecosystem Amendment in combination with reasonably foreseeable probable future projects which are listed in 2022 PEIR Table 7-2. All of the revised Mitigation Measures discussed in this Section were adopted and incorporated into the Project above and set forth in the discussion of Significant and Unavoidable Impacts in Section V. As explained in Section XI, below, the findings in this Section are based on the PEIR, the discussion and analysis in which is hereby incorporated in full by this reference.

A. Aesthetics

Construction and operation of projects listed in PEIR Table 7-2 (e.g., modification of levees, fish passage facilities, and habitat restoration or improvement projects) would introduce new physical features into the existing landscape, which could result in significant temporary, long-term, or permanent adverse effects on visual quality, affect scenic vistas and scenic resources, and introduce new sources of light and glare. The effect on aesthetic and scenic resources that would result from these changes associated with past, present, and planned future projects could be significant.

Projects implemented by other entities in response to the Project would introduce new physical features into the existing landscape, which could result in significant adverse effects on visual quality in the Primary and Extended Planning Areas that are either temporary (e.g., construction-related temporary activities such as earthmoving activities and the staging of construction equipment could alter the existing landscape of agricultural and natural open space areas) or permanent (e.g., permanent structures may not be of the same visual character of surrounding landscapes). Therefore, projects implemented by other entities in response to the Project could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to the substantial degradation of scenic vistas, scenic resources, and existing visual character.

Delta Plan revised mitigation Measures 8-1(a) through (j), 8-2(a) and (b), and 8-3, adopted and incorporated into the Delta Plan, or equally feasible measures, could minimize impacts to aesthetic and scenic resources. 2018 PEIR Mitigation Measure 5.2-1, also previously adopted and incorporated into the Delta Plan, could reduce the contribution of covered actions to cumulative impacts associated with glare caused by new transmission lines to less than cumulatively considerable. However, because the extent and location of impact-causing actions
are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Furthermore, implementation and enforcement of these mitigation measures or equally effective mitigation measures, would be within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, cumulative impacts could remain significant and unavoidable.

B. Agriculture and Forestry Resources

Construction and operation of projects listed in PEIR Table 7-2 could convert Farmland to nonagricultural use or forestland to non-forest use, conflict with a Williamson Act Contract, or create a conflict with zoning for agricultural, forestland, or timberland use. Construction activities such as modification of levees, fish passage facilities, and habitat restoration or improvement projects could convert Farmland to nonagricultural use or forestland to non-forest use, conflict with a Williamson Act Contract, or create a conflict with zoning for agricultural, forestland, or timberland use. These temporary construction-related impacts could become long-term or permanent if topsoil is not replaced to pre-construction conditions and the affected area is not replanted to the extent feasible. The effect on agriculture and forestry resources that would result from these changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Projects implemented by other entities in response to the Project could result in significant temporary (e.g., construction of haul roads or equipment staging sites) or permanent (restoring natural communities) conversion of Farmland; conflicts with Williamson Act contracts and agricultural zoning; conversion of forestland, timberland, and timber production zones to non-forest or non-timber uses; and conversion of Farmland to non-agricultural use in the Primary and Delta Watershed Planning Areas. Therefore, projects implemented by other entities in response to the Project could result in a cumulatively considerable incremental contribution to a significant cumulative impact on agriculture and forestry resources.

Delta Plan revised Mitigation Measures 7-1 and 7-3 were previously adopted and incorporated into the Delta Plan have been revised to reflect updated formatting and current standards. Revised Mitigation Measures 7-1 (a) through (h) and Mitigation Measure 7-3 (a) through (d) or equally effective feasible measures, could minimize impacts to agriculture and forestry resources. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Furthermore, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by those other agencies. Therefore, cumulative impacts could remain significant and unavoidable.

C. Air Quality and Greenhouse Gas Emissions

Construction and operation of projects listed in PEIR Table 7-2 (e.g., construction or modification of levees, fish passage facilities, and habitat restoration or improvement projects) would likely require the use of diesel-powered equipment and vehicles, and emissions would
result from combustion of fuels in equipment and vehicles. Therefore, such projects could conflict with an applicable air quality plan, violate an air quality standard, contribute substantially to an air quality violation, and result in a short-term or long-term cumulatively considerable net increase of nonattainment pollutants. Projects could also create objectionable odors affecting a substantial number of people, expose sensitive receptors to substantial pollutant concentrations, and result in an increase in GHG emissions. These significant effects could be temporary during construction as well as permanent during operation of projects. The effect on air quality and GHG emissions that would result from changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Projects implemented by other entities in response to the Project could result in temporary or long-term emissions of air pollutants, substantially contributing to pollutant concentrations that exceed the National Ambient Air Quality Standards and California Ambient Air Quality Standards, and conflicting with a local Air Quality Management Plan, thereby resulting in conflicts with applicable air quality plans. Implementation of projects could result in the temporary generation of odorous emissions during construction, though the Project would not result in significant effects that would result in a cumulatively considerable incremental contribution to a significant cumulative impact because odors would be temporary and intermittent and would dissipate rapidly over a short distance. Construction of projects could generate air pollutant emissions that, at high dosages, could present health risks to sensitive receptors and result in significant adverse effects on air quality. Implementation of projects could result in temporary and long-term GHG emissions and conflict with GHG reduction policies, plans, and regulations. Therefore, projects implemented by other entities in response to the Project could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to the substantial degradation of air quality and GHG emissions production in the Primary and Delta Watershed Planning Areas.

Delta Plan revised Mitigation Measures 9-1(a) through (n), 9-3(a) through (c), and 21-1, previously adopted and incorporated into the Delta Plan, or equally effective feasible measures could minimize impacts to air quality and impacts due to GHG emissions. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Furthermore, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by that other agency. Therefore, cumulative impacts could remain significant and unavoidable.

D. Biological Resources – Aquatic

Construction and operation of projects listed in 2022 PEIR Table 7-2 could adversely impact habitat associated with special-status fish species, result in adverse direct effects on special-status fish species, and interfere with the movement of native resident fish species. These significant adverse effects could be temporary as well as permanent. For example, construction activities such as earthmoving, vegetation removal, equipment staging, and stockpiling of materials could indirectly affect special-status fish species in multiple ways, including disturbance of prey species, mobilization of sediment, disturbance of riparian habitat, or chemical contamination. The effect on aquatic biological resources that would result from
changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Projects constructed and operated by other entities in response to the Project could include, for example, construction, modification, breaching, or removal of levees to improve the function and connectivity of floodplain habitat; construction of fish passage improvements; and grading, backfilling, and construction associated with the restoration, protection, and enhancement of wetland, stream, floodplain, or riparian habitat. These projects could result in significant temporary and permanent adverse impacts to special-status fish species and their habitat in the Primary and Delta Watershed Planning Areas, including through, for example, construction-related disturbance of species and habitat and operation-related alteration of flows and migratory patterns. Therefore, projects implemented by other entities in response to the Project could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to the substantial degradation or elimination of special-status fish species and their habitat and the movement of native resident fish species.

Delta Plan Mitigation Measures 4-1(a) through (c) and (e), 4-2(a) through (e), 4-3(a) through (d), and 4-4(a) and (b), previously adopted and incorporated into the Delta Plan, or equally effective feasible measures, could minimize impacts to aquatic biological resources. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Furthermore, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by that other agency. Therefore, cumulative impacts could remain significant and unavoidable.

