

Chapter 6 Alternatives

6.1 Introduction

This chapter describes alternatives to the Order for Clean Water Act (CWA) Section 401 Water Quality Certification and Waste Discharge Requirements for Restoration Projects Statewide (Order) and compares the environmental impacts of those alternatives. This chapter also describes alternatives that were considered for further consideration but rejected.

The principles used to guide selection of the alternatives analyzed in this program environmental impact report (PEIR) are provided by Section 15126.6 of the California Environmental Quality Act (CEQA) Guidelines (State CEQA Guidelines), which specifies that an environmental impact report (EIR) must do all of the following:

- ◆ Describe a reasonable range of potentially feasible alternatives to the project that could feasibly attain most of the basic objectives of the project.
- ◆ Consider alternatives that could reduce or eliminate any significant environmental impacts of the Order, including alternatives that may be costlier or could otherwise impede the project's objectives.
- ◆ Evaluate the comparative merits of the alternatives.

The focus and definition of the alternatives evaluated in this PEIR are governed by the “rule of reason,” in accordance with Section 15126.6(f) of the State CEQA Guidelines. That is, the range of alternatives presented in this PEIR must permit a reasoned choice by the State Water Resources Control Board (State Water Board). The State CEQA Guidelines (Section 15126.6) require that an EIR evaluate at least one “No-Project Alternative,” evaluate a reasonable range of alternatives to the project, identify alternatives that were considered during the scoping process but eliminated from detailed consideration, and identify the “environmentally superior alternative.”

Although the State CEQA Guidelines (Section 15126.6[d]) require that alternatives be evaluated, they permit the evaluation to be conducted in less detail than for the Order. Consistent with Section 15126.6(d) of the State CEQA Guidelines, the information provided in this PEIR about each alternative is sufficient to allow for a meaningful evaluation, analysis, and comparison of the alternatives.

The alternatives considered but rejected are discussed in Section 6.3.3, *Alternatives Considered but Rejected*. The alternatives carried forward for analysis are discussed in Section 6.4, *Alternatives to the Order*. The State CEQA Guidelines also require that the EIR identify the environmentally superior alternative. Section 6.5, *Environmentally Superior Alternative*, identifies the environmentally superior alternative and summarizes the impacts of each alternative, and their ability to meet project objectives, as compared to the Order.

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6.2 Objectives

As presented in Section 2.2.2, *Objectives*, the objective of the Order is to help expedite and make the regulatory process more efficient, and thus to allow as many restoration projects as possible statewide by interpreting state standards in a uniform manner to ensure that applicable projects are consistent with federal and state water quality laws.

6.3 Alternatives Considered and Screening Criteria

This section describes the development of a reasonable range of alternatives to the Order, the method used to screen the alternatives, and the alternatives considered but eliminated from detailed consideration in this document.

6.3.1 Development of a Reasonable Range of Alternatives

CEQA requires that an EIR describe and evaluate a reasonable range of alternatives to a project or to the location of a project that would feasibly attain most of the basic project objectives and avoid or substantially lessen significant project impacts. The alternatives to the Order considered in this PEIR were developed based on information gathered during development of the Order and during the PEIR scoping process (Section 1.3, *Public Participation and Environmental Review Process*).

In developing the Order, a range of potential actions and other ways to meet the project objectives were considered. Various draft versions of the Order were prepared based on input received from the Regional Water Quality Control Boards (Regional Boards) and technical experts. In addition, comments were received during scoping of the PEIR. See Appendix B for the comments received in response to the notice of preparation (NOP) of the PEIR.

NOP comments on the Order addressed a variety of topics and themes, including the following:

- ◆ Some comments suggested including certain restoration projects already included in the Order (e.g., process-based restoration of fluvial systems as a means to create a dynamic and self-sustaining riverine environment [e.g., Stage 0], main-channel gravel augmentation, in-channel grading activities, boulder placement, and placement of large and small woody habitat material).
- ◆ Some comments suggested including certain restoration projects not included in the Order (e.g., direct flow releases).
- ◆ Some comments supported establishing fewer requirements for the design of restoration categories and/or not including maximum upper limit size constraints or generic limits on the size of restoration projects covered under the Order.
- ◆ Some comments asked that the State Water Board specify much more narrowly the types of restoration projects that could be permitted under the Order, or that more specific criteria be required for projects to be included in the Order. Among the specific criteria requested: One of the project's primary objectives is restoration; the project is financed, at least in part, with monies set aside for the explicit purpose of restoration or stewardship; the project does not permanently

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affect beneficial uses established by the applicable water quality control plan (basin plan); and/or the percentage of hardscape (e.g., concrete, unvegetated riprap) does not exceed more than a certain limited percent of the total footprint. Some comments requested a clear and reasonable definition of what level of restoration is necessary for projects to qualify for coverage, and how that level of restoration can, or should, be measured.

- ◆ Some comments suggested eliminating certain aspects of restoration projects included in the Order. For example: Eliminating bank stabilization projects that depend on extensive use of rock riprap; or restoration projects conducted in connection with a requirement for water supply development requiring any action on the part of the State Water Board's Division of Water Rights.
- ◆ Some comments suggested eliminating or excluding an entire category of restoration projects included in the Order, such as excluding all water conservation restoration projects.
- ◆ Some comments suggested allowing flexibility in the regulations regarding certain types of restoration projects. For example, it was suggested that the State Water Board should include higher thresholds for nephelometric turbidity units (NTU) during construction in the Order to allow work to continue between short work windows and during a variety of water-year types.

6.3.2 Method Used to Screen Alternatives

Potential alternatives were screened based on their ability to feasibly attain most of the basic project objectives, their feasibility within the limits of the State Water Board jurisdiction, and their ability to reduce or eliminate any significant environmental impacts of the Order.

- ◆ **Meeting project objectives**—The project objectives are listed in Section 2.2.2, *Objectives*. The State CEQA Guidelines state that alternatives must feasibly attain most of the basic objectives of the project. Alternatives that did not meet the majority of the objectives for the Order were screened out and not carried forward for further evaluation in the PEIR.
- ◆ **Feasibility**—CWA Section 401 and California Water Code Section 13000 establish certain requirements that govern the State Water Board's regulatory authority related to the Order. Alternatives that do not meet the requirements of the CWA or California Water Code, or of other applicable laws and regulations, were not carried forward for further evaluation in the PEIR.
- ◆ **Avoiding or lessening any potentially adverse environmental effect of the Order**—Consistent with the State CEQA Guidelines, alternatives should avoid or substantially lessen one or more of the significant environmental effects of the Order. Alternatives that would not lessen or avoid a potentially significant environmental impact may be eliminated from detailed evaluation in the PEIR.

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6.3.3 Alternatives Considered but Rejected

The State CEQA Guidelines require an EIR to identify any alternatives that were considered by the lead agency but were rejected as infeasible, and to briefly explain the reasons underlying the lead agency's determination. Section 15126.6(c) of the State CEQA Guidelines states the following:

The EIR should identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination... Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.

The alternative that was considered but rejected is "Flexibility in regulations regarding restoration projects (e.g., higher NTU thresholds)."

As stated above, the State Water Board is governed by CWA and California Water Code requirements related to the Order. Regulations in Title 23, Division 3, Chapter 15, Article 5 of the California Code of Regulations contain the interpretation of the state's Antidegradation Policy that has been promulgated in regulations.

The State Water Board enacted the Statement of Policy with Respect to Maintaining High Quality of Waters in California, also referred to as the California Antidegradation Policy. This policy is used to ensure that high-quality water is maintained, and it limits the discharge of pollutants into high-quality water in the state (Resolution Number 68-16), as follows:

- (1) Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.*
- (2) Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.*

An alternative that requires the State Water Board to change threshold standards (such as NTUs) are outside the scope of the Order. Therefore, this alternative was rejected from further consideration.

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6.4 Alternatives to the Order

Three alternatives were identified for further evaluation in the PEIR: The No Project Alternative and two potentially feasible alternatives to the Order resulting from the alternatives development and screening process described above:

- ◆ No Project Alternative
- ◆ Alternative 1—Specify more narrowly the types of restoration projects included in the Order (e.g., the project must exceed a certain limited percent of footprint)
- ◆ Alternative 2—Eliminate certain aspects of restoration categories (e.g., eliminating bank stabilization)

These alternatives are described below, along with a comparison of the impacts of the alternatives to the impacts of the Order. The alternatives were also evaluated for their ability to achieve the project objectives, which are presented in Section 2.2.2, *Objectives*.

This analysis of impacts is based on an evaluation of the potential changes to environmental resources that would result from implementation of actions in response to the alternatives, compared to the Order. However, the precise locations and detailed characteristics of potential future individual restoration projects are unknown. Therefore, this analysis focuses on reasonably foreseeable changes from implementation of the types of projects and actions that might be taken in the future, consistent with the level of detail appropriate for a program-level analysis.

Similar to the Order, impacts of the alternatives were evaluated in terms of how typical construction and operations and maintenance (O&M) of project components might cause adverse environmental impacts.

Consistent with Section 15126.6(d) of the State CEQA Guidelines, the information provided in this PEIR about each alternative is sufficient to allow for a meaningful evaluation, analysis, and comparison of the alternatives with the Order. If an alternative would cause one or more significant effects in addition to those identified for the Order, the effects are discussed, but in less detail than for the Order (State CEQA Guidelines Section 15126.6[d]). In the following sections, impacts are described with respect to whether they are likely to be similar to, more severe than, or less severe than the corresponding impacts of the Order.

6.4.1 No Project Alternative

Description of Alternative

State CEQA Guidelines Section 15126.6(e) requires consideration of a “no project” alternative. The purpose of this alternative is to allow the decision makers to compare the impacts of the Order with the impacts of not approving the Order (the project). The No Project Alternative consists of existing conditions at the time the NOP is published, and what would be reasonably expected to occur in the foreseeable future if the Order were not approved, based on current plans and consistent with available infrastructure.

