RESOLUTION 2023-03

EXHIBIT A

CEQA FINDINGS OF FACT

FOR

THE ENVIRONMENTAL IMPACT REPORT OF THE GUIDELINES FOR ACCEPTING WATER INTO THE FRIANT-KERN CANAL PROJECT

STATE CLEARINGHOUSE NUMBER: 2022120093

PREPARED PURSUANT TO

SECTIONS 15091 AND 15093 OF THE STATE CEQA GUIDELINES AND SECTION 21081 OF THE PUBLIC RESOURCES CODE

BY

FRIANT WATER AUTHORITY

JULY 2023

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1. INTRODUCTION

These Findings (defined below) are made pursuant to the California Environmental Quality Act (CEQA), Public Resources Code Sections 21000 and CEQA Guidelines (California Code of Regulations, Title 14, sections 15000 and following) by the Friant Water Authority (Friant) in connection with the Environmental Impact Report (EIR) prepared for the *Guidelines for Accepting Water into the Friant-Kern Canal* (Guidelines). The Draft EIR (and appendices) and Final EIR (and appendices) constitute the EIR for the Guidelines.

These Findings are based on substantial evidence in the entire administrative record and references to specific reports and specific pages of documents are not intended to identify those sources as the exclusive basis for the findings. These findings reflect the Friant's Board of Director's (Board) independent judgment and analysis.

1.1 OVERVIEW AND ORGANIZATION

Friant has prepared an EIR which analyzes the anticipated environmental impacts of the Guidelines. To support its certification of the EIR and approval of the proposed Guidelines, Friant's Board makes the following findings of fact (Findings). These Findings contain the Board's written analysis and conclusions regarding the Guidelines environmental effects, mitigation measures, and alternatives which, in the Board's view, justify the approval of the Guidelines despite its potential environmental effects. These Findings are based upon the entire record of proceedings for the EIR, as described below.

The content and format of the Findings are designed to meet the requirements of CEQA. The EIR identifies significant environmental effects that would result from the Project. For each significant effect identified in the EIR, the Board is adopting one or more of the findings as provided in CEQA and specified in Section 15091 of the CEQA Guidelines. For identified significant effects, the Board finds that the mitigation measures identified in the EIR avoid or substantially lessen the significant effects to a level of less than significant.

The Board also adopts a Mitigation Monitoring and Reporting Program (MMRP). The Board finds that the MMRP meets the requirements of Public Resources Code Section 21081.6 by providing for the implementation and monitoring of measures intended to mitigate potentially significant effects. The MMRP is attached to the Board's Resolution as Exhibit B and incorporated by reference is being adopted by the Board concurrent with and as part of its Project approval.

2. PROPOSED GUIDELINES SUMMARY

Friant, a joint powers authority, has been working with Friant Division long-term contractors (Friant Contractors) and the United States Department of the Interior, Bureau of Reclamation (Reclamation) to develop the proposed Guidelines to ensure that the quality of water conveyed through the Friant-Kern Canal is protected for sustained domestic and agricultural use.

The proposed Guidelines would be applicable to all Non-Millerton water (water from sources other than Millerton Lake) introduced to or diverted from the Friant-Kern Canal including but not limited to: groundwater pump-ins, surface water diversions and pump-ins, recaptured and recirculated San Joaquin River Restoration Program Restoration Flows, and water introduced at the Friant-Kern Canal–Cross Valley Canal (CVC) intertie and delivered via reverse flow on the Friant-Kern Canal. The proposed Guidelines define the water quality thresholds and required "leave behind" water associated with introduced Non-Millerton water and corresponding water quality, as well as the methodologies and tools for monitoring and forecasting water quality in the Friant-Kern Canal. The proposed Guidelines describe the Friant review process for applications to Reclamation to introduce Non-Millerton water into

the Friant-Kern Canal; implementation procedures; and the responsibilities of water contractors and other parties authorized to introduce or receive Non-Millerton water into or from the Friant-Kern Canal (referred to collectively as "Contractors").

Implementation of the proposed Guidelines would not result in Friant making any physical modifications to the Friant-Kern Canal; however, in response to the proposed Guidelines, Contractors may need to take certain actions to ensure that a proposed introduction of Non-Millerton water meets the water quality thresholds of the Guidelines. These actions may include blending of water, changes to the timing of the introduction or discharge of Non-Millerton water, use of alternative water supplies, or construction and operation of small water treatment facilities at the source of the pump-in. In addition, Friant or Contractors may need to construct and/or maintain facilities for monitoring and forecasting water quality (e.g., water quality monitoring stations).

2.1 PROJECT OBJECTIVES

CEQA requires that an EIR contain a "statement of the objectives sought by the proposed project." Under CEQA, "[a] clearly written statement of objectives will help the Lead Agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations. The statement of objectives should include the underlying fundamental purpose of the project" (CEQA Guidelines Section 15124[b]).

The objectives of the proposed Guidelines are to:

- Provide greater protection of the quality of water introduced to or received from the Friant-Kern Canal for sustained domestic and agricultural use.
- Define the water quality thresholds, including the "leave behind" water associated with introduced Non-Millerton water and corresponding water quality, as well as the methodologies and tools for monitoring and forecasting water quality in the Friant-Kern Canal.
- Guide the application review process, implementation procedures, and the responsibilities of water contractors and other parties authorized by Reclamation to introduce or receive Non-Millerton water into or from the Friant-Kern Canal.

3. STATUTORY REQUIREMENTS

CEQA, in Public Resources Code Section 21081, and the CEQA Guidelines Section 15091 requires that:

No public agency may approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:

- 1. Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.
- 2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- 3. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the EIR.

All identified significant effects were determined to be mitigated to a less-than-significant level with incorporation of mitigation measure as described below in Section 4.

3.1 RECORD OF PROCEEDINGS AND CUSTODIAN OF RECORD

For purposes of CEQA and these Findings, the record of proceedings for the Board's decisions on the Guidelines consist of: (a) matters of common knowledge to the Board, including, but not limited to, federal, state and local laws and regulations and policies, (b) the following documents, which are in custody of the Friant Water Authority, 854 N. Harvard Ave. Lindsay, CA 9324:

- Notice of Preparation, dated December 6, 2022.
- Other public notices issued by Friant in conjunction with the Guidelines.
- Draft EIR, dated May 12, 2023.
- Final EIR, dated July, 2023, including all documents incorporated therein by reference.
- Mitigation Monitoring and Reporting Plan, dated July, 2023.
- All findings and resolutions adopted by the Board in connection with the Guidelines, and all documents cited or referred to therein.
- All final technical reports and addenda, studies, memoranda, maps, correspondence and all planning documents prepared by Friant or Friant's consultants relating to the Guidelines.
- All documents submitted to Guidelines by agencies or members of the public in connection with development of the Guidelines.
- All actions of the Board with respect to the Guidelines.
- All references included in the Draft EIR.
- Other documents regarding coordination and consultation with the public and public agencies and other documents designated by Friant.

3.2 PREPARATION AND CONSIDERATION OF THE EIR AND INDEPENDENT JUDGMENT FINDINGS

Pursuant to Public Resources Code Section 21082.1(c)(3), the Board finds, with respect to the Friant's preparation, review and consideration of the EIR, that:

- Friant retained the independent firm of Environmental Science Associates (ESA) to prepare the EIR, under the supervision and at the direction of Friant.
- Friant circulated a NOP on December 6, 2022 for a 30-day period.
- Friant noticed and conducted a virtual scoping meeting on December 13, 2022.
- The NOP was sent to public agencies, organizations, and individuals that requested receipt of Friant's public notices.
- Friant circulated the Draft EIR for review by responsible agencies and the public from May 12, 2023 through June 26, 2023, for a 45 days and submitted it to the State Clearinghouse for review and comment by State agencies.
- The Draft EIR was sent to public agencies, organization, and individuals that requested receipt of Friant's public notices and was made available at the Fresno, Kern and Tulare County Clerks offices and published in The Fresno Bee and The Bakersfield Californian on Friday May 12, 2023.
- Friant noticed and conducted a virtual public meeting on May 30, 2023 to receive oral comments on the Draft EIR.
- The EIR reflects the Board's independent judgment and analysis and has been completed in compliance with CEQA.

- The Project will have potential significant, unavoidable impacts as described and discussed in the EIR.
- The EIR is adequate under CEQA to address the potential environmental impacts of the Project.
- The EIR has been presented to the Board and the Board has independently reviewed and considered information contained in the EIR.
- By these Findings, the Board ratifies, adopts and incorporates the analyses, explanations, findings, responses to comments, and conclusions of the EIR described in these Findings.

3.3 NO RECIRCULATION OF EIR REQUIRED

Public Resources Code Section 21092.1 and CEQA Guidelines Section 15088.5 dictate that, under certain circumstances, when new information is added to an EIR after it has been circulated for the required public review and comment period, the EIR must undergo another round of public review and comment. The Final EIR contains no new information and therefore, no recirculation of the EIR is required.