E. Biological Resources – Terrestrial

Construction and operation of projects listed in PEIR Table 7-2 such as construction or modification of levees, fish passage facilities, and habitat restoration or improvement projects, could result in adverse effects on sensitive natural communities, including wetlands and riparian habitat, special-status plant species, and special-status terrestrial wildlife species and their habitat. These significant adverse effects could be temporary as well as permanent. Construction activities such as earthmoving, vegetation removal, equipment staging, and stockpiling of materials could harm or kill special-status terrestrial wildlife species inhabiting areas near or adjacent to levee construction sites. Construction and operation of projects could also interfere with the movement of native resident or migratory wildlife species. These activities could also have the potential to conflict with local policies or ordinances protecting biological resources or the provisions of an adopted conservation plan, natural community conservation plan, or other approved local, regional, or state habitat protection plan. The effect on terrestrial biological resources that would result from changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Projects constructed and operated by other entities in response to the Project could result in significant temporary or permanent adverse impacts on sensitive natural communities, special-status plant species and special-status wildlife species and their habitat in the Primary and Delta Watershed Planning Areas. Construction activities could result in temporary habitat disturbance
and permanent habitat loss. For example, noise from and night-time lighting for construction equipment could disturb special-status birds and mammals. Special-status amphibians, reptiles, and small mammals could be killed by construction and earthmoving equipment. Construction activities could also result in temporary or permanent changes to wildlife movement corridors for terrestrial wildlife. Projects also have the potential to conflict with local policies and ordinances for terrestrial biological resources. Therefore, projects implemented by other entities in response to the Project could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to the substantial adverse effects on terrestrial biological resources.

Delta Plan revised Mitigation Measures 4-1(a) through (e), 4-2(f) through (l), 4-3(a) and (b) and 4-3(e) through (j), 4-4(c) and (d), and 4-5(a), previously adopted and incorporated into the Delta Plan, or equally effective feasible measures could minimize impacts to terrestrial biological resources. Revised Mitigation Measure 4-1(a) and (b), Mitigation Measure 4-3(e) through (j), which would help reduce impacts and will be adopted and incorporated into the Delta Plan. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Furthermore, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by that other agency. Therefore, cumulative impacts could remain significant and unavoidable...

F. Cultural Resources

Construction and operation of projects listed in PEIR Table 7-2 could result in a substantial adverse change to significant historic buildings, structures, or linear features and could disturb or destroy prehistoric and historic-era archaeological resources, or buried human remains, which could result in significant permanent adverse effects on cultural resources. Impacts to historic resources would primarily occur as a result of construction activities, as a result of introducing new elements to a historic setting or altering a significant built resource. The effect on cultural resources that would result from changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Projects implemented by other entities in response to the proposed Ecosystem Amendment such as channel widening, fish passage improvements, and wetland restoration projects could result in significant permanent impacts to historic built resources as well as to archaeological resources, or human remains through their damage or destruction. Impacts to historic resources would primarily occur as a result of construction activities. Therefore, projects implemented by other entities in response to the Project could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to the substantial degradation or destruction of cultural resources.

Delta Plan revised Mitigation Measures 10-1(c) through (i), 10-2(a) through (f), 10-3(a) through (f), previously adopted and incorporated into the Delta Plan, or equally effective feasible measures could minimize impacts to cultural resources. As previously discussed above in Impact 5.17-1, revised Mitigation Measure 10-1 includes new measures (a) and (b), which would also
minimize cumulative impacts to cultural resources, and will be adopted and incorporated into the Delta Plan. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Furthermore, implementation and enforcement of these mitigation measures, or equally effective mitigation measures, is within the responsibility and jurisdiction of public agencies other than the Council and should be adopted by that agency. Therefore, cumulative impacts could remain significant and unavoidable.

G. Energy Resources

Construction and operation of projects listed in PEIR Table 7-2 such as construction or modification of levees, fish passage facilities, and habitat restoration or improvement projects could result in changes in energy resources, including substantial inefficient, wasteful, or unnecessary long-term consumption of energy, changes to hydropower generation, or increased energy consumption due to growth inducement. Additionally, implementation of projects in PEIR Table 7-2 could conflict with applicable plans, policies, or regulations of local, county, and/or state energy standards that have been adopted for the purpose of improving energy efficiency or reducing consumption of fossil fuels. Given the multiple laws, regulations, and programs within the state that require or promote the efficient use of energy, a cumulative adverse effect is not expected to occur in either the Primary Planning Area or the Extended Planning Area related to substantially inefficient, wasteful, or unnecessary long-term consumption of energy, a substantial reduction in the generation of renewable energy, or increased energy consumption due to growth inducement.

Projects implemented by other entities in response to the Project are not likely to result in significant adverse impacts related to inefficient, wasteful, or unnecessary long-term consumption of energy, changes to hydropower generation, or increased energy consumption due to growth inducement. Additionally, projects are not likely to result in significant adverse impacts related to conflicts with applicable plans, policies, or regulations of local county and/or state energy standards that have been adopted for the purpose of improving energy efficiency or reducing consumption of fossil fuels. Multiple laws, regulations, and programs within the state require or promote the efficient use of energy. Therefore, projects implemented by other entities in response to the proposed amendments would not result in a cumulatively considerable incremental contribution to a cumulative impact related to energy, and there is no cumulative impact.

H. Geology, Soils, Seismicity, and Mineral Resources

Construction and operation of projects listed in PEIR Table 7-2 such as construction or modification of levees, fish passage facilities, and habitat restoration or improvement projects could result in significant adverse effects associated with the rupture of known earthquake faults, strong seismic groundshaking, and substantial soil erosion or loss of topsoil, and could expose people or structures to hazards associated with unstable soil conditions. Construction projects on or adjacent to a known fault could be exposed to risks associated with fault rupture or seismic groundshaking. Construction of projects could also result in the loss of access to a known mineral resource or important mineral resource recovery site, depending on the projects’
locations. Paleontological resources could also be disturbed or destroyed by the actions taken by others to implement the project list above. The effect on geology, soils, seismicity, and mineral resources that would result from changes associated with past, present, and planned future projects could be a cumulatively significant impact.

Projects implemented by other entities in response to the Proposed Project could expose people or structures to risk of loss, injury, or death due to rupture of known earthquake faults, and could result in significant adverse effects associated with strong seismic groundshaking. Projects could result in significant adverse effects associated with unstable soil conditions, including landslides, expansive soils, subsidence, high organic matter soils, and nuisance water, and could result in significant adverse effects associated with soil erosion and loss of topsoil. Implementation of projects could also result in the loss of a known mineral resources or an important mineral resource recovery site and disturbance or destruction of a paleontological resource in the Primary and Delta Watershed Planning Areas, both through potential placement of facilities in area with known mineral and/or paleontological resources and through demand for aggregate resources from project construction depending on the projects’ location and proximity to resources. Therefore, projects implemented by other entities in response to the Project result in a cumulatively considerable incremental contribution to a significant cumulative impact related to geology, soils, seismicity, and mineral resources.