Under the No Project Alternative, the State Water Board would take no action to approve the Order to expedite regulatory approval of restoration projects that fall

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outside the project size limits of the Order for Small Habitat Restoration Projects (Order #SB12006GN). Restoration projects initiated by project proponents are assumed to continue to be implemented, and projects would remain subject to the requirement to file a CWA Section 401 water quality certification and/or waste discharge requirements for each restoration project. Proponents of restoration projects would continue to obtain individual CWA Section 401 water quality certifications and/or waste discharge requirements from the State Water Board and/or Regional Boards.

Restoration projects would still be carried out in a manner consistent with CWA Section 401, waste discharge requirements, and other legal requirements intended to reduce or eliminate potential significant environmental impacts. However, under the No Project Alternative, when proponents of individual restoration projects apply for a Section 401 water quality certification or waste discharge requirements, the applications would be reviewed and evaluated without the benefit of the systematic and consistent Order process provided by the Order, which could result in loss of efficiencies, less regulatory certainty, and a longer time frame for permit approval by the State Water Board and/or Regional Boards.

Recognizing that each restoration project would receive its case-by-case review by the State Water Board and/or Regional Board without the opportunity for up-front and consistent identification, selection, and application of species protection measures, general protection measures, design criteria, and/or mitigation from a program EIR, the permit applications and CEQA documentation would not benefit from the eligibility requirements or time savings associated with this program and may be repetitive from one project to the next and/or the potential for variability in mitigation approaches may exist.

Other Projects Included in the No Project Alternative

The No Project Alternative includes reasonably foreseeable projects that are funded and for which construction and operation permits had been issued at the time of the NOP. The following other projects are included in the No Project Alternative:

- ◆ Restoration projects that originate from programs and/or initiatives that guide restoration throughout the state, such as:
 - Proposition 1 and Proposition 68 funds administered by local conservancies and state agencies.
 - California Department of Fish and Wildlife Fisheries Restoration Grant Program.
 - State Water Board Comprehensive Response to Climate Change (Resolution No. 2017-0012).
 - State Water Board Non-point Source (Section 319h) grant program for restoration activities.
 - California EcoRestore.
 - Central Valley Flood Protection Plan–Conservation Strategy.
 - San Joaquin River Restoration Program.

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- San Francisco Bay Restoration Authority (Measure AA).
- California State Conservancies (e.g., Coastal, Tahoe, Sierra Nevada).
- Species recovery plans published by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and other federal, state, and local agencies, and watershed protection and management plan implementation projects.
- Projects that are part of other restoration plans, agreements, or funding sources.
- ◆ Multiple-benefit projects, including those that address groundwater recharge, recreation, flood management, water quality improvement, and/or adaptation to climate change.
- ◆ Restoration projects that contribute to the protection of existing and potential beneficial uses identified in each of the nine Regional Boards' basin plans.

Relationship to Project Objectives

The No Project Alternative would not achieve the objective to help streamline the regulatory process for restoration projects statewide by interpreting state standards in a uniform manner to ensure that the projects are consistent with federal and state water quality laws. As stated above, when proponents of restoration projects apply for a Section 401 water quality certification or waste discharge requirements, they would be reviewed and evaluated without the benefit of a systematic and consistent Order process, which could result in the loss of efficiencies and a longer time frame for permit approval by the State Water Board and/or Regional Boards. In summary, the No Project Alternative does not meet the project objectives of the Order.

6.4.2 Alternative 1—Specify More Narrowly the Types of Restoration Projects Included in the Order

Description of Alternative

Alternative 1 would include the same categories of restoration projects in the Order as described in Chapter 2, *Project Description*, within the nine Regional Boards' jurisdictions; however, this alternative would specify more narrowly the types of projects that would be covered under the Order.

This alternative would allow for larger restoration projects than specified in the Order for Small Habitat Restoration Projects, but would be more limited than the Order. Furthermore, this alternative would define the level of restoration necessary for projects to qualify for coverage, and would indicate how that level can or should be measured. For example, projects would be limited to specific size constraints (e.g., the project must not exceed a certain size) or must meet certain criteria (e.g., the percentage of hardscape, such as concrete or unvegetated riprap, must not exceed a certain limited percentage of the total footprint).

The same authorization process for restoration projects would be implemented under Alternative 1 as under the Order. Construction activities would be similar to those listed

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in the Order, and restoration projects would incorporate species protection measures, general protection measures, and design criteria as with the Order.

Because of specific size constraints or criteria limitations placed on the restoration projects covered by the Order, this alternative would reduce the types, and potentially the locations, of restoration projects that would be implemented under the Order.

Restoration projects implemented by project proponents that do not meet the size constraints or certain criteria required by Alternative 1 would not be covered under this alternative. Implementation of these restoration projects would be the same as under the No Project Alternative (as described above).

Relationship to Project Objectives

Alternative 1 would not achieve all the project objectives. This alternative includes all categories of restoration projects in the Order as described in Chapter 2, *Project Description*; however, certain projects would not be covered because of size constraints or other limitations.

Depending on the specific circumstances, project size limits may be arbitrary, and imposing such limits may not reduce temporary adverse impacts, especially if appropriate protection measures are in place. Many projects essential for ecological and environmental improvements would be delayed or require phasing (to reduce the size of single project phases). Delays and phasing would slow down project implementation and associated contributions to species recovery and water quality improvement.

In addition, if projects must meet certain criteria (e.g., the percentage of hardscape, such as concrete or unvegetated riprap, must not exceed a certain limited percentage of the total footprint), some project types—such as fish passage and road crossing improvements—may not be eligible because certain projects require a higher percentage of hardscape. Also, more resources would be spent on planning and permitting and State Water Board and Regional Board staff time, and less on project implementation.

Because Alternative 1 would limit the restoration projects covered under the Order to specific size constraints or certain criteria, this alternative would not fully achieve streamlining of the regulatory process for restoration projects statewide.

In summary, Alternative 1 partially achieves the project objectives, but many projects could be left out, and this alternative would not achieve the same degree of environmental benefits as the Order.

6.4.3 Alternative 2—Eliminate Certain Aspects of Restoration Categories

Description of Alternative

Alternative 2 would include the same categories of restoration projects in the Order as described in Chapter 2, *Project Description*, within the nine Regional Boards'

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jurisdictions. However, certain elements could be removed from the categories of restoration projects under this alternative, such as the following:

- ◆ Bank stabilization projects that may depend on riprap, currently covered under the Stream and Riparian Habitat Establishment, Restoration, and Enhancement category.
- ◆ Removal, replacement, modification, retrofit, installation, or resetting of culverts, fords, bridges, and other stream crossings and water control structures of any size, currently covered under the Improvements to Stream Crossings and Fish Passage category.
- ◆ Removal of small dams, currently covered under the Removal of Small Dams, Tide Gates, Flood Gates, and Legacy Structures category.

The same authorization process for restoration projects would be implemented under Alternative 2 as under the Order. Construction activities would be similar to those listed in the Order, and restoration projects would incorporate species protection measures, general protection measures, and mitigation measures as with the Order.

Because Alternative 2 would eliminate project categories or practices within the eligible types of restoration projects permitted by the Order, this alternative would reduce the types or varieties of restoration projects that would be implemented under the Order.

Individual restoration projects that would implement categories of restoration not covered under Alternative 2 would be permitted following the same procedures as those listed for the No Project Alternative (as described above).

Relationship to Project Objectives

Alternative 2 would not achieve all the project objectives. Alternative 2 includes all categories of restoration projects in the Order as described in Chapter 2, *Project Description*; however, certain restoration projects would not be covered because this alternative would eliminate certain elements within the categories of restoration projects.

Similar to Alternative 1, depending on the specific circumstances, restricting certain project types under Alternative 2 may not result in reduced temporary adverse impacts, especially if the projects are planned and designed appropriately with protection measures in place. The Order has been developed to address these issues and concerns. Specifically, all projects permitted under the Order must incorporate applicable general protection measures (identified in Chapter 2, Section 2.8.2) into their designs to ensure that the projects avoid and minimize impacts on sensitive resources. See also Appendix E for full descriptions of these general protection measures.

In addition, the Order identifies a requirement for a pre-application consultation meeting with the approving Water Board, unless the consultation is waived by contacting the approving Water Board (Section 2.8.3):

- ◆ Removal of small dams
- ◆ Permanent removal of flashboard dam abutments and sills
- ◆ Placement of weirs within existing concrete-lined channels

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- ◆ Ecotone levees
- ◆ Bioengineered bank stabilization
- ◆ Beneficial reuse of dredged material
- ◆ Climate change adaptation measures
- ◆ Projects in Outstanding National Resource Waters
- ◆ Application of pesticides to surface waters
- ◆ Live stream diversions with pumping
- ◆ Projects requiring a Basin Plan Prohibition Exemption

All project types included in the Order are essential for ecological and environmental improvements. Removing projects from eligibility under the Order would cause such projects to be delayed, slowing down their implementation and associated contributions to species recovery and water quality improvement.

Because Alternative 2 would limit the restoration projects covered under the Order, this alternative would not fully achieve streamlining of the regulatory process for restoration projects statewide.

In summary, Alternative 2 achieves or partially achieves most of the project objectives, though not to the same degree as the Order.

6.4.4 Alternative 3—Exclude Entire Categories of Restoration Projects

Description of Alternative

This alternative would include some of the same categories of restoration projects in the Order as described in Chapter 2, *Project Description*, within the nine Regional Boards' jurisdictions; however, this alternative would exclude entire categories of restoration projects that would be covered under the Order. For example, under this alternative, all restoration projects associated with the Water Conservation and Floodplain Restoration categories under the Order would not be implemented.

The same authorization process for restoration projects would be implemented under Alternative 3 as under the Order. Construction activities would be similar to those listed in the Order, and restoration projects would incorporate species protection measures, general protection measures, and mitigation measures as with the Order.

Because Alternative 3 would eliminate certain categories of restoration projects covered by the Order, this alternative would reduce the types of restoration projects that would be implemented under the Order.

Restoration projects implemented by project proponents that include certain aspects of the categories of restoration not covered under this alternative would be implemented the same as under the No Project Alternative (as described above).