3.4 MITIGATION MEASURES, CONDITIONS OF APPROVAL AND MITIGATION MONITORING AND REPORTING PROGRAM

Public Resources Code Section 21081.6 and CEQA Guidelines Section 15097 require Friant to adopt a monitoring or reporting program to ensure that the mitigation measures and revisions to the Project identified in the Final EIS are implemented. The MMRP attached to the Board's Resolution as Exhibit B and incorporated by reference is being adopted by the Board concurrent with and as part of its approval of the Guidelines. The MMRP satisfies the requirements of CEQA. The mitigation measures set forth in the MMRP are specific and enforceable and are capable of being fully implemented by the efforts of Friant and/or the Contractors when carrying out any new project subject to CEQA pursuant to the Guidelines. The MMRP adequately describes implementation procedures, monitoring responsibility, reporting actions, compliance schedule, and verification of compliance in order to ensure that actions taken in response to the Guidelines comply with the adopted mitigation measures, or equally effective measures, to reduce significant impacts to a less-than-significant level. Compliance with the MMRP is a requirement of the Cooperative Agreement that will be executed by all Contractors.

The mitigation measures incorporated into and imposed as part of the MMRP will not have significant impacts that were not analyzed in the EIR.

4. FINDINGS REGARDING SIGNIFICANT IMPACTS

In accordance with Public Resources Code Section 21081 and CEQA Guidelines Sections 15091 and 15092, the Board adopts the findings and conclusions regarding impacts and mitigation measures that are set forth in the EIR and summarized in the MMRP. These findings do not repeat the full discussions of environmental impacts contained in the EIR. The Board ratifies, adopts, and incorporates the analysis, explanation, findings and conclusions of the EIR. The EIR concludes that the potentially significant environmental impacts related to biological resources, cultural resources, noise, and tribal cultural resources can be reduced to a less than significant level through the implementation of specific mitigation measures, as discussed below.

4.1 FINDINGS REGARDING IMPACTS ANALYZED IN THE EIR AND DETERMINED TO BE LESS-THAN-SIGNIFICANT IMPACTS

This section identifies potentially significant adverse impacts of the proposed Guidelines that require findings to be made pursuant to Public Resources Code Section 21081 and CEQA Guidelines Section 15091. Based on information in the EIR, the Board finds that, based upon substantial evidence in the record, adoption and implementation of the mitigation measures set forth below will avoid or reduce the identified significant impacts of the proposed Guidelines to less than significant levels. Based on the

analysis contained in the EIR, the following resources have been determined to have impacts that can be reduced to less-than-significant levels with implementation of mitigation measures.

4.1.1 Biological Resources

Impact 3.5-1: Implementation of the proposed Guidelines could result in a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.

In response to the proposed Guidelines, Contractors might need to take certain actions to comply with the proposed Guidelines. Actions may include construction and operation of small water treatment facilities (approximately the size of a shed) likely located adjacent to the Friant-Kern Canal right-of-way, or installation of water quality monitoring stations located in the Friant-Kern Canal itself. It is also possible that some actions could occur in areas within Contractors' boundaries. Construction of such facilities could adversely affect special-status species, either through direct mortality or injury (e.g., from heavy machinery crushing wildlife or plants) or through the loss of suitable habitat for special-status species. his effect could be temporary, if such habitat is restored to pre-action conditions following the completion of construction (e.g., staging areas or haul routes); or the effect could be permanent, if no such restoration activities are possible (e.g., it would not be possible to restore habitat in the footprint where a permanent new water quality treatment facility is constructed).

Mitigation Measure 3.5-1a: One botanical survey shall be conducted prior to construction activities to determine the presence or absence of special-status plant species within the construction footprint, including staging and haul routes. The surveys shall be conducted in general accordance with the *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities* (CDFW 2018) and shall be timed to appropriately coincide with the blooming period in all suitable habitat located within any anticipated disturbance areas.

Mitigation Measure 3.5-1b: In the event that special-status plant species are found during the botanical surveys, the locations of the special-status plants shall be marked and a 50-foot buffer shall be established as avoidance areas both in the field, using flagging, staking, fencing, or similar devices, and on construction plans.

Mitigation Measure 3.5-1c: If non-listed, special-status plants are identified during botanical surveys and complete avoidance is not practicable, coordination with CDFW and/or USFWS shall be conducted as appropriate to develop the conservation plan. No take of state-listed species shall occur without an Incidental Take Permit (ITP) from CDFW.

Mitigation Measure 3.5-1d: To avoid special-status wildlife habitat, Contractors implementing actions in response to the proposed Guidelines shall implement the following measures:

- To the extent practicable, site(s) shall be identified that avoid habitats of special-status species (which may include foraging, sheltering, migration, and rearing habitat in addition to breeding or spawning habitat).
- Buffers around special-status species habitats shall be established to exclude effects of construction activities. The size of the buffer shall be in accordance with USFWS and CDFW protocols for the applicable special-status species.

- To the extent practicable, construction activities shall be scheduled to avoid special-status species' breeding, spawning, or migration locations during the seasons or active periods that these activities occur.
- Where impacts on special-status species are unavoidable, impacts shall be compensated for by restoring or preserving in-kind suitable habitat on-site or off-site, or by purchasing restoration or preservation credits.

Mitigation Measure 3.5-1e: To protect wildlife, Contractors implementing actions in response to the proposed Guidelines shall implement the following measures:

- Avoidance of Vegetation Disturbance. Sites shall be selected that will minimize, to the greatest extent feasible, the amount of soil and upland vegetation disturbance during construction and use methods creating the least disturbance to vegetation. Disturbance to existing grades and native vegetation, the number of access routes, the size of staging areas, and the total area disturbed shall be limited to the extent of all temporary and permanent impacts as defined by the final project design.
- Environmental Awareness Training. Prior to engaging existing or new personnel in construction activities, new construction personnel shall participate in environmental awareness training conducted by an agency-approved biologist or resource specialist. Construction personnel will be informed about the identification, potential presence, legal protections, and avoidance and minimization measures relevant to special-status species that potentially occur on the site.
- **Environmental Monitoring.** A qualified biologist shall ensure that all applicable protective measures are implemented during construction. The qualified biologist shall have authority to stop any work if they determine that any permit requirement is not fully implemented. The qualified biologist will prepare and maintain a monitoring log of construction site conditions and observations, which will be kept on file by the lead agency.
- Work Area and Speed Limits. All construction work and materials staging shall be restricted to designated work areas, routes, staging areas, temporary interior roads, or the limits of existing roadways.
 - Prior to start of work, brightly colored fencing or flagging or other practical means shall be erected to demarcate the limits of the activities within 100 feet of sensitive natural communities and habitat areas (e.g., any aquatic features), including designated staging areas; ingress and egress corridors; stockpile areas, soil, and materials; and equipment exclusion zones. Flagging or fencing shall be maintained in good repair for the duration of construction activities.
 - Vehicles shall obey posted speed limits and will limit speeds to 20 miles per hour within the study area on unpaved surfaces and unpaved roads to reduce dust and soil erosion and avoid harm to wildlife.
- **Daily Removal of Food Trash.** All food trash shall be properly contained within sealed containers, removed from the work site, and disposed of daily to prevent attracting wildlife to construction sites.

Mitigation Measure 3.5-1f: To protect nesting birds, Contractors implementing actions in response to the proposed Guidelines shall implement the following measures:

• To the extent practicable, vegetation removal shall be scheduled to avoid the breeding season for nesting raptors and other special-status birds (generally February 1 through

August 31, depending on the species). Removal of vegetation outside of the nesting season is intended to minimize the potential for delays in vegetation removal due to active nests.