Delta Plan revised Mitigation Measures 11-1(a) and (b), 11-2(a), 11-3(a) through (d), 11-4(a), 11-5(a), 11-6(a) and (b), 11-7(a), 11-9(a), 12-1(a) and (b), and 13-1(a) through (d), and 13-2(a) and (b), previously adopted and incorporated into the Delta Plan, or equally effective measures could minimize impacts to geology, soils, seismicity, and mineral resources. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Furthermore, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by that other agency. Therefore, cumulative impacts could remain significant and unavoidable.

I. Hazards and Hazardous Materials

Construction activities, constructed facilities, and operations associated with other projects listed in PEIR Table 7-2 such as construction or modification of levees, fish passage facilities, and habitat restoration or improvement projects could involve the routine transport, use, or disposal of hazardous materials, which if accidentally released could create a hazard to the public or the environment or be located within one-quarter mile of a school, and could result in significant adverse effects involving the exposure of construction workers, the public, and the environment to existing soil and/or groundwater contamination. Implementation of projects could result in airport safety hazards by placing projects in proximity to the hazards associated with airport operations or result in the potential for collisions between aircraft and wildlife. Project construction and heavy equipment use could result in interference with existing transportation and circulation patterns. Operation of new projects could result in interference with an adopted emergency response plan or emergency evacuation plan by making permanent changes to emergency access routes and evacuation routes as a result of project operation, depending on
where projects are located. Construction and operation of new projects could result in new areas of standing water that could result in vector-related public health hazards through the creation of mosquito habitat. The effect on hazards and hazardous materials that would result from changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Projects implemented by other entities in response to the Project similarly could create a hazard to the public or the environment from the release of hazardous materials during their use, storage, or transport; could be located within one-quarter mile of an existing or proposed school; and could expose individuals to the potential of accidental hazardous material spills. Projects could also: result in significant adverse effects involving the exposure of construction workers, the public, and the environment to existing soil and/or groundwater contamination through construction activities involving ground disturbing activities; result in airport safety hazards by placing projects in proximity to the hazards associated with airport operations and/or by increasing the potential for collisions between aircraft and wildlife; interfere with emergency response access; and increase the risk of wildfires by locating projects in areas that have an increased risk of wildfires or including equipment and vehicle use that could potentially ignite dry vegetation and result in fire in the Primary and Delta Watershed Planning Areas. Projects also could pose a significant public health hazard through the creation of a vector habitat, such as the creation of standing water that supports mosquito habitat. Therefore, projects implemented by other entities in response to the Project could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to hazards and hazardous materials.

Delta Plan revised Mitigation Measures 14-1(a) through (s), 14-2(a) and (b), 14-3(a) through (d), 14-4(a) and (b), 14-5(a), 17-1(a) through (d), and 19-3(a) through (f), previously adopted and incorporated into the Delta Plan, or equally effective feasible measures could minimize impacts to hazards and hazardous materials. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Furthermore, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by that other agency. Therefore, cumulative impacts could remain significant and unavoidable.

### J. Hydrology and Water Quality

Construction and operation of projects listed in PEIR Table 7-2 such as construction or modification of levees, fish passage facilities, and habitat restoration or improvement projects, could result in changes to hydrology and water quality, including changes to surface water and/or groundwater supply and quality, drainage patterns and impervious surface cover, and flooding and inundation. Construction and operation of projects could also: result in changes to surface water and/or groundwater quality; affect groundwater supply through construction-related activities; temporarily change availability of water supplies by temporarily affecting water quality to the extent of making supplies unusable; or increase the imperviousness of soils, decreasing infiltration rates and increasing surface run-off that could exceed the capacity of existing or planned stormwater drainage systems and/or result in localized flooding. Construction
and operation of projects could also expose people or structures to a significant risk of loss, injury, or death involving flooding, or a risk of inundation by seiche and mudflow. These significant effects could be temporary (e.g., caused by construction dewatering activities) as well as permanent (e.g., caused by ecosystem restoration activities). The effect on water resources that would result from changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Projects implemented by other entities in response to the Project similarly could: result in the release of pollutants into surface and/or groundwater that could substantially degrade water quality due to project construction and operations; deplete groundwater supplies or interfere substantially with groundwater recharge; change water supply availability to Delta Water users or require new or expanded entitlements; substantially increase the rate or amount of surface runoff in a manner that would exceed the capacity of existing or planned stormwater drainage systems and/or result in flooding; increase or expose people or structures to a significant risk of loss, injury, or death involving flooding; and cause inundation by seiche in the Primary and Delta Watershed Planning Areas. Therefore, projects implemented by other entities in response to the Project could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to hydrology and water quality.

Delta Plan revised Mitigation Measures 3-1(a) through (c) and (e), 5-1(a) through (k), 5-2(a) and (b), 5-4(a) through (c), and 5-5(a) through (e), previously adopted and incorporated into the Delta Plan, or equally effective measures could minimize impacts related to hydrology and water quality. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Furthermore, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by other agencies. Therefore, cumulative impacts could remain significant and unavoidable.

K. Land Use and Planning

Construction and operation of projects listed in PEIR Table 7-2 such as construction or modification of levees, fish passage facilities, and habitat restoration or improvement projects, could conflict with land use plans, policies, or regulations or physically divide an established community, which could result in significant temporary or permanent adverse effects on land use. The effect on land use and planning that would result from changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Projects implemented by other entities in response to the Project could result in conflicts with land use plans, policies, and regulations meant to reduce environmental impacts or result in division of established communities. Therefore, projects implemented by other entities in response to the Project could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to the substantial impact on land use and planning.

Delta Plan revised Mitigation Measures 19-1(f) through (g), and 6-2(a) through (d), previously adopted and incorporated into the Delta Plan, or equally effective measures could minimize
impacts to land use and planning. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Furthermore, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by that other agency. Therefore, cumulative impacts could remain significant and unavoidable.

L. Noise

Construction and operation of projects listed in PEIR Table 7-2 such as construction or modification of levees, fish passage facilities, and habitat restoration or improvement projects, could expose people to noise levels in excess of standards established in applicable plans and ordinances, cause a substantial increase in ambient noise levels, and expose sensitive receptors to excessive groundborne vibrations. These impacts could be temporary or long-term during construction and operation, as well as permanent during operation. The effect on noise that would result from changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Projects implemented by other entities in response to the Project could expose people to elevated noise levels and could result in substantial temporary or permanent increases in ambient noise levels in the Primary and Delta Watershed Planning Areas. Projects also could expose sensitive receptors to excessive groundborne vibrations. Therefore, projects implemented by other entities in response to the Project could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to the substantial increase in noise levels and groundborne vibrations.

Delta Plan revised Mitigation Measures 15-1(a) through (f), 15-2(a) and (b), and 5-3(a), (b) and (d), previously adopted and incorporated into the Delta Plan, or equally effective measures could minimize impacts to noise. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Furthermore, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by that other agency. Therefore, cumulative impacts could remain significant and unavoidable.