Relationship to Project Objectives

Alternative 3 would not achieve all the project objectives. This alternative does not include all categories of restoration projects in the Order as described in Chapter 2, *Project Description*; entire categories of restoration projects would be removed.

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Similar to Alternatives 1 and 2, depending on specific project circumstances, restricting certain project types under Alternative 3 may not result in reduced temporary adverse impacts, especially if the projects are planned and designed appropriately with protection measures in place. The Order has been developed to address these issues and concerns; specifically, all projects permitted under the Order must incorporate *applicable* general protection measures (identified in Chapter 2, Section 2.8.2) into their designs so that the projects avoid and minimize impacts on sensitive resources. See also Appendix E for full descriptions of these general protection measures.

In addition, the Order requires a pre-application consultation meeting with the approving Water Board, unless the consultation is waived by contacting the approving Water Board (Section 2.8.3). All project types included in the Order are essential for ecological and environmental improvements. Removing projects from eligibility under the would cause such projects to be delayed, slowing down their implementation and associated contributions to species recovery and water quality improvement. More resources would be spent on planning and permitting, and State Water Board and Regional Board staff time, and less for project implementation.

Because Alternative 3 would limit the restoration projects covered under the Order, this alternative would not fully achieve an efficient regulatory process for a wide range of restoration projects statewide.

In summary, Alternative 3 achieves or partially achieves most of the project objectives, though not to the same degree as the Order.

6.4.5 Comparative Impact Analysis

This section compares the environmental impacts of the alternatives to the impacts of the Order.

Comparative Impact Analysis for the No Project Alternative

This section compares the impacts of the No Project Alternative to those of the Order.

Impacts Identified as Less Severe than Impacts of the Order

No impacts of the No Project Alternative have been identified as being less severe than impacts of the Order.

Impacts Identified as the Same as or Similar to Impacts of the Order

Construction and O&M impacts of the No Project Alternative in the study area would be similar to construction and O&M impacts of the Order because the State of California encourages the implementation of actions or activities to construct, operate, and maintain restoration projects. With the No Project Alternative, it could take longer for the State Water Board and Regional Boards to process CWA Section 401 permits for restoration projects, but the types of restoration projects and construction activities occurring would be similar to those under the Order. For example, there may be less or more construction activity in different portions of the study area with the No Project Alternative, as compared to the Order. Construction and operation of these types of

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projects could result in significant and unavoidable environmental impacts similar to those described for the Order in Chapter 3.

- ◆ **Aesthetics:** The visual character of the project area is the same for the No Project Alternative as for the Order and is defined by all counties and cities in California. The No Project Alternative would still involve construction work for restoration projects; O&M activities of restoration projects could change the character of the project vicinity relative to current conditions. Like the Order, the No Project Alternative would include the presence of construction equipment and materials, vehicles, and crews, along with the construction of natural or artificial infrastructure. The Order's general protection measures GCM-11, GCM-14, GCM-15, VHDR-1, VHDR-3, VHDR-4, and VHDR-5 and Mitigation Measures AES-1 and AES-2 would reduce impacts of the No Project Alternative on visual resources to less-than-significant levels.

For these reasons, similar to the impacts of the Order, aesthetics impacts of the No Project Alternative could be less than significant.

- ◆ **Agriculture and forestry resources:** Like the Order, the No Project Alternative would involve implementation of restoration projects that could require the conversion of farmland or forestland to accommodate new project features, and could conflict with existing agricultural or forest zoning and Williamson Act contracts (Impacts 3.3-1, 3.3-2, and 3.3-2). The Order's general protection measures GCM-8, GCM-10, GCM-11, GCM-12, GCM-15, IWW-14, VHDR-1, VHDR-2, VHDR-3, VHDR-4, VHDR-5, and VHDR-6 and Mitigation Measures AG-1, AG-2, and GEO-6 would reduce some impacts on agriculture and forestry resources.

Therefore, similar to the impacts of the Order, impacts of the No Project Alternative on agriculture and forestry resources could be significant and unavoidable.

- ◆ **Air quality and greenhouse gas (GHG) emissions:** As under the Order, restoration projects undertaken under the No Project Alternative could conflict with adopted air quality plans, contribute to a cumulatively considerable net increase of criteria pollutants, and result in other emissions (e.g., those leading to odors) (Impacts 3.4-1, 3.4-2, and 3.4-3). The No Project Alternative could expose sensitive receptors to substantial pollutant concentrations and increase GHG emissions that could significantly affect the environment (Impacts 3.4-4 and 3.4-5). Similarly, the No Project Alternative could conflict with applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions from construction and O&M activities (Impact 3.4-6).

Like the Order, the No Project Alternative would include construction and O&M activities that would require the use of equipment that would contribute to pollutants. The Order's general protection measures GCM-8 and GCM-17 and Mitigation Measures AIR-1, AIR-2, and AIR-3 would reduce impacts on air quality and GHG emissions.

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Therefore, similar to the impacts of the Order, impacts of the No Project Alternative on air quality and GHG emissions could be significant and unavoidable.

- ◆ **Terrestrial biological resources:** As under the Order, construction and O&M activities for individual restoration projects under the No Project Alternative could affect sensitive natural communities, special-status species, wildlife habitat, or movement of native resident and migratory wildlife species (Impacts 3.5-1, 3.5-2, 3.5-3, and 3.5-5). Restoration projects could also result in the removal, hydrological interruption, or other actions that adversely affect protected wetlands (Impact 3.5-4). They could also conflict with local policies, ordinances, or adopted habitat conservation plans or natural community conservation plans (Impacts 3.5-6 and 3.5-7).

Like the Order, the No Project Alternative would include construction and O&M activities that could cause adverse impacts on terrestrial biological resources. Impacts on terrestrial biological resources would be reduced with incorporation and implementation of the following protection measures and mitigation measure from the Order:

- General protection measures GCM-2, GCM-3, GCM-4, GCM-5, GCM-6, GCM-7, GCM-8, GCM-9, GCM-10, GCM-11, GCM-12, GCM-13, GCM-14, GCM-15, GCM-17, GCM-18, GCM-20, IWW-1, IWW-2, IWW-3, IWW-4, IWW-6, IWW-8, IWW-11, IWW-13, WQHM-1, WQHM-2, WQHM-3, WQHM-4, WQHM-5, WQHM-6, VHDR-1, VHDR-2, VHDR-3, VHDR-4, and VHDR-5.
- General species protection measures SPM-1, SPM-2, SPM-3, SPM-4, SPM-5, and SPM-6.
- Plant species protection measures PLANT-1, PLANT-2, PLANT-3, PLANT-4, PLANT-5, PLANT-6, and PLANT-7¹.
- Amphibian species protection measures AMP-1, AMP-2, AMP-3, AMP-4, AMP-5, AMP-6, AMP-7, AMP-8, AMP-9, AMP-10, AMP-11, and AMP-12.
- Reptile species protection measures REP-1, REP-2, REP-3, REP-4, REP-5, REP-6, and REP-7.
- Bird species protection measures BIRD-1, BIRD-2, BIRD-3, BIRD-4, and BIRD-5.
- Mammal species protection measures MAM-1, MAM-2, MAM-3, MAM-4, and MAM-5.
- Invertebrate species protection measures INVERT-1, INVERT-2, INVERT-3, and INVERT-4.
- Mitigation Measure TERR-1.

However, similar to the impacts of the Order, impacts of the No Project Alternative on terrestrial biological resources could be significant and unavoidable.

¹ Staff Note: The PEIR listed Plant-7 in error. There is not a Plant-7 protection measure.

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- ◆ **Aquatic biological resources:** Like the Order, the No Project Alternative could directly or indirectly affect special-status fish species or the movement of native resident or migratory fish (Impacts 3.6-1 and 3.6-2). Typically, long-term impacts of restoration projects would be expected to be beneficial or neutral because the specific purpose of all project types would be to restore and enhance existing conditions. In addition, impacts on aquatic biological resources would be avoided and/or reduced with incorporation of the following protection measures from the Order:
 - General protection measures GCM-2, GCM-3, GCM-4, GCM-5, IWW-1, IWW-2, IWW-3, IWW-4, IWW-5, IWW-6, IWW-7, IWW-8, IWW-9, IWW-10, IWW-11, IWW-12, IWW-13, WQHM-1, WQHM-2, WQHM-3, WQHM-4, WQHM-5, WQHM-6, VHDR-1, VHDR-2, VHDR-3, VHDR-4, VHDR-5, VHDR-6, VHDR-7, VHDR-8, VHDR-9, VHDR-10, VHDR-11, VHDR-12, and VHDR-13.
 - Species protection measures SPM-1, SPM-3, FISH-1, FISH-2, FISH-3, FISH-4, and FISH-5.

Therefore, similar to the impacts of the Order, impacts of the No Project Alternative on aquatic biological resources could be less than significant.

- ◆ **Cultural and tribal cultural resources:** As under the Order, restoration projects undertaken under the No Project Alternative could disturb or destroy prehistoric or historic archaeological resources; tribal cultural resources; historic buildings, structures, and linear features; unrecorded human remains; and paleontological resources. Construction projects also could result in the alteration or removal of character-defining features of a cultural landscape. The Order's Mitigation Measures CUL-1, CUL-2, CUL-3, CUL-4, TCR-1, and TCR-2 would reduce impacts on cultural and tribal cultural resources.

Therefore, similar to the impacts of the Order, impacts of the No Project Alternative on cultural and tribal cultural resources could be significant and unavoidable.

- ◆ **Energy resources:** As under the Order, construction and O&M activities for the No Project Alternative could result in substantial inefficient, wasteful, or unnecessary long-term consumption of energy resources or conflict with a state or local plan for renewable energy or energy efficiency (Impacts 3.8-1 and 3.8-2). However, like the Order, the No Project Alternative would not result in the inefficient, wasteful, or unnecessary long-term consumption of energy or changes to hydropower generation because local air pollution control or management districts require that construction activities for restoration projects improve equipment efficiency and reduce energy use. Routine O&M activities would require energy use; however, they would be consistent with current uses in the project area.