- If work is to occur during the breeding season for nesting birds, a qualified biologist shall conduct a minimum of one pre-construction survey for nesting migratory birds and raptors within the project area for all construction-related activities that will occur during the nesting season. The pre-construction survey shall be conducted no more than 15 days prior to the initiation of construction in a given area and will be phased based on the construction schedule. If an active nest is found, a construction-free buffer zone (250 feet for migratory birds, 500 feet for raptors) shall be established around the active nest site. If establishment of the construction-free buffer zone is not practicable, appropriate conservation measures (as determined by a qualified biologist and approved by CDFW) shall be implemented. These measures may include but are not limited to consulting with CDFW to establish a different construction-free buffer zone around the active nest site, conducting daily biological monitoring of the active nest site, and delaying construction activities in the vicinity of the active nest site until the young have fledged.
- If burrowing owls are detected within the project area during the non-breeding season and maintaining a 150-foot, no-disturbance buffer is not practicable, a qualified biologist shall submit an exclusion and passive-relocation plan to CDFW for approval. The exclusion and passive-relocation plan will generally follow the guidelines outlined in Appendix E of the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). If occupied burrows are detected during the breeding season and maintaining a 250-foot no-disturbance buffer is not practicable, CDFW will be consulted to determine and approve alternative measures to minimize the potential for disturbance to occupied burrows and nesting activities. Measures may include but are not limited to continuous biological monitoring by a qualified biologist until it has been determined that the young have fledged and are no longer reliant on the nest or parental care for survival or construction is complete. No direct disturbance of burrows with eggs or young can be conducted without written authorization from CDFW and USFWS.
- For construction activities that occur between February 1 and August 31, a qualified biologist shall conduct pre-construction surveys for raptors. The pre-construction surveys will include the project footprint and a minimum of a 0.50-mile radius where access is permitted around the construction area in suitable nesting habitat (i.e., large trees). The preconstruction surveys shall be conducted no more than 10 days before ground disturbance in a given area and will be phased based on the construction schedule. If nesting raptors are detected, an appropriate no-disturbance buffer (initially set at 500 feet for raptors; reductions in the standard buffer for raptors may be allowed where circumstances suggest the birds will not abandon the active nest with a reduced buffer size. A qualified biologist will determine whether reducing the buffer is likely to substantially increase disturbance of nesting birds, taking into account the presence or absence of dense vegetation, topography, or structures that would block project activities from view; the life history and behavior of the bird species in question; and the nature of the proposed activity. If a reduced buffer is implemented, the biologist shall monitor bird behavior in relation to work activities. At a minimum, the biologist will monitor the baseline behavior of the birds for at least 30 minutes prior to the commencement of the work activity and for at least one hour immediately following the initiation of the work activity, when response by the nesting birds to the novel activity is expected to be greatest) shall be established and monitored by a qualified biologist. Buffers shall be maintained until a qualified biologist has determined that the young have fledged and are no longer reliant on the nest or parental care for survival.

 If construction results in permanent loss of alfalfa fields (high-quality foraging habitat for Swainson's hawk), this loss shall be mitigated; at a minimum of a 1:1 ratio. Mitigation shall occur in coordination with CDFW and may consist of but is not limited to purchasing mitigation credits from a CDFW-approved mitigation bank, obtaining conservation easements with appropriate provisions to maintain the land as suitable foraging habitat in perpetuity, establishing new alfalfa fields, or implementing other habitat conservation measures as approved by CDFW.

Mitigation Measure 3.5-1g: To protect special-status amphibians and reptiles, Contractors implementing actions in response to the proposed Guidelines shall implement the following measures:

- If western spadefoot is encountered during construction activities, it will be allowed to move out of harm's way of its own volition, or a qualified biologist will relocate it to the nearest suitable habitat that is at least 100 feet outside of the construction impact area.
- Prior to moving equipment at the start of a day, construction personnel shall inspect underneath parked vehicles and heavy machinery for amphibians or reptiles. If any are found, they will be allowed to move out of the construction area under their own volition, or a qualified biologist will relocate the organism(s) to the nearest suitable habitat that is at least 100 feet outside of the construction impact area.

Mitigation Measure 3.5-1h: To protect Crotch's bumble bee, Contractors implementing actions in response to the proposed Guidelines shall implement the following measures:

- If construction activities will involve conversion of grassland or shrublands, a survey for Crotch's bumble bee shall be conducted prior to construction activities during the Crotch's bumble bee active period (i.e., March to July).
- The survey will be a visual survey conducted by a qualified biologist who will search for Crotch's bumble bee activity and the presence of ground nests. If an active ground nest is observed, it shall be avoided. If avoidance of the active nest is not possible, CDFW will be consulted for approval of alternative measures to protect the Crotch's bumble bee.

Mitigation Measure 3.5-1i: To protect San Joaquin kit fox, Contractors implementing actions in response to the proposed Guidelines shall implement the following measures:

- Before the start of ground-disturbing activities within suitable habitat areas for San Joaquin kit fox (i.e., alkali desert scrub, annual grassland, pasture, barren) an approved biologist shall conduct preconstruction surveys in accordance with USFWS' *Standardized Recommendations for Protection of the San Joaquin Kit Fox prior to or during Ground Disturbance* (USFWS 2011). Preconstruction surveys shall be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact the San Joaquin kit fox.
- If a natal/pupping den is discovered within the work area or within 200-feet buffer of the work area boundary, the USFWS shall be immediately notified and under no circumstances should the den be disturbed or destroyed without prior authorization from USFWS. If the preconstruction survey reveals an active natal/pupping den, the Contractor shall contact the Service immediately to obtain the necessary take authorization. No construction work shall be allowed within 200 feet of the newly discovered natal/pupping den without written approval from the Service.

Mitigation Measure 3.5-1j: To protect Tipton kangaroo rat, Contractors implementing actions in response to the proposed Guidelines shall implement the following measures:

- Before the start of construction, the approved biologist shall conduct a habitat assessment to determine presence of special-status small mammal species burrows or their signs. If no observations, burrows, or signs of special-status small-mammal species are detected, no further measures will be required.
- If burrows and signs of special-status small mammal species are observed, the approved biologist will conduct protocol-level surveys in accordance with *Survey Protocol for Determining Presence of San Joaquin Kangaroo Rats* (USFWS 2013)
- If signs of Tipton kangaroo rat are detected during the survey, the Contractor, under the supervision of the approved biologist, shall establish non-disturbance exclusion zones (using wildlife exclusion fencing [e.g., a silt fence or similar material]). The non-disturbance exclusion fence with one-way exit/escape points shall be placed to exclude the Tipton kangaroo rat from the construction area.

Mitigation Measure 3.5-1k: To protect American badger, Contractors implementing actions in response to the proposed Guidelines shall implement the following measures:

- No more than 30 days before the start of construction activities, a qualified biologist shall conduct pre-construction surveys for American badgers within suitable habitat on the project site. If a potentially active den is found in a construction area, a burrow probe shall be used to determine the presence of badgers, or the den openings may be monitored with tracking medium or an infrared-beam camera for three consecutive nights to determine current use. Potential (inactive) dens within the limits of disturbance shall be blocked or excavated to prevent use during construction. If American badgers or active dens are detected during these surveys, the following measures shall be implemented.
- Disturbance of any American badger dens shall be avoided to the extent practicable. American badger dens are used for shelter, escape, cover, and reproduction, and are thus vital to the survival of American badgers. If present, occupied badger dens shall be flagged, and ground-disturbing activities avoided, within 50 feet of the occupied den during the nonbreeding season (July 1 through February 14). Dens determined to be occupied during the breeding season (February 15 through June 30) shall be flagged, and ground-disturbing activities avoided to protect adults and nursing young. Buffers may be modified by a qualified biologist with the written concurrence of CDFW.
- If avoidance of an active non-maternity den is not feasible, badgers shall be relocated by slowly excavating the burrow (either by hand or with mechanized equipment under the direct supervision of a qualified biologist) before or after the rearing season (February 15 through June 30). Any passive relocation of American badgers shall occur only under the direction of a qualified biologist.

Findings for Impact 5.3-1: Implementation of Mitigation Measures 3.5-1(a) through 3.5-1(k), or equally effective measures, would reduce potential impacts on special-status species to a less-than-significant level because either habitat for special-status species would be avoided through siting of Contractor actions, or potential effects on species would be greatly minimized through implementation of minimization strategies (or would be offset through the purchase of off-site compensatory mitigation credits or through on-site restoration actions). Pursuant to Public Resources Code Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), the Board finds that changes or alterations have been required in, or incorporated into, the Guidelines which will avoid this significant effect or mitigate it to a

less than significant level as identified in the EIR. The Board has imposed Mitigation Measures 3.5-1(a) through 3.5-1(k) on the Guidelines as a condition of approval and implementation will be monitored through the MMRP.

Impact 3.5-2: Implementation of the proposed Guidelines could result in a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS.

In response to the proposed Guidelines, Contractors might need to take certain actions to comply with the proposed Guidelines. Actions may include construction and operation of small water treatment facilities (approximately the size of a shed) likely located adjacent to the Friant-Kern Canal right-of-way, or installation of water quality monitoring stations located in the Friant-Kern Canal itself. It is also possible that some actions could occur in areas within Contractors' boundaries. Construction activities could include site preparation involving removal of existing structures and facilities (e.g., distribution boxes, wells, ditches, standpipes, and pipes) and clearing of areas for establishment of new staging areas and potentially off-road haul routes. Ground and/or surface water disturbance could result in temporary damage to, or the permanent removal of sensitive natural communities located in and adjacent to the construction site. Affected sensitive natural communities could include seasonal wetlands, vernal pools, riparian forest and scrub, oak woodlands, and other sensitive communities.