M. Population, Employment, and Housing

Construction and operation of projects listed in PEIR Table 7-2 such as construction or modification of levees, fish passage facilities, and habitat restoration or improvement projects could require workers to move to the area to support construction activities and maintenance operations such as vegetation removal and rodent damage repair along new levees, which may result in significant population growth and demand for housing. Projects also may displace substantial numbers of housing or people, depending on where projects are located, necessitating the construction of replacement housing elsewhere. For example, fish screens and ancillary buildings or structures could include excavation and grading activities that could result in
elimination of housing. These effects could be temporary or long-term during construction as well as permanent during operation. The effect on population, employment, and housing that would result from changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Projects implemented by other entities in response to the Project would result in negligible levels of temporary and permanent population growth and would not result in significant population growth or demand for housing; existing vacant units could absorb any population increase. Projects could result in displacement of some housing and people depending on the location of facilities and activities. However, impacts would be negligible because projects would likely be sited in unpopulated or sparsely populated areas. Therefore, projects implemented by other entities in response to the Project would not result in a cumulatively considerable incremental contribution to a significant cumulative impact related to population, employment, and housing and this cumulative impact would be less than significant.

N. Recreation

Construction and operation of projects listed in PEIR Table 7-2 such as construction or modification of levees, fish passage facilities, and habitat restoration or improvement projects could significantly alter, impair, degrade, or eliminate recreational resources, facilities, and opportunities, and may include the construction or expansion of recreational facilities that could result in significant environmental impacts. Construction and operation of the projects also could increase the use of existing recreational resources and facilities such that substantial physical deterioration would occur or be accelerated. The effect on recreational resources that would result from changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Projects implemented by other entities in response to the Project could result in temporary or long-term impairment, degradation, and elimination of recreational resources, facilities, and opportunities in the Primary and Extended Planning Areas. Implementation of projects could also result in construction and modification of recreational facilities that could result in environmental impacts. Projects implemented by other entities in response to the Project could also result in temporary and permanent adverse effects on recreation and recreational resources that cause displacement of recreationists to other recreational facilities, thereby accelerating physical deterioration of the other recreation facilities. Therefore, projects implemented by other entities in response to the Project could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to the substantial impairment, degradation, and elimination of recreational resources.

Delta Plan revised Mitigation Measures 18-1(a) and revised 18-2(a) through (d), and 18-2, , previously adopted and incorporated into the Delta Plan, or equally effective measures could minimize impacts associated with recreational resources. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Furthermore, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility
and jurisdiction of public agencies other than the Council and can and should be adopted by that other agency. Therefore, cumulative impacts could remain significant and unavoidable.

O. Transportation

Construction and operation of projects listed in PEIR Table 7-2 such as construction or modification of levees, fish passage facilities, and habitat restoration or improvement projects could conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system; substantially increase hazards due to a design feature or incompatible uses; exceed the threshold of significance and conflict with CEQA Guidelines Section 15064.3(b) result in inadequate emergency access; and conflict with adopted policies, plans, or programs supporting alternative transportation. These significant effects could be temporary or long-term during construction or operation, or could be permanent during operation. The effect on transportation that would result from changes associated with past, present, and planned future projects could be a cumulatively significant impact.

Projects implemented by other entities in response to the Project could result in significant temporary, long-term, or permanent adverse effects on transportation by conflicting with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system through road closures or relocation, potentially by increasing traffic congestion from an increase in the numbers of trucks at intersections and on road segments, and possibly requiring temporary railroad track closures. Roads also may need to be relocated based on project design, potentially causing new and/or rerouted traffic at intersections or road segments that are not designed to accommodate the additional traffic. Projects could impact navigation in waterways and deep-water channels and cause a potential for increased hazards, or result in the need to close or relocate emergency routes or close or reroute lanes, thereby reducing emergency access and possibly increasing emergency response times. Projects could also result in significant temporary or permanent adverse effects on public transit, bicycle, or pedestrian facilities. Therefore, projects implemented by other entities in response to the Project could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to transportation.

Delta Plan revised Mitigation Measures 19-1(a) through (i), and 19-2(a), previously adopted and incorporated into the Delta Plan, or equally effective feasible measures could minimize impacts to transportation, traffic, and circulation. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Furthermore, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by that other agency. Therefore, cumulative impacts could remain significant and unavoidable.

P. Tribal Cultural Resources

Construction and operation of projects listed in PEIR Table 7-2 such as construction or modification of levees, fish passage facilities, and habitat restoration or improvement projects could require the use of heavy equipment and ground disturbance. These construction and
operation activities could result in the disturbance or destruction of surficial and subsurface tribal cultural resources, which could result in significant permanent adverse effects to these resources. Operation activities also may limit tribal access to sacred locations or gathering sites. Activities occurring in areas with denser concentrations of tribal cultural resources would have a higher potential to affect eligible resources. The effect on tribal cultural resources that would result from changes associated with past, present, and planned future projects could be a cumulatively significant impact.

Projects implemented by other entities in response to the Project could result in significant permanent adverse effects on tribal cultural resources through their damage or destruction due to the use of heavy equipment or inundation of land as part of restoration projects that may disturb surface or subsurface tribal cultural resources or limit access to sacred locations or gathering sites. Therefore, projects implemented by other entities in response to the Project could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to the substantial degradation or destruction of tribal cultural resources.

Delta Plan Mitigation Measures 10-1 and 10-2, previously adopted and incorporated into the Delta Plan, or equally effective feasible measures could minimize impacts to tribal cultural resources. As previously discussed in Impact 5.17, revised Mitigation 10-1 includes new measures 10-1(a) and (b), and revised Mitigation Measure 10-2, would help reduce cumulative impacts to tribal cultural resources, and will be adopted and incorporated into the Delta Plan. Revised Mitigation Measure 10-1 would not result in any new or substantially more severe impacts than the previously adopted Delta Plan Mitigation Measure 10-1. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Furthermore, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by that other agency. Therefore, cumulative impacts could remain significant and unavoidable.

Q. Utilities and Public Service Systems

Construction and operation of projects listed in PEIR Table 7-2 such as construction or modification of levees, fish passage facilities, and habitat restoration or improvement projects could require substantial numbers of workers to construct and operate the new infrastructure, which could result in temporary, long-term, or permanent increases in population and generate substantial new customer demand to existing wastewater and water treatment systems. Implementation of other projects listed on Table 7-2 also would generate solid waste from construction and operation activities and could be served by a landfill that has insufficient permitted capacity for the demand. Construction and operations could result in adverse physical impacts from construction of new or modified fire protection, police protection, schools, parks, and other public facilities if they increase population and are required in order to maintain acceptable services in response to the projects. These significant effects could be temporary or long-term during construction as well as permanent during operations. The effect on utilities and public service systems that would result from changes associated with past, present, and planned future projects would be a cumulatively significant impact.
Implementation of the projects by other entities in response to the Project would not add substantial new customer demands to existing wastewater and water systems that could result in a cumulatively considerable incremental contribution to a significant cumulative impact. Construction and operation of projects could result in temporary, long-term, or permanent generation of solid waste that could exceed the permitted capacity of local landfills or conflict with federal, state, and local statutes and regulations related to solid waste. Construction activities could result in temporarily increased response times for fire protection, law enforcement, and emergency medical services due to increased traffic from construction materials deliveries and travel to and from the job sites by construction workers; and construction and operation activities could add substantial new demands to public services or require new or altered schools, parks, or other public services facilities. Therefore, projects implemented by other entities in response to the Project could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to the substantial impact on utilities and public services.

Delta Plan revised Mitigation Measures 20-1(b) through (e), previously adopted and incorporated into the Delta Plan, could minimize impacts to utilities and public services. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Furthermore, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by that other agency. Therefore, cumulative impacts could remain significant and unavoidable.