In addition, the No Project Alternative would not 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. Multiple laws, regulations, and programs in California

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require or promote the efficient use of energy, many of which have the effect of promoting or requiring the efficient use of energy and the expansion of renewable-energy generation and use. California's building codes (California Code of Regulations Title 24) also contain stringent energy efficiency standards. In addition, the state has adopted a specific California Green Building Standards Code that includes energy efficiency requirements and addresses the generation of renewable energy (e.g., rooftop photovoltaic solar panels).

Therefore, similar to the impacts of the Order, impacts of the No Project Alternative on energy resources could be less than significant.

- ◆ **Geology and soils:** Like the Order, the No Project Alternative could include the construction of surface storage infrastructure and flood management projects that could expose people or structures to seismic hazards, including fault rupture and strong ground motion (Impact 3.9-1). Restoration projects also may expose people or structures to unstable geological conditions; result in a loss of topsoil associated with ground disturbance, with resulting erosion and sedimentation impacts; and result in a loss of a unique paleontological or geological resource (Impacts 3.9-2, 3.9-3, 3.9-4, and 3.9-5). The Order's general protection measures GCM-15, WQHM-1, WQHM-2, WQHM-3, WQHM-4, VHDR-1, VHDR-3, and VHDR-4 and Mitigation Measures GEO-1, GEO-2, GEO-3, GEO-4, GEO-5, GEO-6, GEO-7, GEO-8, GEO-9, and GEO-10 would reduce the impacts of the No Project Alternative related to geology and soils.

However, similar to the impacts of the Order, impacts of the No Project Alternative related to geology and soils could be significant and unavoidable.

- ◆ **Hazards and hazardous materials:** Like the Order, the No Project Alternative could result in exposure of the environment and sensitive receptors to unidentified contaminated soil and/or groundwater, and some of the impacts could occur within one-quarter mile of a school or within 2 miles of an airport (Impacts 3.10-1, 3.10-2, and 3.10-3). Restoration projects could also interfere with emergency response access or adopted emergency response or evacuation plans (Impact 3.10-4). In addition, they could expose people or structures to wildland fires or vector habitats (Impacts 3.10-5 and 3.10-6). The Order's general protection measures GCM-6, GCM-7, GCM-10, GCM-11, GCM-12, GCM-14, WQHM-1, WQHM-2, WQHM-4, WQHM-5, WQHM-6, IWW-1, IWW-2, IWW-3, IWW-6, IWW-13, and VHDR-6 and Mitigation Measures HAZ-1, HAZ-2, HAZ-3, HAZ-4, HAZ-5, HAZ-6, and FIRE-1 would reduce the impacts of the No Project Alternative related to hazards and hazardous materials.

However, similar to the impacts of the Order, impacts of the No Project Alternative related to hazards and hazardous materials could be significant and unavoidable.

- ◆ **Hydrology and water quality:** Like the Order, the No Project Alternative could result in the release of pollutants into surface water and/or groundwater that could substantially degrade water quality, deplete groundwater supplies or interfere substantially with groundwater recharge, or contribute to runoff water (Impacts 3.11-1, 3.11-2, and 3.11-3). The No Project Alternative would have the

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same impacts from construction and O&M activities as the Order. In addition, the Order's protection measures GCM-10, GCM-11, GCM-12, WQHM-1, WQHM-2, WQHM-3, WQHM-4, WQHM-5, WQHM-6, IWW-1, IWW-2, IWW-3, IWW-4, IWW-6, IWW-10, IWW-11, IWW-12, IWW-13, VHDR-2, VHDR-3, VHDR-4, VHDR-6, VHDR-7, VHDR-8, VHDR-9, VHDR-10, VHDR-11, VHDR-12, and VHDR-13 would reduce impacts on hydrology and water quality.

Therefore, similar to the impacts of the Order, impacts of the No Project Alternative on hydrology and water quality could be less than significant.

- ◆ **Land use and planning:** Like the Order, the No Project Alternative could potentially conflict with existing land use plans, policies, and regulations and divide an established community (Impacts 3.12-1 and 3.12-2). The No Project Alternative would have the same construction and O&M activities as the Order.

Therefore, similar to the impacts of the Order, impacts of the No Project Alternative related to land use and planning could be significant and unavoidable.

- ◆ **Mineral resources:** Like the Order, the No Project Alternative could result in the loss of availability of a known mineral resource or locally important mineral resource recovery site (Impacts 3.13-1 and 3.13-2). The No Project Alternative would have the same construction and O&M activities as the Order.

Therefore, similar to the impacts of the Order, impacts of the No Project Alternative on mineral resources could be less than significant.

- ◆ **Noise:** As under the Order, sensitive receptors could be exposed to excessive noise and groundborne vibrations associated with construction-related and operational improvements under the No Project Alternative Order (Impacts 3.14-1, 3.14-2, and 3.14-3). In addition, as under the Order, construction of restoration projects under the No Project Alternative could be located in the vicinity of a private airstrip or an airport land use plan, or within 2 miles of a public airport or public use airport (Impact 3.14-4). The Order's general protection measures GCM-2, GCM-3, and IWW-9 and Mitigation Measures Noise-1, Noise-2, and Noise-3 would reduce the noise impacts of the No Project Alternative; however, as under the Order, noise impacts could remain significant and unavoidable.

Therefore, similar to the impacts of the Order, noise impacts of the No Project Alternative could be significant and unavoidable.

- ◆ **Population and housing:** As under the Order, restoration projects undertaken under the No Project Alternative could displace housing and/or people; however, as under the Order, these impacts would be expected to be less than significant and there would be sufficient housing units to accommodate any displaced people.

Therefore, similar to the impacts of the Order, impacts of the No Project Alternative related to population and housing could be less than significant.

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- ◆ **Recreation:** With the No Project Alternative, recreational facilities and activities could be impaired, degraded, or eliminated. As under the Order, restoration projects undertaken under this alternative could place additional demands on recreation facilities by attracting more users or displacing people from existing recreation facilities, requiring construction of new facilities or the expansion of existing facilities. The Order's general protection measures GCM-6, GCM-7, GCM-10, GCM-11, GCM-12, GCM-13, GCM-14, GCM-15, WQHM-1, WQHM-2, WQHM-4, WQHM-5, WQHM-6, IWW-1, IWW-2, IWW-3, IWW-5, IWW-6, IWW-8, IWW-13, VHDR-1, VHDR-2, VHDR-3, VHDR-4, and VHDR-6 and Mitigation Measures Rec-1, Rec-2, and Noise-2 would reduce the impacts of the No Project Alternative on recreational resources; however, as under the Order, recreation impacts of the No Project Alternative could be less than significant.
- ◆ **Transportation:** As under the Order, restoration projects undertaken under the No Project Alternative could conflict with adopted plans and policies for roadway performance; bicycle and pedestrian paths and trails; rail and transit performance; and navigation, ports, waterways, and ferries. They also could increase traffic hazards as a result of road relocation, increase navigation hazards related to design features, and result in inadequate emergency access by blocking access or otherwise interfering with established emergency service routes (including boat access). The Order's general protection measures GCM-6, GCM-10, and WQHM-1 and Mitigation Measures TRA-1, TRA-2, TRA-3, TRA-4, TRA-5, TRA-6, TRA-7, and TRA-8 would reduce impacts of the No Project Alternative on transportation; however, as under the Order, impacts could remain significant and unavoidable.

Therefore, similar to the impacts of the Order, impacts of the No Project Alternative related to transportation could be significant and unavoidable.

- ◆ **Utilities and service systems and public services:** Like the Order, the No Project Alternative is not anticipated to require the relocation of new water or expanded water facilities due to the extensive cost of relocation and potential environmental impacts from the relocation. However, future restoration projects could require the relocation of stormwater outfalls or utilities (e.g., electric power, natural gas, or telecommunication facilities) that would cause significant environmental effects. Like the Order, the No Project Alternative is not anticipated to change in water levels resulting from constructed facilities and would need to comply with relevant federal, state, and local regulations and ordinances and would not impede operations of existing diversion facilities or substantially change water supply availability to water users.

In addition, like the Order, the No Project Alternative would not include the construction of new or modified fire or police protection facilities, schools, or other public facilities and would not increase population or add new public service demands.

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Therefore, similar to the impacts of the Order, impacts of the No Project Alternative on utilities and service systems could be significant and unavoidable and impacts to public services could be less than significant.

- ◆ **Wildfire:** Like the Order, the No Project Alternative could exacerbate fire risk or result in downslope or downstream risks as a result of runoff, post-fire slope instability, or drainage changes. The Order's Mitigation Measure FIRE-1 would reduce the wildfire impacts of the No Project Alternative to less than significant.

Therefore, similar to the impacts of the Order, wildfire impacts of the No Project Alternative could be less than significant.

Impacts Identified as More Severe than Impacts of the Order

No impacts of the No Project Alternative have been identified as being more severe than impacts of the Order.

Comparative Impact Analysis for Alternatives 1, 2, and 3

This section compares the impacts of Alternatives 1, 2, and 3 to the impacts of the Order.

Impacts Identified as the Same as or Similar to Impacts of the Proposed Project

Construction and O&M impacts of Alternatives 1, 2, and 3 in the study area would be similar to construction and O&M impacts of the Order because Alternatives 1, 2, and 3 include implementation of restoration projects. Under these alternatives, the impacts in each category could be of a lesser magnitude than the impacts under the Order (e.g., smaller restoration projects, different components within a type of restoration project, or implementation of fewer categories of restoration projects). However, the general types of construction and O&M activities would be similar to those under the Order. For example, less overall construction may occur under Alternative 1, 2, or 3, but the construction impact conclusions related to noise, air quality, etc., would be the same as under the Order (as described below).

- ◆ **Aesthetics:** Construction and O&M activities under Alternative 1, 2, or 3 could be of a lesser magnitude than under the Order. This would be the case because these alternatives would limit the size of or place other restrictions on restoration projects, eliminate certain elements of restoration projects, and/or exclude entire categories of restoration projects that would be permitted under the Order.