Mitigation Measure 3.5-2: To avoid or minimize disturbance of sensitive natural communities, Contractors implementing actions in response to the proposed Guidelines shall implement the following measures:

- Avoidance of Sensitive Natural Communities. The proponent of the action will select sites that will avoid sensitive natural communities, including riparian habitats, by doing the following:
 - To the maximum extent practicable, project elements shall be designed to avoid effects on sensitive natural communities.
 - Flagging or fencing shall be installed by a qualified biologist around any sensitive natural community to be avoided by construction.
 - Flagging or fencing shall remain in place throughout the duration of the construction activities and will be inspected and maintained regularly by a qualified biologist until completion of construction activities. Fencing shall be removed when all construction equipment is removed from the site, the area is cleared of debris and trash, and the area is returned to natural conditions.
 - Where impacts on sensitive natural communities other than waters of the United States or state are unavoidable, impacts shall be compensated for by restoring and/or preserving in-kind sensitive natural communities on-site, or off-site at a nearby site, or by purchasing in-kind restoration or preservation credits from a mitigation bank.
- **Restoration of Temporarily Affected Areas.** For any areas temporarily affected by construction activities, the following measures shall be implemented:
 - Prepare a restoration plan for sites with temporary impacts, for review by CDFW.
 - Minimize soil disturbance and stockpile topsoil for later use in any areas to be graded.
 - Amend soil as necessary before installing replacement plants.
 - Use only native plant species for revegetation.

- **Preservation of Large Trees.** Existing native vegetation shall be retained as practicable, with special focus on the retention of shade-producing and bank-stabilizing trees and brush with greater than 6-inch-diameter branches or trunks. If large trees must be removed, compensation shall be implemented within 12 months of removal of such large trees. Compensation shall be implemented through one of three mechanisms or some combination thereof: (1) replacement via replanting at a minimum ratio of 1:1 based on a diameter-at-breast-height (DBH) basis, (e.g., planting six 1-inch DBH trees for a single, removed 6-inch DBH tree); (2) permanent preservation of large, native trees, which could include, but not be limited to, establishment of a conservation easement on lands that support native trees; or (3) contribution to the respective, established, approved tree conservation fund where the tree impact occurred.
- Avoidance of Excessive Soil Compaction. Wherever possible, vegetation disturbance and soil compaction shall be minimized by using low-ground-pressure equipment with a greater reach than other equipment, or that exerts less pressure per square inch on the ground.
- Materials and Methods of Native and Invasive Vegetation Removal. If riparian vegetation is removed with chain saws or other power equipment, machines that operate with vegetablebased bar oil will be used, if practicable. All invasive plant species (e.g., those rated as invasive by the California Invasive Plant Council or local problem species) shall, if feasible, be removed using locally and routinely accepted agricultural practices. Stockpiling of invasive plant materials is prohibited during the flood season.
- **Revegetation of Disturbed Areas.** All temporarily disturbed areas shall be de-compacted and seeded/planted with a mix of native riparian, wetland, and/or upland plant species suitable for the area. The proponent of the action shall develop a revegetation plan, including (as applicable) a schedule; plans for grading of disturbed areas to pre-construction contours; a planting palette with plant species native to the study area; invasive species management; performance standards; and maintenance requirements (e.g., watering, weeding, and replanting).

Plants for revegetation shall come primarily from active seeding and planting; natural recruitment may also be proposed if site conditions allow for natural recruitment to reestablish vegetation and avoid potential negative risks associated with erosion and impacts on water quality. Plants imported to the restoration areas will come from local stock, and to the extent possible, from local nurseries. Only native plants (genera) will be used for restoration efforts. Certified weed-free native mixes and mulch will be used for restoration planting or seeding.

- **Revegetation Materials and Methods.** Following the completion of work, site contours shall be returned to preconstruction conditions or redesigned to provide increased biological and hydrological functions.
 - Any area barren of vegetation as a result of implementation of an action shall be restored to a natural state by mulching, seeding, planting, or other means with native trees, shrubs, willow stakes, erosion control native seed mixes, or herbaceous plant species.
 - Where disturbed, topsoil shall be conserved for reuse during restoration to the extent practicable.
 - Native plant species comprising a diverse community structure (plantings of both woody and herbaceous species, if both are present) that follow a CDFW-approved plant palette shall be used for revegetation of disturbed and compacted areas, as appropriate.

- Irrigation may also be required to ensure the survival of shrubs, trees, or other vegetation.
- Soils that have been compacted by heavy equipment shall be de-compacted, as necessary, to allow for revegetation.
- *Materials and Methods of Revegetation Erosion Control.* If erosion control fabrics are used in revegetated areas, they shall be slit in appropriate locations to allow for plant root growth. Only non-monofilament, wildlife-safe fabrics shall be used.
- **Revegetation Monitoring and Reporting.** All revegetated areas shall be maintained and monitored for a minimum of two years after replanting is complete and until success criteria are met, to ensure that the revegetation effort is successful. The standard for success is 60 percent absolute cover compared to an intact, local reference site. If an appropriate reference site cannot be identified, success criteria will be developed for review and approval by CDFW on a project-by-project basis based on the specific habitat affected and known recovery times for that habitat and geography. A summary report of the monitoring results and recommendations at the conclusion of each monitoring year shall be prepared.

Findings for Impact 5.3-2: Implementation of Mitigation Measures 3.5-2, or equally effective measures, would reduce impacts to existing sensitive natural community resources to a less-than-significant level through avoidance of such resources through project siting and through restoration of temporarily affected areas for construction areas associated with new water treatment facilities. Pursuant to Public Resources Code Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), the Board finds that changes or alterations have been required in, or incorporated into, the Guidelines which will avoid this significant effect or mitigate it to a less than significant level as identified in the EIR. The Board has imposed Mitigation Measures 3.5-2 on the Guidelines as a condition of approval and implementation will be monitored through the MMRP.

Impact 3.5-3: Implementation of the proposed Guidelines could result in a substantial adverse effect on state or federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, and coastal) through direct removal, filling, hydrological interruption, or other means.

In response to the proposed Guidelines, Contractors might need to take certain actions to comply with the proposed Guidelines. Actions may include construction and operation of small water treatment facilities (approximately the size of a shed) likely located adjacent to the Friant-Kern Canal right-of-way, or installation of water quality monitoring stations located in the Friant-Kern Canal itself. It is also possible that some actions could occur in areas within Contractors' boundaries. Construction of these potential future actions could directly affect wetlands and waters depending on where they are sited, and/or could indirectly affect wetlands associated with potential siltation, chemical spills, or other discharges into waterways during construction. Habitat disturbance and permanent wetland loss could result from construction activities including general grading, recontouring, and removal of existing facilities (e.g., power poles, utility lines, and piping).

Mitigation Measure 3.5-3: To avoid or minimize disturbance to wetlands and waters, Contractors implementing actions in response to the proposed Guidelines shall implement the following measures:

• Avoidance of Jurisdictional Wetlands and Other Waters. Sites shall be selected that shall avoid, minimize, and if necessary, compensate for reduction in area and/or habitat quality of wetlands and jurisdictional waters, through the following measures:

- To the maximum extent practicable, elements of Contractor actions shall be designed to avoid effects on wetlands and other waters, including rivers, streams, vernal pools, and seasonal wetlands.
- Flagging or fencing shall be installed by a qualified biologist around any jurisdictional wetland or other aquatic feature to be avoided by construction.
- Flagging or fencing shall remain in place throughout the duration of construction and will be inspected and maintained regularly by a qualified biologist until completion of the project. Fencing shall be removed when all construction equipment is removed from the site, the area is cleared of debris and trash, and the area is returned to natural conditions.
- Staging areas, access roads, and other facilities shall be placed to avoid and limit disturbance to waters of the state and other aquatic habitats (e.g., streambank or stream channel, riparian habitat) as much as possible. When possible, existing ingress or egress points shall be used and/or work shall be performed from the top of the creek banks or from barges on the waterside of the stream or levee bank, or dry gravel beds.
- Wetlands and other waters of the United States, and waters of the state that would be removed, lost, and/or degraded shall be replaced, restored, or enhanced on a "no net loss" basis (in accordance with all permits secured from and related requirements imposed by USACE and State Water Board).

Findings for Impact 5.3-3: Implementation of Mitigation Measures 3.5-3, or equally effective measures, would reduce impacts to wetlands to a less-than-significant level through avoidance of wetlands at construction areas associated with new water treatment facilities. Pursuant to Public Resources Code Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), the Board finds that changes or alterations have been required in, or incorporated into, the Guidelines which will avoid this significant effect or mitigate it to a less than significant level as identified in the EIR. The Board has imposed Mitigation Measures 3.5-3 on the Guidelines as a condition of approval and implementation will be monitored through the MMRP.

Impact 3.5-5: Implementation of the proposed Guidelines could conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

In response to the proposed Guidelines, Contractors might need to take certain actions to comply with the proposed Guidelines. Actions may include construction and operation of small water treatment facilities (approximately the size of a shed) likely located adjacent to the Friant-Kern Canal right-of-way, or installation of water quality monitoring stations located in the Friant-Kern Canal itself. It is also possible that some actions could occur in areas within Contractors' boundaries. Depending on the specific location and design such actions could potentially conflict with local policies and ordinances.