R. Wildfire

Construction and operation of projects listed in 2022 PEIR Table 7-2 such as construction or modification of levees, fish passage facilities, and habitat restoration or improvement projects could result in temporary, long-term, or permanent increases in risk for fire exacerbation or result in downslope or downstream risks due to post-fire runoff, slope instability, or drainage changes. Implementation of the projects listed in 2022 PEIR Table 7-2 also could exacerbate fire risk if located in a High or Very High Fire Hazard Severity area. In addition, increased surface runoff and erosion are possible in a post-fire environment where surface vegetation has been removed and steep slopes can increase the velocity of runoff flows. These significant effects could be temporary or long-term during construction as well as permanent during operations. The effect on wildfire that would result from these changes associated with past, present, and planned future projects would be a cumulatively significant impact.

Implementation of the projects by other entities in response to the Project would involve the construction of new or rehabilitated setback levees, new or modified levees, levee removal or degradation, stream and riparian habitat restoration and enhancement projects, new surface water intakes and diversions, and fish passage improvements. Construction and maintenance of these activities could develop temporary facilities and include the use of heavy equipment and machinery which could exacerbate wildfire risks due to slope and prevailing winds, and other factors, and result in exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Projects implemented by other entities in response to the
Project could result in actions that could result in runoff, post-fire instability, or drainage changes, or expose people or structures to significant risks such as downslope or downstream flooding or landslides. Therefore, projects implemented by other entities in response to the Project could result in a cumulatively considerable incremental contribution to a significant cumulative impact related to wildfire.

Delta Plan revised Mitigation Measures 14-1(a) through (s), 14-5(a), and 17-1(a) through (d), previously adopted and incorporated into the Delta Plan, or equally effective feasible measures could minimize impacts related to wildfire. However, because the extent and location of impact-causing actions are not known, it is not possible to conclude that the mitigation measures would reduce the contribution of covered and non-covered actions to less than cumulatively considerable in all cases. Furthermore, implementation and enforcement of these mitigation measures or equally effective mitigation measures is within the responsibility and jurisdiction of public agencies other than the Council and can and should be adopted by that other agency. Therefore, cumulative impacts could remain significant and unavoidable.

VIII. GROWTH INDUCING IMPACTS

An EIR is required to discuss growth inducing impacts, which consist of the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. State CEQA Guidelines §15126.2(e); Pub. Resources Code § 21100(b)(5). Direct growth inducement would result, for example, if a project involves the construction of substantial new housing that would support increased population in a community or establishes substantial new permanent employment opportunities. This additional population could, in turn, increase demands for public utilities, public services, roads, and other infrastructure. Indirect growth inducement would result if a project stimulates economic activity that requires physical development or removes an obstacle to growth and development (e.g., increasing infrastructure capacity that would enable new or additional development). It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment. State CEQA Guidelines §15126.2(e).

Section 8.1 of the PEIR analyzes the growth inducing impacts of the proposed Ecosystem Amendment. As explained in Section XI, below, the findings in this Section are based on the PEIR, the discussion and analysis in which is hereby incorporated in full by this reference.

A. Direct Growth Inducement

The Project would have no direct growth-inducement potential because no new housing would be developed or required as a result of it, nor would substantial new permanent employment opportunities be provided. Implementation of the projects by other entities in response to the Project could result in people who live outside of the project area moving to a project area during construction and operation to support project activities. However, the specific locations and scale of possible future facilities are not known at this time. Factors necessary to identify specific impacts include the number of construction and operations workers employed, the duration of project construction, and the location of projects in relation to population centers. Activities associated with projects implemented by other entities in response to the Project are anticipated to result in negligible levels of temporary and long-term population growth because an adequate labor pool exists in the Primary and Delta Watershed Planning Areas to provide employees.
needed for construction and operation of projects. Additionally, while activities associated with the Project could generate some additional jobs, if new staff is needed for construction and operations, it is likely that the increase in population would be minimal when compared to existing conditions. The potential for direct economic growth as a result of implementing the Project, in both the Primary and Delta Watershed Planning Areas, would be controlled by local jurisdiction planning guidelines and policies. Therefore, the Project would not directly induce substantial growth.

B. Indirect Growth

Construction of projects undertaken by other entities in response to the Project could generate substantial new permanent employment and indirectly generate growth by creating demand for homes and services and fostering economic and population growth. Similarly, population growth induced by short- or long-term construction efforts with substantial employment opportunities could indirectly stimulate the need for additional housing and services to support the new temporary employment demand. While such projects would create jobs, an adequate labor pool exists in the Primary and Extended Planning Areas. It is expected that project construction workers would be drawn from the regional labor pool. Furthermore, operation of projects would not result in a substantial increase in long-term jobs.

The Ecosystem Amendment does not direct the construction of specific projects, nor would projects be implemented under the direct authority of the Council. However, the Council, through the Project, would influence the actions, activities, and/or projects of other entities, but the specific locations and scale of possible future facilities are not known at this time. Factors necessary to identify specific impacts include the number of construction and operation workers employed, the duration of project construction and the location of projects in relation to population centers.

Local development projects to accommodate any induced growth that might result from projects implemented in response to the Project would be subject to the land use regulations and general plans of the cities and counties in which they are located, as well as CEQA review. If any such growth-related decisions are covered actions, the agency proposing the actions will be required to implement all applicable and feasible mitigation measures identified in the PEIR and adopted herein, or equally effective mitigation, which would reduce or avoid the environmental impacts of induced growth.

IX. ALTERNATIVES

The PEIR analyzed four alternatives to the Project, examining the environmental impacts and feasibility of each alternative, as well as the ability of the alternatives to meet the project objectives. The alternatives analyzed are the No Project Alternative and three project alternatives, which are briefly summarized below and described in Section 9.3 of the Draft PEIR. All of the alternatives were considered within the context of the Delta Plan, which achieves the eight inherent background objectives described in the Delta Reform Act and contributes to achievement of the project objectives.
Pursuant to the Delta Reform Act, and as described in Section II of these Findings and in Section 3.1 of the Draft 2022 PEIR, the project objectives are to further achievement of the coequal goals and the eight inherent objectives in a manner that: (1) furthers the statewide policy to reduce reliance on the Delta in meeting the State’s future water supply needs through regional self-reliance (Wat. Code section 85021), (2) is consistent with specific statutory content requirements for the Delta Plan (Wat. Code sections 85302(c) through (e), and 85303-85308), (3) is implementable in a comprehensive, concurrent and interrelated fashion, and (4) is accomplished as rapidly as realistically possible without jeopardizing ultimate success. In addition, the Ecosystem Amendment has the following specific objectives:

1. Create more natural, functional flows across a restored landscape to support native species recovery and provide the flexibility needed for water supply reliability.

2. Implement large-scale restoration projects that restore ecosystem function, increase resilience to climate change, are compatible with adjacent land uses, and that support the cultural, recreational, agricultural, and natural resource values of the Delta as an evolving place.

3. Protect opportunities to restore ecosystems and safeguard against land loss by taking sea level rise and long-term flood risk into consideration; protecting land from development; reducing, halting, or reversing subsidence; and incentivizing agricultural land management practices that support native wildlife and counter subsidence.

4. Prevent introduction of non-native invasive species; manage non-native invasive species impacts; and improve fish management to support the reproductive success and survival of native fish.