However, Alternatives 1, 2, and 3 would still involve construction work for restoration projects, and O&M activities for these projects could change the character of the project vicinity relative to current conditions. Like the Order, Alternatives 1, 2, and 3 would include the presence of construction equipment and materials, vehicles, and crews along with the construction of natural or artificial infrastructure. The Order's general protection measures GCM-11, GCM-14, GCM-15, VHDR-1, VHDR-3, VHDR-4, and VHDR-5 and Mitigation Measures AES-1 and AES-2 would reduce the impacts of Alternatives 1, 2, and 3 on visual resources to less-than-significant levels.

For these reasons, aesthetics impacts of Alternatives 1, 2, and 3 would be similar to those of the Order, and impacts would be less than significant.

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- ◆ **Agriculture and forestry resources:** Construction and O&M activities for Alternative 1, 2, or 3 could be of a lesser magnitude than under the Order. This would be the case because these alternatives would limit the size of or place other restrictions on restoration projects, eliminate certain elements of restoration projects, and/or exclude entire categories of restoration projects that would be permitted under the Order.

Restoration projects associated with Alternative 1, 2, or 3 could require the conversion of farmland or forestland to accommodate new project features, and could conflict with existing agricultural or forest zoning and Williamson Act contractions (Impacts 3.3-1, 3.3-2, and 3.3-3). However, while there could be less conversion of agricultural land and forestland to other uses in the project area due to the reduced scale of restoration projects compared to the Order, the potential for significant impacts still exist. The Order's general protection measures GCM-8, GCM-10, GCM-11, GCM-12, GCM-15, IWW-14, VHDR-1, VHDR-2, VHDR-3, VHDR-4, VHDR-5, and VHDR-6 and Mitigation Measures AG-1, AG-2, and GEO-6 would reduce some impacts on agriculture and forestry resources from Alternatives 1, 2, and 3.

Therefore, similar to the Order, impacts of Alternatives 1, 2, and 3 on agriculture and forestry resources would be significant and unavoidable.

- ◆ **Air quality and GHG emissions:** Construction and O&M activities for Alternative 1, 2, or 3 could be of a lesser magnitude than under the Order. This would be the case because these alternatives would limit the size of or place other restrictions on restoration projects, eliminate certain elements of restoration projects, and/or exclude entire categories of restoration projects that would be permitted under the Order.

However, like the Order, Alternative 1, 2, or 3 could conflict with adopted air quality plans, contribute to a cumulatively considerable net increase of criteria pollutants, and result in other emissions (e.g., those leading to odors) (Impacts 3.4-1, 3.4-2, and 3.4-3). Alternative 1, 2, or 3 could expose sensitive receptors to substantial pollutant concentrations and increase GHG emissions that could significantly affect the environment (Impacts 3.4-4 and 3.4-5).

Similarly, like the Order, Alternative 1, 2, or 3 could conflict with applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions due to construction and O&M activities (Impact 3.4-6). However, it would be expected that there would be fewer short-term conflicts with applicable air quality plans during construction because there likely would be lower levels of construction emissions with less construction activity. However, the potential to result in temporary or long-term emissions of air pollutants and GHGs and cause significant adverse effects on air quality in the project area would still exist with Alternatives 1, 2, and 3.

Like the Order, Alternative 1, 2, or 3 would include construction and O&M activities that would require the use of equipment that would contribute to pollutants. However, such activities would occur at a reduced scale because

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these alternatives would limit restoration sizes and impose additional confinements on the types of restoration projects that would be permitted under the Order. The Order's general protection measures GCM-8 and GCM-17 and Mitigation Measures AIR-1, AIR-2, and AIR-3 would further reduce impacts of Alternatives 1, 2, and 3 on air quality and GHG emissions.

Therefore, impacts on air quality and GHG emissions would be less severe under Alternatives 1, 2, and 3 than under the Order; however, impacts could still be significant and unavoidable.

- ◆ **Terrestrial biological resources:** Construction and O&M activities for Alternative 1, 2, or 3 could be of a lesser magnitude than under the Order. This would be the case because these alternatives would limit the size of or place other restrictions on restoration projects, eliminate certain elements of restoration projects, and/or exclude entire categories of restoration projects that would be permitted under the Order.

However, as under the Order, construction and O&M activities for individual restoration projects under Alternative 1, 2, or 3 could affect sensitive natural communities, special-status species, wildlife habitat, or movement of native resident and migratory wildlife species (Impacts 3.5-1, 3.5-2, 3.5-3, and 3.5-5). Restoration projects could also result in the removal, hydrological interruption, or other actions that adversely affect protected wetlands (Impact 3.5-4). They could also conflict with local policies, ordinances, or adopted habitat conservation plans or natural community conservation plans (Impacts 3.5-6 and 3.5-7). However, less construction activity would occur within the project area and these alternatives would be expected to reduce the likelihood of adverse impacts on special-status species and their habitats, sensitive natural communities, and wildlife migratory corridors in the short term.

Furthermore, impacts of Alternatives 1, 2, and 3 on terrestrial biological resources would be reduced with incorporation and implementation of the following protection measures and mitigation measure from the Order:

- General protection measures GCM-2, GCM-3, GCM-4, GCM-5, GCM-6, GCM-7, GCM-8, GCM-9, GCM-10, GCM-11, GCM-12, GCM-13, GCM-14, GCM-15, GCM-17, GCM-18, GCM-20, IWW-1, IWW-2, IWW-3, IWW-4, IWW-6, IWW-8, IWW-11, IWW-13, WQHM-1, WQHM-2, WQHM-3, WQHM-4, WQHM-5, WQHM-6, VHDR-1, VHDR-2, VHDR-3, VHDR-4, and VHDR-5.
- General species protection measures SPM-1, SPM-2, SPM-3, SPM-4, SPM-5, and SPM-6.
- Plant species protection measures PLANT-1, PLANT-2, PLANT-3, PLANT-4, PLANT-5, PLANT-6, and PLANT-7².
- Amphibian species protection measures AMP-1, AMP-2, AMP-3, AMP-4, AMP-5, AMP-6, AMP-7, AMP-8, AMP-9, AMP-10, AMP-11, and AMP-12.

² Staff Note: The PEIR listed Plant-7 in error. There is not a Plant-7 protection measure.

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- Reptile species protection measures REP-1, REP-2, REP-3, REP-4, REP-5, REP-6, and REP-7.
- Bird species protection measures BIRD-1, BIRD-2, BIRD-3, BIRD-4, and BIRD-5.
- Mammal species protection measures MAM-1, MAM-2, MAM-3, MAM-4, and MAM-5.
- Invertebrate species protection measures INVERT-1, INVERT-2, INVERT-3, and INVERT-4.
- Mitigation Measure TERR-1.

Therefore, impacts on terrestrial biological resources could be of a lesser magnitude under Alternatives 1, 2, and 3 than under the Order; however, impacts could be significant and unavoidable.

- ◆ **Aquatic biological resources:** Construction and O&M activities for Alternative 1, 2, or 3 could be of a lesser magnitude than under the Order. This would be the case because these alternatives would limit the size of or place other restrictions on restoration projects, eliminate certain elements of restoration projects, and/or exclude entire categories of restoration projects that would be permitted under the Order.

However, like the Order, Alternative 1, 2, or 3 could directly or indirectly affect special-status fish species or the movement of native resident or migratory fish (Impacts 3.6-1 and 3.6-2). Typically, long-term impacts associated with restoration projects are expected to be beneficial or neutral because the specific purpose of all project types would be to restore and enhance existing conditions. Furthermore, with Alternative 1, 2, or 3, fewer construction activities for restoration projects would occur because of the alternatives' limitation on project size, which would be expected to reduce the likelihood of adverse impacts on special-status fish and their habitat and migratory corridors. In addition, impacts on aquatic biological resources would be avoided and/or reduced with incorporation of the following protection measures from the Order:

- General protection measures GCM-2, GCM-3, GCM-4, GCM-5, IWW-1, IWW-2, IWW-3, IWW-4, IWW-5, IWW-6, IWW-7, IWW-8, IWW-9, IWW-10, IWW-11, IWW-12, IWW-13, WQHM-1, WQHM-2, WQHM-3, WQHM-4, WQHM-5, WQHM-6, VHDR-1, VHDR-2, VHDR-3, VHDR-4, VHDR-5, VHDR-6, VHDR-7, VHDR-8, VHDR-9, VHDR-10, VHDR-11, VHDR-12, and VHDR-13.
- Species protection measures SPM-1, SPM-3, FISH-1, FISH-2, FISH-3, FISH-4, and FISH-5.

Therefore, impacts on aquatic biological resources could be of a lesser magnitude under Alternatives 1, 2, and 3 than under the Order, and impacts could be less than significant.

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- ◆ **Cultural and tribal cultural resources:** Construction and O&M activities for Alternative 1, 2, or 3 could be of a lesser magnitude than under the Order. This would be the case because these alternatives would limit the size of or place other restrictions on restoration projects, eliminate certain elements of restoration projects, and/or exclude entire categories of restoration projects that would be permitted under the Order.

However, as under the Order, restoration projects under Alternative 1, 2, or 3 could disturb or destroy prehistoric or historic archaeological resources; tribal cultural resources; historic buildings, structures, and linear features; unrecorded human remains; and paleontological resources. Construction projects also could result in the alteration or removal of character-defining features of a cultural landscape. However, construction and ground-disturbing activities would occur at a reduced scale because these alternatives would reduce project sizes and impose additional confinements on restoration projects. The Order's Mitigation Measures CUL-1, CUL-2, CUL-3, CUL-4, TCR-1, and TCR-2 would further reduce impacts on cultural and tribal cultural resources.

Therefore, impacts on cultural and tribal cultural resources would be of a lesser magnitude under Alternatives 1, 2, and 3 than those of the Order; however, impacts could be significant and unavoidable.