Mitigation Measure 3.5-4: To reduce potential conflicts with adopted local policies or ordinances protecting biological resources, Contractors implementing actions in response to the proposed Guidelines shall Implement Mitigation Measures 3.5-2 and 3.5-3.

Findings for Impact 5.3-4: Implementation of Mitigation Measures 3.5-4, or equally effective measures, would reduce impacts associated with potential conflicts with adopted local policies or ordinances protecting biological resources to a less-than-significant level. See also Findings for Impacts 3.5-2 and 3.5-3 above. Pursuant to Public Resources Code Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), the Board finds that changes or alterations have been required in, or incorporated into, the Guidelines which will avoid this significant effect or mitigate it to a less than significant level as identified

in the EIR. The Board has imposed Mitigation Measures 3.5-4 on the Guidelines as a condition of approval and implementation will be monitored through the MMRP.

4.1.2 Cultural Resources

Impact 3.6-1: Implementation of the proposed Guidelines could cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5.

In response to the proposed Guidelines, Contractors might need to take certain actions to comply with the proposed Guidelines. Actions may include construction and operation of small water treatment facilities (approximately the size of a shed) likely located within or adjacent to the Friant-Kern Canal right-of-way, or installation of water quality monitoring stations located in the Friant-Kern Canal itself. It is also possible that some actions could occur in areas within Contractors' boundaries. If construction and/or operation and maintenance activities were to result in either a direct impact (e.g., physical modification, damage, or destruction) or an indirect impact (e.g., alteration to setting, including visual) on any architectural resources that qualify as historical resources as defined in CEQA Guidelines Section 15064.5, the impact would be potentially significant.

Mitigation Measure 3.6-1a: Before implementation of any construction-related activities associated with the proposed Guidelines, the need for an inventory and significance evaluation of architectural resources i shall be assessed, based upon the type of activity and the potential for architectural resources to be present or disturbed. The assessment shall consist of a review of maps and aerial photos to determine whether existing buildings, dams, levees, roads, or other built features are present. If so, and if these features either are of unknown age or are known to be older than 45 years old, then an inventory and evaluation shall be completed by, or under the direct supervision of, a qualified architectural historian, defined as one who meets the U.S. Secretary of the Interior's Professional Qualifications Standards (SOI PQS) for Architectural History or History. This inventory and evaluation shall include the following:

- a. Map(s) and verbal description of the project area that delineates both the horizontal and vertical extents of potential direct and indirect effects —on architectural resources.
- b. A records search at the appropriate repository of the California Historical Resources Information System (CHRIS) for the project area and vicinity (typically areas within 0.25 or 0.5 mile, based on setting), to acquire records of previously recorded cultural resources and previously conducted cultural resources studies. This task can be performed by either the qualified archaeologist or the appropriate local CHRIS center staff.
- c. Background research on the history of the project area and vicinity for all actions determined to need additional historical architecture assessment.
- d. If, after review, features of the built environment are determined to be less than 45 years old, inclusion in the description a summary statement of their age and references for this determination.
- e. If architectural resources (45 years of age or older) are determined to likely be present in or near the project area, an architectural field survey of the project area, unless previous architectural field surveys no more than two years old have been conducted for the project area, in which case a new field survey is not necessary. Any architectural resources identified in the project area during the survey shall be recorded on the appropriate California Department of Parks and Recreation (DPR) 523 forms (i.e., site record forms).

- f. An evaluation of any architectural resources identified in the project area for California Register eligibility (i.e., whether they qualify as historical resources, as defined in CEQA Guidelines Section 15064.5).
- g. An assessment of potential impacts on any historical resources identified in the project area. This shall include an analysis of whether potential impacts on the historical resource would be consistent with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties and applicable guidelines.
- h. A technical report meeting the U.S. Secretary of the Interior's Standards for architectural history technical reporting. This report shall document the mitigation measures taken and any study results. The report shall be submitted to the appropriate CHRIS repository for the project area upon approval by the CEQA lead agency.

Mitigation Measure 3.6-1b: If potentially significant impacts on historical resources are identified through implementation of Mitigation Measure 3.6-1a, an approach for reducing such impacts shall be developed before implementation of the action and in coordination with interested parties (e.g., historical societies, local communities). Typical measures for reducing impacts include:

- a. Modification of the action to avoid impacts on historical resources.
- b. Documentation of historical resources, to the standards of and to be included in the *Historic American Building Survey*, *Historic American Engineering Record*, or *Historic American Landscapes Survey*, as appropriate. As described in the above standards, the documentation shall be conducted by a qualified architectural historian, defined above, and shall include large-format photography, measured drawings, written architectural descriptions, and historical narratives. The completed documentation shall be submitted to the U.S. Library of Congress.
- c. Relocation of historical resources in conformance with the U.S. Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.
- d. Monitoring of construction-related and operational vibrations at historical resources.
- e. For historical resources that are landscapes, preservation of the landscape's historic form, features, and details that have evolved over time, in conformance with the U.S. Secretary of the Interior's Guidance for the Treatment of Cultural Landscapes.
- f. Development and implementation of interpretive programs or displays, and community outreach.

Any technical report developed as part of this mitigation measure shall meet the U.S. Secretary of the Interior's Standards for architectural history technical reporting and shall be submitted to the appropriate CHRIS repository for the project area upon approval by the CEQA lead agency.

Findings for Impact 5.6-1: Implementation of Mitigation Measure 3.6-1a would require for construction-related activities an assessment of whether architectural resources that may qualify as historical resources, pursuant to CEQA Guidelines Section 15064.5, would be affected by these activities. If any historical resources that would be affected by the activities are identified through implementation of Mitigation Measure 3.6-1a, Mitigation Measure 3.6-1b would require modification of the proposed activities to avoid the historical resources or, if avoidance is not feasible, documentation or relocation of the historical resources that would be affected, and/or construction monitoring of the activities, and/or development of interpretive programs associated with the historical resources that would be affected. Implementation of Mitigation Measures 3.6-1a and 3.6-1b, or equally effective measures, would reduce

any potential impacts on historical resources to a less-than-significant level. Pursuant to Public Resources Code Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), the Board finds that changes or alterations have been required in, or incorporated into, the Guidelines which will avoid this significant effect or mitigate it to a less than significant level as identified in the EIR. The Board has imposed Mitigation Measures 3.6-1 on the Guidelines as a condition of approval and implementation will be monitored through the MMRP.

Impact 3.6-2: Implementation of the proposed Guidelines could cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.

In response to the proposed Guidelines, Contractors might need to take certain actions to comply with the proposed Guidelines. Actions may include construction and operation of small water treatment facilities (approximately the size of a shed) likely located within or adjacent to the Friant-Kern Canal right-of-way, or installation of water quality monitoring stations located in the Friant-Kern Canal itself. It is also possible that some actions could occur in areas within Contractors' boundaries. Construction of small water treatment facilities could involve ground disturbance which could partially or completely destroy archaeological resources as defined in CEQA Guidelines Section 15064.5.

Mitigation Measure 3.6-2a: Before implementation of any construction-related activity that includes ground disturbance associated actions taken by Contractors in response to the proposed Guidelines, an archaeological records search and sensitivity assessment, and an inventory and significance evaluation of archaeological resources identified in the project area shall be conducted. The inventory and evaluation shall be done by or under the direct supervision of a qualified archaeologist, defined as one who meets the SOI PQS for Archeology, and shall include the following:

- a. Map(s) and verbal description of the project area that delineates both the horizontal and vertical extents of potential direct and indirect effects on archaeological resources.
- b. A records search at the appropriate CHRIS repository for the project area and vicinity (typically areas within 0.25 or 0.5 mile, based on setting) to acquire records of previously recorded cultural resources and previously conducted cultural resources studies. This task can be performed by either the qualified archaeologist or the appropriate local CHRIS center staff.
- c. Outreach to the NAHC, including a request of a search of the Sacred Lands File for the project area and a list of California Native American Tribes culturally and geographically affiliated with the project area, to determine whether any documented Native American sacred sites could be affected by the action.
- d. Consultation with California Native American Tribes pursuant to PRC Section 21080.3 to determine whether any indigenous archaeological resource or tribal cultural resources could be affected by the action. The CEQA lead agency shall consult with California Native American Tribes culturally and affiliated with the project area and who have requested to be notified by the CEQA lead agency regarding projects, pursuant to AB 52; this consultation shall consist of the CEQA lead agency providing written notification of the action to any such Tribes and follow-up consultation if any Tribes request, in writing, from the CEQA lead agency's initial notification. Consultation shall include discussion regarding the design of the action, cultural resources survey, protocols for construction monitoring, and any other Tribal concerns.