5. Facilitate implementation of ecosystem protection, enhancement, restoration, and mitigation projects in the Delta by improving the efficiency and effectiveness of actions by public agencies and private organizations engaged in proposing, approving, and permitting such projects. Because furthering achievement of the coequal goals requires tradeoffs between different environmental impacts, the PEIR analyzes alternatives that would modify proposed policies, recommendations, and performance measures to emphasize different aspects of ecosystem restoration. The PEIR does not consider alternatives that would not advance the coequal goals or attain most of the basic project objectives, would not be feasible, or would not reduce or eliminate at least one of the Project’s environmental impacts. Such alternatives, which were reviewed but rejected for further consideration in the PEIR, are discussed in Section 9.2.3 of the Draft PEIR, as required by State CEQA Guidelines section 15126.6(c).

The Council certifies that it independently reviewed and considered the information on alternatives provided in the Final PEIR and the record of proceedings. The Council finds that no new alternatives that are considerably different from those analyzed in the Final PEIR have been identified and that the feasibility of the analyzed alternatives has not changed since Draft PEIR.
Brief summaries of the evaluated alternatives are provided below. As explained in Section XI, below, the findings in this Section are based on the PEIR, the discussion and analysis in which is hereby incorporated in full by this reference, and on the record as a whole.

A. Alternative 1: Agricultural Working Lands Protection Emphasis

Alternative 1 focuses on reducing the impacts of ecosystem restoration projects to agricultural working lands in the Delta compared to the Project. Alternative 1 includes modified policies, recommendations, and performance measures that would reduce the occurrence of new ecosystem restoration projects on existing agricultural working lands or on lands suitable for farming (lands designated as Prime Farmland, Farmland of Statewide and Local importance, and Unique Farmland). Under this alternative, fewer acres of agricultural land would be converted as a result of ecosystem restoration or subsidence reversal actions when compared to the Ecosystem Amendment.

Construction and operation impacts associated with implementation of restoration projects in the Primary Planning Area under Alternative 1 would be similar to the Project. Specifically, environmental impacts and impact conclusions related to aesthetics; agriculture and forestry resources; air quality and GHG emissions; biological resources; cultural and tribal cultural resources; energy resources; geology, soils, seismicity, and paleontological and mineral resources; hazards and hazardous materials; hydrology and water quality; land use and planning; noise; population and housing; recreation; transportation; utilities and public services; and wildfire would be similar to the Project. However, the impacts would be reduced (less in magnitude) because the number, size, and location of restoration projects would be reduced compared to the Ecosystem Amendment.

Impacts from construction and operation activity in the Delta Watershed Planning Area (and the Extended Planning Area for energy and hydrology and water quality) would be similar to the Project because Alternative 1 would not substantially change projects that would be implemented in the Extended Planning Area. Therefore, environmental impacts and impact conclusions related to aesthetics; agriculture and forestry resources; air quality and GHG emissions; biological resources (aquatic and terrestrial); cultural and tribal cultural resources; energy resources; geology, soils, and mineral resources; hazards and hazardous materials; hydrology and water quality; land use and planning; noise; population and housing; recreation; transportation; utilities and public services; and wildfire would be similar to the Project.

Overall, Alternative 1 partially achieves most of the project objectives, although not to the same degree as the Project. However, Alternative 1 would not significantly contribute to the project objective of implementing large-scale restoration projects, and would be limited in its ability to contribute to protecting opportunities to restore ecosystems and safeguard against land loss, because the majority of land in the Delta is either in agricultural production or designated as suitable for agriculture. By reducing restoration on a large portion of Delta lands, Alternative 1 would significantly limit the number, size, type, and location of restoration projects contributing to a comprehensive approach to ecosystem protection, restoration, and enhancement in the Delta as compared to the Project.

For the foregoing reasons, Alternative 1 is hereby rejected.
B. Alternative 2: Reduced Waterside Restoration Emphasis

Alternative 2 would reduce impacts associated with channel widening, levee improvements, and other flood management activities compared to the Project. Unlike the Proposed Project, Alternative 2 would not promote channel widening and levee setback projects. Levee-related construction activities would continue, but those activities would primarily occur along existing levee footprints and would be less likely to include expanded or restored floodplains or improved waterside riparian habitat when compared to the Project.

Construction and operation impacts associated with implementation of restoration projects in the Primary Planning Area under Alternative 2 would be similar to the Project. Specifically, environmental impacts and impact conclusions related to aesthetics; agriculture and forestry resources; air quality and GHG emissions; biological resources; cultural and tribal cultural resources; energy resources; geology, soils, seismicity, and paleontological and mineral resources; hazards and hazardous materials; hydrology and water quality; land use and planning; noise; population and housing; recreation; transportation; utilities and public services; and wildfire would be similar to the Project. However, the impacts would be reduced (less in magnitude) because the number, size, and location of restoration projects would be reduced compared to the Project.

Impacts from construction and operation activity in the Delta Watershed Planning Area (and the Extended Planning Area for energy and hydrology and water quality) would be similar to the Project because Alternative 2 would not substantially change projects that would be implemented in the Extended Planning Area. Therefore, environmental impacts and impact conclusions related to aesthetics; agriculture and forestry resources; air quality and GHG emissions; biological resources (aquatic and terrestrial); cultural and tribal cultural resources; energy resources; geology, soils, and mineral resources; hazards and hazardous materials; hydrology and water quality; land use and planning; noise; population and housing; recreation; transportation; utilities and public services; and wildfire would be the same as the Project.

Overall, Alternative 2 would limit the number, size, and type of restoration projects contributing to a comprehensive approach to ecosystem protection, restoration, and enhancement in the Delta. Therefore, Alternative 2 partially achieves each of the project objectives, though not to the same degree as the Project. Furthermore, restoration projects under Alternative 2 would not promote channel widening or levee setbacks. Consequently, Alternative 2 would afford significantly fewer opportunities to restore waterside riparian channel margin habitat and/or reconnect Delta river channels to their historic floodplains compared to the Project. Reconnecting floodplains is critical to establishing the natural ecosystem functions described in the Delta Reform Act.

For the foregoing reasons, Alternative 2 is hereby rejected.

C. Alternative 3: Reduced Restoration Footprint Emphasis

Alternative 3 focuses on reducing the Project footprint by reducing target restoration acreages. As a result, the amount of restoration acres would be less when compared to the Ecosystem Amendment.
Construction and operation impacts associated with implementation of restoration projects in the Primary Planning Area under Alternative 3 would be similar to the Project. Specifically, environmental impacts and impact conclusions related to aesthetics; agriculture and forestry resources; air quality and GHG emissions; biological resources; cultural and tribal cultural resources; energy resources; geology, soils, seismicity, and paleontological and mineral resources; hazards and hazardous materials; hydrology and water quality; land use and planning; noise; population and housing; recreation; transportation; utilities and public services; and wildfire would be similar to the Project. However, the impacts would be reduced (less in magnitude) because the number, size, and location of restoration projects would be reduced compared to the Project.

Impacts from construction and operation activity in the Delta Watershed Planning Area (and the Extended Planning Area for energy and hydrology and water quality) would be similar to the Project because Alternative 3 would not substantially change projects that would be implemented in the Extended Planning Area. Therefore, environmental impacts and impact conclusions related to aesthetics; agriculture and forestry resources; air quality and GHG emissions; biological resources (aquatic and terrestrial); cultural and tribal cultural resources; energy resources; geology, soils, and mineral resources; hazards and hazardous materials; hydrology and water quality; land use and planning; noise; population and housing; recreation; transportation; utilities and public services; and wildfire would be the same as the Project.