- ◆ **Energy resources:** Construction and O&M activities for Alternative 1, 2, or 3 could be of a lesser magnitude than under the Order. This would be the case because these alternatives would limit the size of or place other restrictions on restoration projects, eliminate certain elements of restoration projects, and/or exclude entire categories of restoration projects that would be permitted under the Order.

However, as under the Order, construction and O&M activities for Alternative 1, 2, or 3 could result in substantial inefficient, wasteful, or unnecessary long-term consumption of energy resources or conflict with a state or local plan for renewable energy or energy efficiency (Impacts 3.8-1 and 3.8-2). Like the Order, Alternative 1, 2, or 3 would not result in the inefficient, wasteful, or unnecessary long-term consumption of energy or changes to hydropower generation because local air pollution control or management districts require that construction activities for restoration projects improve equipment efficiency and reduce energy use. Routine O&M activities would require energy use; however, they would be consistent with current uses in the project area.

In addition, Alternative 1, 2, or 3 would not 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. Multiple laws, regulations, and programs in California require or promote the efficient use of energy, many of which have the effect of promoting or requiring the efficient use of energy in the state and the expansion of renewable-energy generation and use. California's building codes (California Code of Regulations Title 24) also contain stringent energy efficiency standards, and the state has adopted a specific California Green Building Standards Code

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that includes energy efficiency requirements and addresses renewable energy generation (e.g., rooftop photovoltaic solar panels).

Alternative 1, 2, or 3 could result in reduced impacts on energy resources because these alternatives would reduce project sizes and impose additional confinements on the types of restoration projects permitted.

Therefore, impacts on energy resources could occur at a lesser magnitude under Alternatives 1, 2, and 3 than under the Order; however, impacts would still be less than significant.

- ◆ **Geology and soils:** Construction and O&M activities for Alternative 1, 2, or 3 could be of a lesser magnitude than under the Order. This would be the case because these alternatives would limit the size of or place other restrictions on restoration projects, eliminate certain elements of restoration projects, and/or exclude entire categories of restoration projects that would be permitted under the Order.

However, like the Order, Alternative 1, 2, or 3 could include the construction of surface storage infrastructure and flood management projects that could expose people or structures to seismic hazards, including fault rupture and strong ground motion (Impact 3.9-1). Alternative 1, 2, or 3 may expose people or structures to unstable geological conditions; result in a loss of topsoil associated with ground disturbance, with resulting erosion and sedimentation impacts; and result in a loss of a unique paleontological or geological resource (Impacts 3.9-2, 3.9-3, 3.9-4, and 3.9-5). However, Alternative 1, 2, or 3 would involve less construction activity in the project area than the Order and would result in fewer short-term impacts on geology and soils because fewer ground disturbance activities would occur. In addition, the Order's general protection measures GCM-15, WQHM-1, WQHM-2, WQHM-3, WQHM-4, VHDR-1, VHDR-3, and VHDR-4 and Mitigation Measures GEO-1, GEO-2, GEO-3, GEO-4, GEO-5, GEO-6, GEO-7, GEO-8, GEO-9, and GEO-10 would further reduce the impacts of Alternatives 1, 2, and 3 on geology and soils.

Therefore, impacts on geology and soils could occur at a lesser magnitude under Alternatives 1, 2, and 3 than under the Order; however, impacts could still be significant and unavoidable.

- ◆ **Hazards and hazardous materials:** Construction and O&M activities for Alternative 1, 2, or 3 could be of a lesser magnitude than under the Order. Like the Order, Alternative 1, 2, or 3 could result in exposure of the environment and sensitive receptors to unidentified contaminated soil and/or groundwater, and some of the impacts could occur within one-quarter mile of a school or within 2 miles of an airport (Impacts 3.10-1, 3.10-2, and 3.10-3). Restoration projects under Alternative 1, 2, or 3 could also interfere with emergency response access or adopted emergency response or evacuation plans (Impact 3.10-4). They could also expose people or structures to wildland fires or vector habitats (Impacts 3.10-5 and 3.10-6).

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The Order's general protection measures GCM-6, GCM-7, GCM-10, GCM-11, GCM-12, GCM-14, WQHM-1, WQHM-2, WQHM-4, WQHM-5, WQHM-6, IWW-1, IWW-2, IWW-3, IWW-6, IWW-13, and VHDR-6 and Mitigation Measures HAZ-1, HAZ-2, HAZ-3, HAZ-4, HAZ-5, HAZ-6, and FIRE-1 would further reduce impacts of Alternatives 1, 2, and 3 related to hazards and hazardous materials.

Therefore, impacts of Alternatives 1, 2, and 3 related to hazards and hazardous materials would be similar to those of the Order, but would occur at a lesser magnitude; however, impacts could still be significant and unavoidable.

- ◆ **Hydrology and water quality:** Construction and O&M activities for Alternative 1, 2, or 3 could be of a lesser magnitude than under the Order. This would be the case because these alternatives would limit the size of or place other restrictions on restoration projects, eliminate certain elements of restoration projects, and/or exclude entire categories of restoration projects that would be permitted under the Order.

However, like the Order, Alternative 1, 2, or 3 could result in the release of pollutants into surface water and/or groundwater that could substantially degrade water quality, deplete groundwater supplies or interfere substantially with groundwater recharge, or contribute to runoff water (Impacts 3.11-1, 3.11-2, and 3.11-3). The Order's protection measures GCM-10, GCM-11, GCM-12, WQHM-1, WQHM-2, WQHM-3, WQHM-4, WQHM-5, WQHM-6, IWW-1, IWW-2, IWW-3, IWW-4, IWW-6, IWW-10, IWW-11, IWW-12, IWW-13, VHDR-2, VHDR-3, VHDR-4, VHDR-6, VHDR-7, VHDR-8, VHDR-9, VHDR-10, VHDR-11, VHDR-12, and VHDR-13 would reduce impacts on hydrology and water quality. Alternatives 1, 2, and 3 would have the same impacts on construction and O&M activities as the Order.

Therefore, like the impacts of the Order, hydrology and water quality impacts of Alternatives 1, 2, and 3 could be less than significant.

- ◆ **Land use and planning:** Construction and O&M activities for Alternative 1, 2, or 3 could be of a lesser magnitude than under the Order. This would be the case because these alternatives would limit the size of or place other restrictions on restoration projects, eliminate certain elements of restoration projects, and/or exclude entire categories of restoration projects that would be permitted under the Order.

However, Alternative 1, 2, or 3 could potentially conflict with existing land use plans, policies, and regulations and divide an established community (Impacts 3.12-1 and 3.12-2). Alternatives 1, 2, and 3 would have the same construction and O&M activities as the Order.

Therefore, like the impacts of the Order, land use and planning impacts of Alternatives 1, 2, and 3 could be significant and unavoidable.

- ◆ **Mineral resources:** Construction and O&M activities for Alternative 1, 2, or 3 could be of a lesser magnitude than under the Order. This would be the case because these alternatives would limit the size of or place other restrictions on

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restoration projects, eliminate certain elements of restoration projects, and/or exclude entire categories of restoration projects that would be permitted under the Order.

However, like the Order, Alternatives 1, 2, and 3 could result in the loss of availability of a known mineral resource or locally important mineral resource recovery site (Impacts 3.13-1 and 3.13-2). Alternatives 1, 2, and 3 would have the same construction and O&M activities as the Order.

Therefore, impacts of Alternatives 1, 2, and 3 on mineral resources would be similar to those of the Order, and impacts could be less than significant.

- ◆ **Noise:** Construction and O&M activities for Alternative 1, 2, or 3 could be of a lesser magnitude than under the Order. This would be the case because these alternatives would limit the size of or place other restrictions on restoration projects, eliminate certain elements of restoration projects, and/or exclude entire categories of restoration projects that would be permitted under the Order.

However, as under the Order, sensitive receptors could be exposed to excessive noise and groundborne vibrations associated with construction and operation under Alternative 1, 2, or 3 (Impacts 3.14-1, 3.14-2, and 3.14-3). In addition, as under the Order, construction of restoration projects under Alternative 1, 2, or 3 could be located in the vicinity of a private airstrip or an airport land use plan, or within 2 miles of a public airport or public use airport (Impact 3.14-4).

The Order's general protection measures GCM-2, GCM-3, and IWW-9 and Mitigation Measures Noise-1, Noise-2 and Noise-3 would further reduce the noise impacts of Alternatives 1, 2, or 3; however, as under the Order, noise impacts could remain significant and unavoidable.

Therefore, similar to the impacts of the Order, noise impacts of Alternatives 1, 2, and 3 could be significant and unavoidable.

- ◆ **Population and housing:** As under the Order, restoration projects associated with Alternative 1, 2, or 3 could displace housing and/or people; however, as under the Order, these impacts are expected to be less than significant, and there would be sufficient housing units to accommodate any displaced people.

Therefore, similar to the impacts of the Order, impacts of Alternatives 1, 2, and 3 related to population and housing could be less than significant.

- ◆ **Recreation:** With Alternative 1, 2, or 3, recreational facilities and activities could be impaired, degraded, or eliminated. As under the Order, restoration projects undertaken under these alternatives could place additional demands on recreation facilities by attracting more users or displacing people from existing recreation facilities, requiring construction of new facilities or expansion of existing facilities. The Order's general protection measures GCM-6, GCM-7, GCM-10, GCM-11, GCM-12, GCM-13, GCM-14, GCM-15, WQHM-1, WQHM-2, WQHM-4, WQHM-5, WQHM-6, IWW-1, IWW-2, IWW-3, IWW-5, IWW-6, IWW-8, IWW-13, VHDR-1, VHDR-2, VHDR-3, VHDR-4, and VHDR-6 and Mitigation

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Measures Rec-1, Rec-2, and Noise-2 would further reduce impacts of Alternatives 1, 2, and 3 on recreational resources; however, as under the Order, impacts could remain significant and unavoidable.

Therefore, similar to the impacts of the Order, recreation impacts of Alternatives 1, 2, and 3 could be less than significant.