- e. Background research on the history, including ethnography and indigenous presence, of the project area and vicinity.
- f. An archaeological sensitivity analysis of the project area based on mapped geologic formations and soils, previously recorded archaeological resources, previous archaeological studies, and Tribal consultation.
- g. An archaeological field survey of project area shall be conducted. The field survey shall include, at a minimum, a pedestrian survey. If the archaeological sensitivity analysis suggests a high potential for buried archaeological resources in the project area, a subsurface survey shall also be conducted. If previous archaeological field surveys no more than two years old have been conducted for the project area, a new field survey is not necessary, unless their field methods do not conform to those required above (e.g., no subsurface survey was conducted but project area has high potential for buried archaeological resources). Any archaeological resources identified in the project area during the survey shall be recorded on the appropriate DPR 523 forms (i.e., site record forms).
- h. An evaluation of any archaeological resources identified in the project area for California Register eligibility (i.e., as qualifying as historical resources, as defined in CEQA Guidelines Section 15064.5) as well as whether they qualify as unique archaeological resources pursuant to PRC Section 21083.2. Such evaluation may require archaeological testing (excavation), potentially including laboratory analysis, and consultation with relevant California Native American Tribes (for indigenous resources).
- i. An assessment of potential impacts on any archaeological resources identified in the project area that qualify as historical resources (per CEQA Guidelines Section 15064.5) and/or unique archaeological resources (per PRC Section 21083.2). This shall include an analysis of whether the potential impacts would materially alter a resource's physical characteristics that convey its historical significance and that justify its inclusion (or eligibility for inclusion) in the California Register or a qualified local register.
- j. A technical report meeting the U.S. Secretary of the Interior's Standards for archaeological technical reporting. This report shall be submitted to the appropriate CHRIS repository for the project area upon approval by the CEQA lead agency unless the document contains information that any California Native American Tribes involved in its development determine should not be filed with the CHRIS, in which case the report shall be submitted to the NAHC.

Mitigation Measure 3.6-2b: If potentially significant impacts on archaeological resources that qualify as historical resources (per CEQA Guidelines Section 15064.5) and/or unique archaeological resources (per PRC Section 21083.2) are identified during an action implemented in response to the Guidelines, the Contractor implementing the action shall develop an approach for reducing such impacts, before implementing the action and in coordination with interested or consulting parties (e.g., California Native American Tribes [for indigenous resources], historical societies [for historic-era resources], local communities). Typical measures for reducing impacts include:

- a. Modify the action to avoid impacts on resources.
- b. Plan parks, green space, or other open space to incorporate the resources.
- c. Develop and implement a detailed archaeological resources management plan to recover the scientifically consequential information from archaeological resources before any excavation at the resource's location. Treatment for most archaeological resources consists of (but is not necessarily limited to): sample excavation, artifact collection, site

documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the resource to be affected by the action. The archaeological resources management plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.

d. Develop and implement interpretive programs or displays and conduct community outreach.

Any technical report developed as part of this mitigation measure shall meet the U.S. Secretary of the Interior's Standards for archaeological technical reporting and shall be submitted to the appropriate CHRIS repository for the project area upon approval by the CEQA lead agency unless the document contains information that any California Native American Tribes involved in its development determine should not be filed with the CHRIS, in which case the report shall be submitted to the submitted to the NAHC.

Mitigation Measure 3.6-2c: Before any ground-disturbing construction activities related to actions implemented by Contractors in response to the Guidelines, an archaeologist meeting, or under the supervision of an archaeologist meeting, the SOI PQS for Archeology shall conduct a training program for all construction field personnel involved in the ground-disturbing activities. If a California Native American Tribe expresses interest, the CEQA lead agency shall invite the Tribe to participate in the training program. On-site personnel shall attend the training before the start of any ground-disturbing activities. The training shall outline the general archaeological sensitivity of the project area and the procedures to follow in the event that archaeological resources and/or human remains are inadvertently discovered during construction (see Mitigation Measures 3.6-2d and 3.6-2e). Documentation of the training attendance shall be maintained by the CEQA lead agency.

Mitigation Measure 3.6-2d: If archaeological resources are encountered during construction activities, all activity within 100 feet of the find shall cease and the find shall be flagged for avoidance. The CEQA lead agency and a qualified archaeologist, defined as one meeting the SOI PQS for Archeology, shall be immediately informed of the discovery. The qualified archaeologist shall inspect the discovery and notify the CEQA lead agency of their initial assessment. If the qualified archaeologist determines that the resource is or is potentially indigenous in origin, the CEQA lead agency shall consult with California Native American Tribes culturally and geographically affiliated with the project area to assess the find and determine whether it is potentially a tribal cultural resource.

If the CEQA lead agency determines based on recommendations from the qualified archaeologist—and, if the resource is indigenous, from California Native American Tribes culturally and geographically affiliated with the project area—that the resource may qualify as a historical resource (per CEQA Guidelines Section 15064.5), unique archaeological resource (per PRC Section 21083.2), or tribal cultural resource (per PRC Section 21074), then the resource shall be avoided if feasible. If avoidance of an identified indigenous resource is not feasible, the lead agency shall consult with a qualified archaeologist, culturally affiliated California Native American Tribes, and other appropriate interested parties to determine treatment measures to minimize or mitigate any potential impacts on the resource pursuant to PRC Section 21083.2 and CEQA Guidelines Section 15126.4.

Once treatment measures have been determined, the CEQA lead agency shall prepare and implement an archaeological (and/or tribal cultural) resources management plan that outlines

the treatment measures for the resource. Treatment measures typically consist of the following steps:

- a. Determine whether the resource qualifies as a historical resource (per CEQA Guidelines Section 15064.5), unique archaeological resource (per PRC Section 21083.2), or tribal cultural resource (per PRC Section 21074) through analysis that could include additional historical or ethnographic research, evaluative testing (excavation), or laboratory analysis.
- b. If the resource qualifies as a historical resource (per CEQA Guidelines Section 15064.5) and/or unique archaeological resource (per PRC Section 21083.2), implement measures for avoiding or reducing impacts such as the following:
 - i. Modify the action to avoid impacts on resources.
 - ii. Plan parks, green space, or other open space to incorporate resources.
 - iii. Recover the scientifically consequential information from the archaeological resource before any excavation at the resource's location. This typically consists of (but is not necessarily limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the resource to be affected by the action.
 - iv. Develop and implement interpretive programs or displays.
- c. If the resource qualifies as a tribal cultural resource (per PRC Section 21074), implement measures for avoiding or reducing impacts such as the following:
 - i. Avoid and preserve the resource in place through measures that include but are not limited to the following:
 - a. Plan and construct the action to avoid the resource and protect the cultural and natural context.
 - b. Plan green space, parks, or other open space to incorporate the resources with culturally appropriate protection and management criteria.
 - ii. Treat the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, through measures that include but are not limited to the following:
 - a. Protect the cultural character and integrity of the resource.
 - b. Protect the traditional use of the resource.
 - c. Protect the confidentiality of the resource.
 - iii. Implement permanent conservation easements or other interests in real property, with cultural appropriate management criteria for the purposes of preserving or using the resource or place.

Any technical report developed as part of this mitigation measure shall meet the U.S. Secretary of the Interior's Standards for archaeological technical reporting and shall be submitted to the appropriate CHRIS repository for the project area upon approval by the CEQA lead agency unless the document contains information that any California Native American Tribes involved in its development determine should not be filed with the CHRIS, in which case the report shall be submitted to the NAHC.

Findings for Impact 3.6-2: Implementation of Mitigation Measure 3.6-2a would require for construction work an assessment of whether such work would affect archaeological resources that may qualify as

historical resources, pursuant to CEQA Guidelines Section 15064.5, or unique archaeological resources, pursuant to PRC Section 21083.2. If any such resources that would be affected are identified through implementation of Mitigation Measure 3.6-2a, Mitigation Measure 3.6-2b would require that the action be modified to avoid the archaeological resources or, if avoidance is not feasible, that an archaeological resources management plan for the affected archaeological resources be developed and implemented. Additionally, implementation of Mitigation Measure 3.6-2c would require a cultural resources awareness training for construction personnel involved in ground-disturbing activities, and Mitigation Measure 3.6-2d would require implementation of a protocol for assessment and treatment of any potential archaeological resources identified during construction activities. Implementation of Mitigation Measures 3.6-2a to 3.6-2d, or equally effective measures, would reduce any potential impacts on archeological resources, pursuant to CEQA Guidelines Section 15064.5, to a less-thansignificant level. Pursuant to Public Resources Code Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), the Board finds that changes or alterations have been required in, or incorporated into, the Guidelines which will avoid this significant effect or mitigate it to a less than significant level as identified in the EIR. The Board has imposed Mitigation Measures 3.6-1 on the Guidelines as a condition of approval and implementation will be monitored through the MMRP.

Impact 3.6-3: Implementation of the proposed Guidelines could disturb human remains, including those interred outside of dedicated cemeteries.