Overall, Alternative 3 would limit the number, size, and type of restoration projects contributing to a comprehensive approach to ecosystem protection, restoration, and enhancement in the Delta. Therefore, Alternative 3 partially achieves each of the project objectives, though not to the same degree as the Project.

For the foregoing reasons, Alternative 3 is hereby rejected.

D. No Project Alternative

CEQA requires consideration of a no project alternative. Consistent with the State CEQA Guidelines, the No Project Alternative assumes the continuation of existing plans and policies. For example, the No Project Alternative assumes the Council would take no action to amend the Delta Plan to address protection, restoration, or enhancement of the Delta ecosystem. The existing Delta Plan, as approved by the Council in 2013 and amended in 2016 and 2018, would continue to be in effect and implemented. The coequal goals would continue to be implemented into the foreseeable future, and projects initiated by other entities to implement the Delta Plan are assumed to continue to be implemented.

Under the No Project Alternative, while the types of projects and construction activities would be similar to the Project, there would be less construction and operations activity because the Delta Plan would not be amended to provide for a more comprehensive approach to ecosystem protection, restoration, and enhancement in the Delta. There also may be less or more construction and operations activity within different portions of the Primary Planning Area compared to the Project. However, given the range of projects that could occur under the No Project Alternative, the PEIR conservatively assumes impacts would be the same for the No Project Alternative and the Project. Construction and operation of projects under the No Project
Alternative could result in significant and unavoidable environmental impacts similar to those described for the Project.

The No Project Alternative would not include the Project. Restoration projects implemented without the Project could still create more natural, functional flows; implement large-scale restoration projects; protect opportunities to restore ecosystems and safeguard against land loss; prevent introduction of non-native invasive species, manage non-native invasive species impacts, and improve fish management; and facilitate implementation of ecosystem protection, enhancement, restoration, and mitigation projects in the Delta similar to the specific objectives of the Project. However, these restoration projects would not be implemented with a comprehensive approach to ecosystem protection, restoration, and enhancement in the Delta as they would be with the Project. Additionally, existing performance measures would not fully achieve the specific project objectives because the Project would refine and add performance measure targets, metrics, and baseline conditions associated with proposed new and revised policies and recommendations within Delta Plan Chapter 4. Therefore, the No Project Alternative partially achieves the project objectives, although not to the same degree as the Project.

For the foregoing reasons, the No Project Alternative is hereby rejected.

E. Environmentally Superior Alternative

On the basis of the analyses in the PEIR, the Council finds that Alternative 3, Reduced Restoration Footprint Emphasis, is the environmentally superior alternative. Alternative 3 would result in a total of 50 percent fewer total acres restored compared to the Project (approximately 30,000 to 40,000 acres compared to 60,000 to 80,000, respectively). Alternative 3 would result in similar significant and unavoidable impacts compared to the Project, but the impacts would be reduced (less in magnitude) because the number, size, and location of restoration projects would be reduced compared to the Project. However, Alternative 3 would not eliminate or reduce to a less than significant level any of the significant and unavoidable impacts identified for the Project. This is because Alternative 3 would still involve the general types of construction and operation activities associated with restoration projects that could be implemented, similar to the Project. Furthermore, like the Project, the specific locations and scale of possible future restoration projects that could be implemented under Alternative 3 are not known at this time. In addition, Alternative 3 would partially achieve the project objectives, although not to the same degree as the Project.

X. STATEMENT OF OVERRIDING CONSIDERATIONS

As discussed above, the Council has found that some of the impacts of the proposed Ecosystem Amendment remain significant following adoption and implementation of mitigation measures described in the PEIR and incorporated into the Project. Section 15093(b) of the State CEQA Guidelines provides that when the decision of the public agency results in the occurrence of significant impacts that are not avoided or substantially lessened, the agency must state in writing the reasons to support its actions. Having balanced the benefits of the Project against its significant and unavoidable environmental impacts, the Council finds that the Project’s benefits outweigh its unavoidable adverse environmental effects, and that the adverse environmental effects are therefore acceptable. The Council further finds that each of the Project’s benefits
discussed below is a separate and independent basis for these findings. The reasons set forth below are based on the Final PEIR and other information in the administrative record.

1. The Council is charged with developing a legally enforceable, long-term management plan for the Delta that furthers achievement of the coequal goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place.

2. The Delta is currently in crisis, as it cannot satisfy all of the competing demands placed on it, including those related to water supply, habitat, agriculture, recreation, and flood protection. Key species are endangered or threatened, the amount of water that can be exported from the Delta is determined by legal orders protecting species in addition to variable precipitation and storage, and experts warn that the Delta poses one of the greatest flood risks in the West.

3. The 45,600 square mile Delta watershed provides all or a portion of surface water or groundwater supplies to 27 million California residents. Approximately 8 percent of the State’s water supply is exported from the Delta.

4. The Delta and Suisun Marsh support more than 55 fish species and more than 750 plant and wildlife species. Of these, approximately 100 wildlife species, 160 plant species, and 16 taxonomic units of fish are considered special status species.

5. The Delta and Suisun Marsh are home to more than one-half million residents living in dozens of communities, including portions of 12 incorporated cities, and support more than 146,000 jobs.

6. Approximately 58 percent of the Delta and Suisun Marsh (more than 484,000 acres of agricultural land) currently supports a highly productive agricultural industry that is valued at hundreds of millions of dollars annually.

7. The Delta and Suisun Marsh levees and lands support interstate and state highways and railroad tracks that support interstate and intrastate traffic, more than 500 miles of major electrical transmission lines, 60 substations, and more than 400 miles of major natural gas pipelines that provide energy throughout Northern California, as well as critical pipelines that carry transportation fuels to airports and other fuel depots throughout the San Francisco Bay Area and Sacramento.

8. The Delta and Suisun Marsh have more than 1,335 miles of levees that protect more than 800,000 acres of land and play a role in the water supplies conveyed through the Delta.

9. The Delta experiences more than 6.4 million visitor days annually from recreational boaters; fishing, hunting, bird watching and camping draw even more visitors to the area.

10. The Ecosystem Amendment will advance California’s interest in furthering achievement of the coequal goals and their inherent objectives of promoting statewide water conservation and water use efficiency, improving water quality, improving water
conveyance, expanding statewide water storage, and reducing risks to people, property, and state interests by effective emergency preparedness, appropriate land uses, and investments in flood protection.

11. The Delta Plan and the Ecosystem Amendment advance subgoals and strategies for restoring a healthy ecosystem, including restoring large areas of interconnected habitats within the Delta and its watershed by 2100; establishing migratory corridors for fish, birds, and other animals along selected Delta river channels; promoting self-sustaining, diverse populations of native and valued species by reducing the risk of take and harm from invasive species; restoring Delta flows and channels to support a healthy estuary and other ecosystems; improving water quality to meet drinking water, agriculture, and ecosystem long-term goals; and restoring habitat necessary to avoid a net loss of migratory bird habitat and, where feasible, increase migratory bird habitat to promote viable populations of migratory birds.