- ◆ **Transportation:** As under the Order, restoration projects undertaken under Alternatives 1, 2, or 3 could conflict with adopted plans and policies for roadway performance; bicycle and pedestrian paths and trails; rail and transit performance; and navigation, ports, waterways, and ferries. They also could increase traffic hazards as a result of road relocation, increase navigation hazards related to design features, and result in inadequate emergency access by blocking access or otherwise interfering with established emergency service routes (including boat access). The Order's general protection measures GCM-6, GCM-10, and WQHM-1 and Mitigation Measures TRA-1, TRA-2, TRA-3, TRA-4, TRA-5, TRA-6, TRA-7, and TRA-8 would further reduce impacts of Alternatives 1, 2, and 3 on transportation; however, as under the Order, impacts could remain significant and unavoidable.

Therefore, similar to the impacts of the Order, impacts of Alternatives 1, 2 and 3 related to transportation could be significant and unavoidable.

- ◆ **Utilities and service systems and public services:** Like the Order, Alternative 1, 2, or 3 is not anticipated to require the relocation of new water or expanded water facilities due to the extensive cost of relocation and potential environmental impacts from the relocation. However, future restoration projects could require the relocation of stormwater outfalls or utilities (e.g., electric power, natural gas, or telecommunication facilities) that would cause significant environmental effects. In addition, like the proposed project, Alternative 1, 2, or 3 would not include the construction of new or modified fire or police protection facilities, schools, or other public facilities and would not increase population or add new public service demands. Like the Order, Alternative 1, 2 or 3 is not anticipated to change in water levels resulting from constructed facilities and would need to comply with relevant federal, state, and local regulations and ordinances and would not impede operations of existing diversion facilities or substantially change water supply availability to water users.

Therefore, similar to the impacts of the Order, impacts of Alternatives 1, 2, and 3 on utilities and service systems could be significant and unavoidable and impacts to public services could be less than significant.

- ◆ **Wildfire:** Like the Order, Alternatives 1, 2, or 3 could exacerbate fire risk or result in downslope or downstream risks as a result of runoff, post-fire slope instability, or drainage changes. The Order's Mitigation Measure FIRE-1 would reduce the wildfire impacts of Alternatives 1, 2, and 3 to less-than-significant levels.

Therefore, similar to the impacts of the Order, wildfire impacts of Alternatives 1, 2, and 3 could be less than significant.

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Impacts Identified as More Severe than Impacts of the Order

No impacts of Alternative 1, 2, or 3 have been identified as being more severe than impacts of the Order.

6.5 Environmentally Superior Alternative

CEQA requires identification of the environmentally superior alternative—that is, the alternative that has the least significant impacts on the environment. State CEQA Guidelines Section 15126.6(e)(2) states: “If the environmentally superior alternative is the ‘no project’ alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.”

Table 6-1 presents a comparison of impacts by resource issue area, after mitigation, for the Order and alternatives when compared to the Order. In Table 6-1, the most conservative environmental impact was used for the entire resource area section.

As shown in Table 6-1, and as discussed in the alternatives analysis above, Alternatives 1, 2, and 3 would result in similar impacts compared to the proposed project, but potentially at a lesser magnitude. Alternative 3 excludes entire categories of restoration projects, which, depending on the excluded restoration category, could result in less construction activity than under the other alternatives. Therefore, Alternative 3 would be the environmentally superior alternative.

However, as described above, Alternative 3 would not fully achieve most of the project objectives. All project types included in the Order are essential for ecological and environmental improvements, and removing them from Order eligibility would cause delays in environmentally beneficial restoration projects, thus slowing down project implementation and associated contributions to species recovery and water quality improvement.

Implementation of appropriate general protection measures, species protection measures, and mitigation measures would minimize the potential for significant impacts of Alternative 3. However, as with the Order, the exact location and extent of projects that would be permitted under Alternative 3 are not known at this time. Therefore, construction-related impacts would still be considered significant and unavoidable.

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Resource Topic	Order	No Project Alternative	Alternative 1—Specify More Narrowly Types of Restoration Projects	Alternative 2—Eliminate Certain Aspects of Restoration Projects	Alternative 3—Exclude Entire Categories of Restoration Projects	
3.2 Aesthetics	3.2-1: Implementing future restoration projects permitted under the Order could result in substantial degradation of visual qualities.	LTS	Similar	Similar *	Similar *	Similar *
	3.2-2: Implementing future restoration projects permitted under the Order could result in substantial adverse effects on scenic vistas and scenic resources.	LTSM	Similar	Similar *	Similar *	Similar *
	3.2-3: Implementing future restoration projects permitted under the Order could result in new sources of substantial light or glare.	LTSM	Similar	Similar *	Similar *	Similar *
3.3 Agriculture and Forestry Resources	3.3-1: Restoration projects permitted under the Order could convert Special Designation Farmland to nonagricultural use or conflict with a Williamson Act contract or zoning for agricultural use.	SU	Similar	Similar *	Similar *	Similar *

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Resource Topic		Order	No Project Alternative	Alternative 1—Specify More Narrowly Types of Restoration Projects	Alternative 2—Eliminate Certain Aspects of Restoration Projects	Alternative 3—Exclude Entire Categories of Restoration Projects
3.3 Agriculture and Forestry Resources (cont.)	3.3-2: Restoration projects permitted under the Order could conflict with existing zoning for forestland, timberland, or timberland zoned Timberland Production, or could result in the loss of forestland from conversion of land to non-forest use.	LTS	Similar	Similar *	Similar *	Similar *
	3.3-3: Restoration projects permitted under the Order could involve other changes in the existing environment that, because of their location or nature, could indirectly result in the conversion of Special Designation Farmland to nonagricultural use or conversion of forestland to non-forest use.	LTSG	Similar	Similar *	Similar *	Similar *
3.4 Air Quality and Greenhouse Gases	3.4-1: Implementing future restoration projects permitted under the Order could conflict with an applicable air quality plan.	SU	Similar	Similar *	Similar *	Similar *

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3.4 Air Quality and Greenhouse Gases (cont.)	3.4-2: Emissions from future restoration projects permitted under the Order could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.	SU	Similar	Similar *	Similar *	Similar *
	3.4-3: Emissions from future restoration projects permitted under the Order could result in other emissions (such as those leading to odors) that would adversely affect a substantial number of people.	LTS	Similar	Similar *	Similar *	Similar *
	3.4-4: Emissions from future restoration projects permitted under the Order could expose sensitive receptors to substantial pollutant concentrations.	SU	Similar	Similar *	Similar *	Similar *
	3.4-5: Implementing future restoration projects permitted under the Order could result in an increase in GHG emissions that may have a significant impact on the environment.	SU	Similar	Similar *	Similar *	Similar *

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Resource Topic		Order	No Project Alternative	Alternative 1—Specify More Narrowly Types of Restoration Projects	Alternative 2—Eliminate Certain Aspects of Restoration Projects	Alternative 3—Exclude Entire Categories of Restoration Projects
3.4 Air Quality and Greenhouse Gases (cont.)	3.4-6: Implementing future restoration projects permitted under the Order could conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs.	SU	Similar	Similar *	Similar *	Similar *
3.5 Biological Resources— Terrestrial	3.5-1: Implementing restoration projects permitted under the Order could adversely affect habitat for special-status plant species.	SU	Similar	Similar *	Similar *	Similar *
	3.5-2: Implementing restoration projects permitted under the Order could result in adverse direct effects on special-status wildlife species.	SU	Similar	Similar *	Similar *	Similar *
	3.5-3: Implementing restoration projects permitted under the Order could result in adverse effects on riparian habitat or sensitive natural communities.	SU	Similar	Similar *	Similar *	Similar *

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Resource Topic	Order	No Project Alternative	Alternative 1—Specify More Narrowly Types of Restoration Projects	Alternative 2—Eliminate Certain Aspects of Restoration Projects	Alternative 3—Exclude Entire Categories of Restoration Projects	
3.5 Biological Resources— Terrestrial (cont.)	3.5-4: Implementing restoration projects permitted under the Order could result in adverse effects on state and federally protected wetlands through direct removal, hydrological interruption, or other means.	LTSG	Similar	Similar *	Similar *	Similar *
	3.5-5: Implementing restoration projects permitted under the Order could interfere with the movement of native resident and migratory wildlife species.	LTSG	Similar	Similar *	Similar *	Similar *
	3.5-6: Implementing restoration projects permitted under the Order could conflict with local policies or ordinances protecting biological resources.	LTSM	Similar	Similar *	Similar *	Similar *
	3.5-7: Implementing restoration projects permitted under the Order could conflict with the provisions of an adopted habitat conservation plan or natural community conservation plan.	LSM	Similar	Similar *	Similar *	Similar *

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Resource Topic	Order	No Project Alternative	Alternative 1—Specify More Narrowly Types of Restoration Projects	Alternative 2—Eliminate Certain Aspects of Restoration Projects	Alternative 3—Exclude Entire Categories of Restoration Projects	
3.6 Biological Resources—Aquatic	3.6-1: Implementing future restoration projects permitted under the Order could result in substantial adverse effects to special-status fish species directly, or indirectly through habitat modifications.	SU	Similar	Similar *	Similar *	Similar *
	3.6-2: Implementing future restoration projects permitted under the Order could result in substantial adverse direct effects on the movement of native resident or migratory fish.	LTS	Similar	Similar *	Similar *	Similar *
3.7 Cultural Resources	3.7-1: Implementing future restoration projects permitted under the Order could cause a substantial adverse change in the significance of a historical resource pursuant to State CEQA Guidelines Section 15064.5.	SU	Similar	Similar *	Similar *	Similar *
	3.7-2: Implementing future restoration projects permitted under the Order could cause a substantial adverse change in the significance of an archaeological resource pursuant to State CEQA Guidelines Section 15064.5.	SU	Similar	Similar *	Similar *	Similar *