In response to the proposed Guidelines, Contractors might need to take certain actions to comply with the proposed Guidelines. Actions may include construction and operation of small water treatment facilities (approximately the size of a shed) likely located within or adjacent to the Friant-Kern Canal right-of-way, or installation of water quality monitoring stations located in the Friant-Kern Canal itself. It is also possible that some actions could occur in areas within Contractors' boundaries. Construction of small water treatment facilities could involve ground disturbance which could affect human remains.

Mitigation Measure 3.6-3: If human remains are encountered during construction activities, all work shall immediately halt within 100 feet of the find and the CEQA lead agency shall contact the appropriate county coroner to evaluate the remains and follow the procedures and protocols set forth in CEQA Guidelines Section 15064.5(e)(1). If the coroner determines that the remains are Native American in origin, the appropriate county shall contact the NAHC, in accordance with HSC Section 7050.5(c) and PRC Section 5097.98. Per PRC Section 5097.98, the CEQA lead agency shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, of the location of the Native American human remains is not damaged or disturbed by further development activity until the CEQA lead agency has discussed and conferred, as prescribed in PRC Section 5097.98, with the most likely descendants and the property owner regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. Any technical report developed as part of this mitigation measure shall meet the U.S. Secretary of the Interior's Standards for archaeological technical reporting and shall be submitted to the NAHC and the appropriate CHRIS repository for the project area upon approval by the CEQA lead agency unless the document contains information that any California Native American Tribes involved in its development determine should not be filed with the CHRIS, in which case the report shall be submitted only to the NAHC.

Findings for Impact 3.6-3: Implementation of Mitigation Measure 3.6-3 would require implementation of a protocol for assessment and treatment of any potential human remains identified during construction activities. Implementation of Mitigation Measures 3.6-2a through 3.6-2d (described above and 3.6-3, or equally effective measures, would reduce any potential impacts on human remains to a less-than-significant level. Pursuant to Public Resources Code Section 21081(a)(1) and

CEQA Guidelines Section 15091(a)(1), the Board finds that changes or alterations have been required in, or incorporated into, the Guidelines which will avoid this significant effect or mitigate it to a less than significant level as identified in the EIR. The Board has imposed Mitigation Measures 3.6-3 on the Guidelines as a condition of approval and implementation will be monitored through the MMRP.

4.1.3 Noise

In response to the proposed Guidelines, Contractors might need to take certain actions to comply with the proposed Guidelines. Actions may include construction and operation of small water treatment facilities (approximately the size of a small shed) likely located adjacent to the Friant-Kern Canal rightof-way, or installation of water quality monitoring stations located in the Friant-Kern Canal itself. It is also possible that some actions could occur in areas within Contractors' boundaries. Construction activities could include the use of haul trucks and heavy equipment. Construction activities and movement of equipment would involve temporary noise sources. Given the limited size of potential actions and because noise associated with construction activities would be short-term and intermittent, actions in response to the implementation of the proposed Guidelines are not likely to result in the generation of a substantial temporary or permanent increase in ambient noise levels in the study area in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Operational and maintenance activities would be similar to existing conditions and would not result in the generation of a substantial temporary or permanent increase in ambient noise levels in the study area. Operational and maintenance activities would be similar to existing conditions and would not result in the generation of a substantial temporary or permanent increase in ambient noise levels in the study area.

Mitigation Measure 3.13-1: The following measures shall be implemented during construction of any actions implemented by Contractors in response to the proposed Guidelines:

- Noise- and vibration-generating activities shall comply with the applicable general plan and/or noise ordinances for the jurisdiction located within the vicinity of the project.
- Construction equipment shall be located as far away as possible from noise-sensitive receptors to the extent feasible, to reduce noise levels below applicable local standards.
- Construction equipment shall be maintained to manufacturers' recommended specifications, and all construction vehicles and equipment shall be equipped with appropriate mufflers and other approved noise control devices.
- Idling of construction equipment shall be limited to the extent feasible to reduce the time that noise is emitted.
- An individual traffic noise analysis of identified haul routes shall be conducted and mitigation, including but not limited to measures such as reduced speed limits, shall be provided at locations where noise standards cannot be maintained for noise-sensitive receptors.
- The action shall incorporate the use of temporary noise barriers, such as acoustical panel systems, between construction activities and noise-sensitive receptors if it is concluded that they would be needed to ensure compliance with applicable noise standards and effective in reducing noise exposure to sensitive receptors.

Findings for Impact 3.13-1: Implementing Mitigation Measure 3.13-1, or equally effective measures, would reduce the potential impact related to a temporary increase in ambient noise levels from construction of actions to a less-than-significant level. Pursuant to Public Resources Code Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), the Board finds that changes or alterations have

been required in, or incorporated into, the Guidelines which will avoid this significant effect or mitigate it to a less than significant level as identified in the EIR. The Board has imposed Mitigation Measures 3.13-1 on the Guidelines as a condition of approval and implementation will be monitored through the MMRP.

Impact 3.13-2: Implementation of the proposed Guidelines could result in the generation of excessive groundborne vibration or groundborne noise levels.

In response to the proposed Guidelines, Contractors might need to take certain actions to comply with the proposed Guidelines. Actions may include construction and operation of small water treatment facilities (approximately the size of a small shed) likely located adjacent to the Friant-Kern Canal right-of-way, or installation of water quality monitoring stations located in the Friant-Kern Canal itself. It is also possible that some actions could occur in areas within Contractors' boundaries. Construction activities would typically take place during daylight hours when construction-related noise increases would be smaller than those during nighttime hours. Given the limited size of actions, the short-term and intermittent nature of construction activities, and the fact that most actions would likely occur far from residential areas and other sensitive receptors during the day (as discussed in Impact 3.13-1), construction activities are not likely to result in the generation of excessive groundborne vibration or groundborne noise levels. Operational and maintenance activities would be similar to existing conditions and would not result in the generation of excessive groundborne noise levels in the study area.

Mitigation Measure 3.13-2: Implement Mitigation Measure 3.13-1 (see above).

Findings for Impact 3.13-2: Implementation of Mitigation Measure 3.13-2, or equally effective measures, would reduce the potential impact related to exposure of noise-sensitive receptors to excessive groundborne vibration or noise levels from construction of actions to a less-than-significant level because construction equipment would be located as far away as possible from noise-sensitive receptors to the extent feasible, construction equipment would be maintained to manufacturers' recommended specifications, and idling of construction equipment would be limited to the extent feasible. Pursuant to Public Resources Code Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), the Board finds that changes or alterations have been required in, or incorporated into, the Guidelines which will avoid this significant effect or mitigate it to a less than significant level as identified in the EIR. The Board has imposed Mitigation Measures 3.13-2 on the Guidelines as a condition of approval and implementation will be monitored through the MMRP.

4.1.4 Tribal Cultural Resources

Impact 3.15-1: Implementation of the proposed Guidelines could cause a substantial adverse change in the significance of a tribal cultural resource, as defined in PRC Section 21074.

in response to the proposed Guidelines, Contractors might need to take certain actions to comply with the proposed Guidelines. Actions may include construction and operation of small water treatment facilities (approximately the size of a shed) likely located within or adjacent to the Friant-Kern Canal right-of-way, or installation of water quality monitoring stations located in the Friant-Kern Canal itself. It is also possible that some actions could occur in areas within Contractors' boundaries. Potential construction of small water treatment facilities could involve ground disturbance and may also affect the biological resources community, visual setting, noise levels, and air quality, among other resources. Such activities are the type that have the potential to affect tribal cultural resources through their partial or complete destruction, introduction of new visual elements to landscapes associated with or composing tribal cultural resources and impacts on biological resources associated with or composing tribal cultural resources. Construction of small water treatment facilities could partially or completely destroy archaeological resources that may compose tribal cultural resources or could result in as-yet-unidentified impacts on tribal cultural resources if construction were to occur on undisturbed land.

Implement Mitigation Measures 3.6-2a, 3.6-2b, 3.6-2c, 3.6-2d, and 3.6-3. (See above under 4.1.2 Cultural Resources).

Findings for Impact 3.15-1: Implementation of Mitigation Measure 3.6-2a would require for construction-related activities consultation with California Native American Tribes, as well as identification and evaluation of archaeological resources, including any that may qualify as tribal cultural resources. Mitigation Measure 3.6-2b would require additional consultation with California Native American Tribes regarding avoidance of any indigenous archaeological resources, and if avoidance is not feasible, development and implementation of an archaeological resources management plan for the archaeological resources that would be affected. Implementation of Mitigation Measure 3.6-2c would require a cultural resources awareness training for construction personnel involved in ground-disturbing activities, and Mitigation Measure 3.6-2d would require implementation of a protocol for assessment and treatment, including consultation with California Native American Tribes, if the resource is indigenous, of any potential archaeological resources identified during construction activities. Mitigation Measure 3.6-3 would require implementation of a protocol for assessment and treatment of any potential human remains, including any that may be Native American in origin and may constitute a tribal cultural resource, identified during construction activities. Implementation of Mitigation Measures 3.6-2a through 3.6-2d and 3.6-3, or equally effective measures, would reduce any potential impacts on tribal cultural resources associated with construction of actions by Contractors in response to the proposed Guidelines to a less-than-significant level. Pursuant to Public Resources Code Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), the Board finds that changes or alterations have been required in, or incorporated into, the Guidelines which will avoid this significant effect or mitigate it to a less than significant level as identified in the EIR. The Board has imposed Mitigation Measures 3.15-1on the Guidelines as a condition of approval and implementation will be monitored through the MMRP.