12. The Delta Plan and the Ecosystem Amendment advance measures to promote characteristics of a healthy Delta Ecosystem, including viable populations of native resident and migratory species, functional corridors for migratory species, diverse and biologically appropriate habitats and ecosystem processes, reduced threats and stresses on the Delta ecosystem, and conditions conducive to meeting or exceeding the goals in existing species recovery plans and state and federal goals with respect to doubling salmon populations.

13. Tradeoffs and integration define the Delta dilemma: water conveyance facilities that built strong urban and agricultural economies threaten ecosystem health. Water that is beneficial for fish is alive with plankton and organic material, but sources of drinking water are best in as pure a form as possible. The pollutants of upstream urban and agricultural uses cause problems for downstream fish and water diverters alike. The same oceangoing ships that opened the Central Valley to world trade also introduced nonnative species that alter the Delta ecosystem. High water flows that historically improved habitat and a diverse food web come with the threat of lost homes, flooded farmland, and disaster for Delta residents and the California economy. Adding to the complexity of these problems is the increasing volatility of Delta water supplies. Without the solutions encouraged by the Delta Plan and the Ecosystem Amendment, these problems will not simply continue to exist at their current level, but will get worse over time.

14. The projects and actions needed to further achievement of the coequal goals and inherent objectives will create significant environmental impacts in the short term related to project construction in order to mitigate future, more severe environmental impacts and to achieve long-term improvements to the environment, including more efficient use of water and increased water supplies, adaptive management of water supplies that balances a healthy ecosystem and multiple beneficial uses, improved water quality, improved wildlife habitats and land for agriculture and recreation, and improved protection from flooding risk in order to preserve existing land uses and agriculture.

15. The Delta Plan and the Ecosystem Amendment build on years of planning efforts and incorporate actions, recommendations, and strategies developed by both governmental
and nongovernmental entities that have invested countless hours on Delta issues and have specialized expertise.

16. The Delta Plan and Ecosystem Amendment lay the groundwork for near-term actions for improvement and focus on the immediate avoidance of further harm or increased risk to the Delta by highlighting urgently needed habitat projects and the significant potential for local and regional water supply development. The Delta Plan and Ecosystem Amendment seek to immediately halt practices known to be detrimental to the sustainability of the Delta’s many functions and services.

17. The Delta Plan and Ecosystem Amendment will protect, restore and enhance the Delta ecosystem by creating more natural, functional flows across a restored landscape to support native species recovery and provide the flexibility needed for water supply reliability; implementing large-scale restoration projects that restore ecosystem function, increase resilience to climate change, are compatible with adjacent land uses, and support the cultural, recreational, agricultural, and natural resource values of the Delta as an evolving place; protecting opportunities to restore ecosystems and safeguard against land loss by taking sea level rise and long-term flood risk into consideration, protecting land from development, reducing subsidence, and incentivizing agricultural land management practices that support native wildlife and counter subsidence; preventing introduction of non-native invasive species, managing non-native invasive species impacts, and improving fish management to support the reproductive success and survival of native fish; and facilitating implementation of ecosystem protection, enhancement, restoration, and mitigation projects in the Delta by improving the efficiency and effectiveness of actions by public agencies and private organizations engaged in proposing, approving, and permitting such projects. Promoting these strategies will benefit not only species and habitats, but also coastal and inland commercial and recreational fisheries, recreation and tourism in the Delta, and the California public as a whole.

18. The Delta Plan and Ecosystem Amendment will continue to protect and enhance the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place by conserving farming and rural land use through appropriate planning for urban land uses, protecting the unique character of historic Delta communities, and allowing for development that supports agricultural and recreation-related economic activities. The Delta Plan seeks to minimize conflicts with and between existing or planned land uses in the Delta and water management, ecosystem restoration, or flood management infrastructure. The Delta thus will retain its rural heritage and status as a place where agricultural, recreational, and environmental uses are uniquely integrated, and it will continue its important role in the regional economy.

19. The Delta Reform Act requires that the Delta Plan and the Ecosystem Amendment be based on the best available science and requires the use of science-based, transparent, and formal adaptive management strategies for ongoing ecosystem restoration and water management decisions. The Delta Science Plan, completed in 2013 and updated in 2016 and 2019 strengthens and unifies the Delta science community; assures the credibility, relevance, and legitimacy of Delta science; and provides tools, organizational structures,
and mechanisms for scientists, policymakers, managers, stakeholders, and the public to help them more effectively collaborate on turning Delta science into effective action.

20. The Delta Plan and the Ecosystem Amendment contain quantified or otherwise measurable targets to be used as indicators of whether the Delta Plan is meeting its objectives. The performance measures support the achievement of all of the goals and objectives of the Delta Plan by enhancing the Council’s ability to accurately gauge current conditions and the effects and effectiveness of agency projects and other actions.

21. As authorized by the Delta Reform Act, pursuant to the Delta Plan the Council will coordinate and collaborate across the multiple public agencies that have responsibility for some aspect of the Delta. The Delta Plan establishes an open and accountable governance mechanism for coordinating actions across agency jurisdictions and statutory objectives in order to halt the decline of the Delta ecosystem and improve water supply reliability.

22. When compared to the alternatives analyzed in the Final EIR (including the No Project Alternative), the Project provides the best available balance between maximizing attainment of the project objectives and minimizing significant environmental impacts.

XI. INCORPORATION BY REFERENCE

These findings incorporate the text of the Final Program Environmental Impact Report for the Delta Plan Ecosystem Amendment, the Delta Plan, and the Mitigation Monitoring and Reporting Program by reference and in their entirety. Without limitation, this incorporation is intended to elaborate on the scope and nature of mitigation measures, the basis for determining the significance of impacts, the comparative analysis of alternatives, the determination of the environmentally superior alternative, and the reasons for approving the Project in spite of the potential for associated significant and unavoidable adverse impacts.

XII. RECIRCULATION NOT REQUIRED

No significant new information was added to the Draft PEIR as a result of the public comment process. The Final PEIR responds to comments, and clarifies, amplifies, and makes insignificant modifications to the Draft PEIR. It does not identify any new significant effects on the environment or a substantial increase in the severity of an environmental impact requiring major revisions to the Draft PEIR. Therefore, recirculation of the PEIR is not required.

XIII. RECORD OF PROCEEDINGS

Various documents and other materials related to the Project constitute the record of proceedings upon which the Council bases its findings and decisions contained herein. Those documents and materials are located in the offices of the custodian for the documents and materials, which is Beck Barger, Clerk of the Board, Delta Stewardship Council, located at 715 P Street, Suite 15-300, Sacramento, California 95814.
XIV. SUMMARY

A. Based on the foregoing Findings and the information contained in the record, the Council has made one or more of the following Findings with respect to each of the significant environmental effects of the Project:

1. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant environmental effects identified in the Final PEIR.
2. Those changes or alterations are wholly or partially within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.
3. Specific economic, legal, social, technological, or other considerations, make infeasible the mitigation measures or alternatives identified in the Final PEIR that would otherwise avoid or substantially lessen the identified significant environmental effects of the Project.

B. Based on the foregoing Findings and the information contained in the record, the Council determines that:

1. All significant effects on the environment due to the approval of the Project have been eliminated or substantially lessened where feasible.
2. Any remaining significant effects on the environment found to be unavoidable are acceptable due to the factors described in the Statement of Overriding Considerations in Section X, above.1513758.2