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Resource Topic	Order	No Project Alternative	Alternative 1—Specify More Narrowly Types of Restoration Projects	Alternative 2—Eliminate Certain Aspects of Restoration Projects	Alternative 3—Exclude Entire Categories of Restoration Projects	
3.6 Cultural Resources (cont.)	3.7-3: Implementing future restoration projects permitted under the Order could disturb any human remains, including those interred outside of dedicated cemeteries.	SU	Similar	Similar *	Similar *	Similar *
3.8 Energy Resources	3.8-1: Implementing restoration projects permitted under the Order could result in substantial inefficient, wasteful, or unnecessary long-term consumption of energy resources or changes to hydropower generation.	LTS	Similar	Similar *	Similar *	Similar *
	3.8-2: Implementing restoration projects permitted under the Order could conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	LTS	Similar	Similar *	Similar *	Similar *
3.9 Geology and Soils	3.9-1: Implementing future restoration projects permitted under the Order could cause direct or indirect adverse effects on people or structures related to risk of loss, injury, or death due to a fault rupture.	LTSM	Similar	Similar *	Similar *	Similar *

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3.9 Geology and Soils (cont.)	3.9-2: Implementing future restoration projects permitted under the Order could directly or indirectly result in adverse effects on people or structures related to risk of loss, injury, or death due to strong seismic ground shaking.	LTSM	Similar	Similar *	Similar *	Similar *
	3.9-3: Implementing future restoration projects permitted under the Order could directly or indirectly cause adverse effects on people or structures from unstable soil conditions.	LTSM	Similar	Similar *	Similar *	Similar *
	3.9-4: Implementing future restoration projects permitted under the Order could result in substantial soil erosion or loss of topsoil.	LTSG	Similar	Similar *	Similar *	Similar *
	3.9-5: Implementing future restoration projects permitted under the Order could directly or indirectly result in the loss of a unique paleontological resource or geological resource.	SU	Similar	Similar *	Similar *	Similar *

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Resource Topic	Order	No Project Alternative	Alternative 1—Specify More Narrowly Types of Restoration Projects	Alternative 2—Eliminate Certain Aspects of Restoration Projects	Alternative 3—Exclude Entire Categories of Restoration Projects	
3.10 Hazards and Hazardous Materials	3.10-1: Implementing future restoration projects permitted under the Order could involve the routine transport, use, or disposal of hazardous materials that, if accidentally released, could create a hazard to the public or the environment, or that could be located within one-quarter mile of a school.	LTSG	Similar	Similar *	Similar *	Similar *
	3.10-2: Ground-disturbing activities for construction of future restoration projects permitted under the Order could encounter previously unidentified contaminated soil and/or groundwater, potentially exposing construction workers, the public, and the environment to risks associated with hazardous materials.	LTSM	Similar	Similar *	Similar *	Similar *
	3.10-3: Future restoration projects permitted under the Order could be implemented within 2 miles of an airport, resulting in a safety hazard.	SU	Similar	Similar *	Similar *	Similar *

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Resource Topic	Order	No Project Alternative	Alternative 1—Specify More Narrowly Types of Restoration Projects	Alternative 2—Eliminate Certain Aspects of Restoration Projects	Alternative 3—Exclude Entire Categories of Restoration Projects	
3.10 Hazards and Hazardous Materials (cont.)	3.10-4: Implementing future restoration projects permitted under the Order could interfere with emergency response access or with an adopted emergency response or evacuation plan.	LTSM	Similar	Similar *	Similar *	Similar *
	3.10-5: Implementing future restoration projects permitted under the Order could expose people or structures, either directly or indirectly, to a significant loss, injury, or death due to wildland fires.	LTSM	Similar	Similar *	Similar *	Similar *
	3.10-6: Implementing future restoration projects permitted under the Order could create vector habitat that would pose a significant public health hazard.	LTSM	Similar	Similar *	Similar *	Similar *

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Resource Topic	Order	No Project Alternative	Alternative 1—Specify More Narrowly Types of Restoration Projects	Alternative 2—Eliminate Certain Aspects of Restoration Projects	Alternative 3—Exclude Entire Categories of Restoration Projects	
3.11 Hydrology and Water Quality	3.11-1: Implementing restoration projects permitted under the Order could result in the release of pollutants into surface water and/or groundwater that could violate water quality standards or waste discharge requirements, substantially degrade water quality, or obstruct implementation of a water quality control plan.	LTSG	Similar	Similar *	Similar *	Similar *
	3.11-2: Implementing restoration projects permitted under the Order could substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that a project may impede sustainable groundwater management of the basin or obstruct implementation of a sustainable groundwater management plan.	LTS	Similar	Similar *	Similar *	Similar *

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3.11 Hydrology and Water Quality (cont.)	3.11-3: Implementing restoration projects permitted under the Order could substantially alter the existing drainage pattern of a site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces in a manner that could substantially increase the rate of runoff; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems; or impede or redirect flood flows.	LTS	Similar	Similar *	Similar *	Similar *
3.12 Land Use and Planning	3.12-1: Restoration projects permitted under the Order could conflict with a land use plan, policy, or regulation adopted to avoid or mitigate an environmental effect.	SU	Similar	Similar *	Similar *	Similar *
	3.12-2: Implementing restoration projects permitted under the Order could physically divide an established community.	SU	Similar	Similar *	Similar *	Similar *

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3.13 Mineral Resources	3.13-1: Implementing restoration projects permitted under the Order could result in the loss of availability of a known mineral resource.	LTSM	Similar	Similar *	Similar *	Similar *
	3.13-2: Implementing restoration projects permitted under the Order could result in the loss of availability of a locally important mineral resource recovery site.	LTSM	Similar	Similar *	Similar *	Similar *
3.14 Noise	3.14-1: Implementing future restoration projects permitted under the Order could result in a temporary or permanent increase in ambient noise levels in excess of standards established in applicable plans and ordinances.	SU	Similar	Similar *	Similar *	Similar *
	3.14-2: Implementing future restoration projects permitted under the Order could expose sensitive receptors to excessive groundborne vibration.	SU	Similar	Similar *	Similar *	Similar *
	3.14-3: Implementing future restoration projects permitted under the Order could expose sensitive receptors to excessive groundborne noise levels.	SU	Similar	Similar *	Similar *	Similar *

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3.14 Noise (cont.)	LTSM	Similar	Similar *	Similar *	Similar *
3.15 Population and Housing	LTS	Similar	Similar *	Similar *	Similar *
	LTS	Similar	Similar *	Similar *	Similar *

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3.16 Recreation	3.16-1: Implementing future restoration projects permitted under the Order could directly impair, degrade, or eliminate recreational resources, facilities, and opportunities.	LTSM	Similar	Similar *	Similar *	Similar *
	3.16-2: Future restoration projects permitted under the Order could alter recreational resources or facilities or require the construction or expansion of recreational facilities that could result in environmental impacts.	LTSM	Similar	Similar *	Similar *	Similar *
	3.16-3: Implementing future restoration projects permitted under the Order could increase the use of existing recreational resources and facilities such that substantial physical deterioration would occur or be accelerated.	LTSM	Similar	Similar *	Similar *	Similar *
3.17 Transportation	3.17-1: Future restoration projects permitted under the Order could conflict with a plan, ordinance, or policy addressing the circulation system including transit, roadways, bicycle, and pedestrian facilities.	LTSM	Similar	Similar *	Similar *	Similar *

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3.17 Transportation (cont.)	3.17-2: Future restoration projects permitted under the Order could conflict with or be inconsistent with State CEQA Guidelines Section 15064.3(b).	SU	Similar	Similar *	Similar *	Similar *
	3.17-3: Implementing future restoration projects permitted under the Order could substantially increase hazards due to a geometric design feature or incompatible uses.	LTSM	Similar	Similar *	Similar *	Similar *
3.18 Tribal Cultural Resources	3.18-1: Implementing future restoration projects permitted under the Order could cause a substantial adverse change in the significance of a tribal cultural resource, as defined in PRC Section 21074.	SU	Similar	Similar *	Similar *	Similar *
3.19 Utilities and Service Systems and Public Services	3.19-1: Implementing future restoration projects permitted under the Order could result in insufficient water supplies available to serve the project during normal, dry, and multiple dry years.	SU	Similar	Similar *	Similar *	Similar *

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 CHAPTER 6 ALTERNATIVES
 6.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Table 6-1
Summary Comparison of the Environmental Impacts of the Alternatives to the Impacts of the Order

Resource Topic		Order	No Project Alternative	Alternative 1—Specify More Narrowly Types of Restoration Projects	Alternative 2—Eliminate Certain Aspects of Restoration Projects	Alternative 3—Exclude Entire Categories of Restoration Projects
3.19 Utilities and Service Systems and Public Services (cont.)	3.19-2: Future restoration projects permitted under the Order could be served by a landfill with insufficient permitted capacity to accommodate the project’s solid waste disposal needs and could fail to comply with federal, state, and local statutes and regulations related to solid waste.	LTS	Similar	Similar *	Similar *	Similar *
	3.19-3: Implementing future restoration projects permitted under the Order could result in substantial adverse physical impacts associated with construction of new or modified fire protection, police protection, schools, and other public facilities.	LTS	Similar	Similar *	Similar *	Similar *
3.20 Wildfire	3.20-1: Implementing restoration projects permitted under the Order could exacerbate fire risk.	LTSM	Similar	Similar *	Similar *	Similar *
	3.20-2: Implementing restoration projects permitted under the Order could result in downslope or downstream risks as a result of runoff, post-fire slope instability, or drainage changes.	LTSM	Similar	Similar *	Similar *	Similar *

SOURCE: Data compiled by Environmental Science Associates in 2020.

Table 6-1

Summary Comparison of the Environmental Impacts of the Alternatives to the Impacts of the Order

* The impact related to the alternative could be at a lesser magnitude than the impact of the Order; however, it is assumed the final impact conclusion (e.g., LTSM, SU) will be the similar to the conclusion for the Order. For example, there may be less overall construction related to the alternative, but the construction impacts related to noise, air quality, etc., could result in the same final impact conclusion as for the Order.

NOTES: LTS—Less than significant; LTSG—Less than significant after application of general protection measure(s);
LTSM—Less than significant after application of feasible mitigation measure(s).