5. ENVIRONMENTAL EFFECTS FOUND TO BE LESS THAN SIGNIFICANT OR HAVE NO IMPACT

This section identifies impacts of the project that are less than significant or would have no impact, and do not require mitigation measures. Based on information in the EIR, the Board finds that based upon substantial evidence in the record, the following impacts have been determined to be less than significant or no impact: aesthetics; agriculture and forestry resources; air quality; biological resources, energy resources; geology, soils and paleontological resources; greenhouse gas (GHG) emissions; hazards and hazardous materials; hydrology and water quality; land use and planning; mineral resources; population and housing; public services; recreation; transportation; utilities and service systems; and wildfire.

5.1 AESTHETICS

Impact 3.2-1: Implementation of the proposed Guidelines could have a substantial adverse effect on a scenic vista.

While construction could have an adverse effect on a scenic vista, construction would be short term and within a limited footprint. Given the limited size of potential facilities and the existing land uses in the study area, potential actions are not likely to have a substantial adverse effect on a scenic vista. Operational and maintenance activities, such as water meter installation and water mixing, would be

similar to existing conditions and would not significantly change the visual character of the Friant-Kern Canal or the surrounding viewsheds.

Findings for Impact 3.2-1: The Board finds that, based upon substantial evidence in the record, the potential impact on a scenic vista is less than significant and no mitigation measures are required.

Impact 3.2-2: Implementation of the proposed Guidelines could substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

County goals and policies are in place in the study area to protect scenic resources such as trees, rock outcroppings, and historic buildings within a state scenic highway. Construction activities and features and operational and maintenance activities would be implemented under the guidance of these general plan goals and policies.

Findings for Impact 3.2-2: The Board finds that, based upon substantial evidence in the record, the potential impact on scenic resources is less than significant and no mitigation measures are required.

Impact 3.2-3: Implementation of the proposed Guidelines could, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. In an urbanized area, implementation of the proposed Guidelines could conflict with applicable zoning and other regulations governing scenic quality.

Constructed facilities would have a limited size and are likely to be installed near existing water supply facilities, in primarily agricultural areas. Actions would not conflict with existing zoning or other regulations governing scenic quality in urban areas, given the limited size of potential facilities and the largely rural location of the Friant-Kern Canal and adjacent study area. Operational and maintenance activities and Friant actions (metering and water mixing) would be similar to existing conditions. They are not likely to substantially degrade the existing visual character and quality of public views of the site and its surroundings.

Findings for Impact 3.2-3: The Board finds that, based upon substantial evidence in the record, the potential impact on the visual character or quality of public views of the site and its surroundings is less than significant and no mitigation is required.

Impact 3.2-4: Implementation of the proposed Guidelines could create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Construction and operation of small water treatment facilities would likely occur away from residential areas and other areas with views and would typically take place during daylight hours. Given the limited size and scale of facilities and the general protection measures provided by local goals and policies, there would not have an adverse effect on day or nighttime views in the area.

Findings for Impact 3.2-4: The Board finds that, based upon substantial evidence in the record, the potential impact on the creation of substantial light or glare that would adversely affect day or nighttime views is less than significant and no mitigation measures are required.

5.2 AGRICULTURE AND FORESTRY RESOURCES

Conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production; or result in loss of forest land or conversion of forest land to non-forest use.

The study area is not located in forested areas or areas zoned as forest land, timberland, or timberland zoned Timberland Production.

Findings: The Board finds that, based upon substantial evidence in the record, no impact would occur related to conflicts with the existing zoning of forest land, timberland, or timberland zoned Timberland Production.

Impact 3.3-1: Implementation of the proposed Guidelines could convert Farmland to nonagricultural use or conflict with a Williamson Act contract or zoning for agricultural use.

Temporary construction activities associated with potential future actions are not likely to result in the permanent conversion of Farmland to nonagricultural use, given their limited size. Operational and maintenance activities would be similar to existing conditions and would not result in conversion of Farmland to nonagricultural use or conflict with a Williamson Act contract or zoning for agricultural use. The proposed Guidelines would serve agricultural and domestic interests by protecting water quality in the Friant-Kern Canal for sustained use.

Findings for Impact 3.3-1: The Board finds that, based on substantial evidence in the record, potential conflicts with Williamson Act contract or zoning for agricultural use is less than significant and no mitigation measures are required.

Impact 3.3-2: Implementation of the proposed Guidelines could involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use.

The proposed Guidelines would serve agricultural and domestic interests by protecting water quality for sustained use. Actions taken would be considered consistent uses of the agricultural zones and would not result in the conversion of Farmland given that facilities would be of limited size. Also, they are likely to be installed near existing water supply facilities that are in developed or disturbed areas and that are not actively farmed. Operational and maintenance activities would be similar to existing conditions.

Findings for Impact 3.3-2: The Board finds that, based on substantial evidence in the record, potential conversion of Farmland to nonagricultural use is less than significant impact and no mitigation measures are required.

5.3 AIR QUALITY

Impact 3.4-1: Implementation of the proposed Guidelines could conflict with or obstruct implementation of the applicable air quality plan.

Construction and operational activities would be required to comply with existing rules and regulations, including the San Juaquin Valley Air Pollution Control District (SJVAPCD) air quality management plans, and applicable general plans. Additionally, the nature of the construction activities are small, short-term, and temporary. Therefore, the potential actions would be consistent with SJVAPCD's and state regulations and would not conflict with or obstruct implementation of the air quality plans.

Findings for 3.4-1: The Board finds that, based on substantial evidence in the record, the potential to conflict with or obstruct implementation of the applicable air quality plan is less than significant and no mitigation measures are required.

Impact 3.4-2: Implementation of the proposed Guidelines 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.

Short-term, temporary construction activities could temporarily emit pollutants (e.g., small water treatment facilities, water quality monitoring stations); however, it is anticipated that any emissions would not result in a cumulatively considerable net increase.

Findings for 3.4-2: The Board finds that, based on substantial evidence in the record, the potential for a cumulatively considerable net increase of any criteria pollutant is less than significant and no mitigation measures are required.

Impact 3.4-3: Implementation of the proposed Guidelines could expose sensitive receptors to substantial pollutant concentrations.

Construction activities would not expose sensitive receptors to substantial pollutant concentrations given the temporary nature of construction and the small size of the potential projects, and it is anticipated that any emissions would not result in substantial pollutant concentrations.

Findings for 3.4-3: The Board finds that, based on substantial evidence in the record, the potential to expose sensitive receptors to substantial pollutant concentrations is less than significant and no mitigation measures are required.

Impact 3.4-4: Implementation of the proposed Guidelines could result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Given the types of potential actions anticipated to be implemented in response to the proposed Guidelines and the rural locations of these potential actions, it is anticipated that any emissions would not create objectionable odors adversely affecting a substantial number of people.

Findings for 3.4-4: The Board finds that, based on substantial evidence in the record, the potential for emissions (such as those leading to odors) adversely affecting a substantial number of people is less than significant and no mitigation measures are required.

5.4 BIOLOGICAL RESOURCES

Conflict with the provisions of an adopted HCP, natural community conservation plan, or other approved local, regional, or state HCP.

Although the study area lies within the boundaries of the Pacific Gas and Electric Company (PG&E) Operation and Maintenance Habitat Conservation Plan area (O&M HCP), the construction activities that could be conducted by Contractors in response to the proposed Guidelines are not covered activities under the PG&E O&M HCP, which is applicable only to PG&E facilities.

Findings: The Board finds that, based upon substantial evidence in the record, no impact would occur related to conflicts with provisions of adopted HCPs and no mitigation measures are required.

Impact 3.5-4: Implementation of the proposed Guidelines could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Water quality monitoring stations would be installed within the Friant-Kern Canal. Wildlife corridors for terrestrial wildlife species could be affected during installation of new small water treatment facilities located adjacent to or near the Friant-Kern Canal or other areas within Contractors' boundaries. The installation of new small water treatment facilities could affect the ability of wildlife to move between areas that are important for different life history functions, such as reproduction and feeding behaviors. Most of the impacts from construction on the movement of wildlife would be temporary. There could be a longer-term impact on local and migratory movement of wildlife if existing vegetation within a wildlife migratory corridor is permanently removed. The small scale of development associated with the individual new water treatment facilities greatly reduces the likelihood that they would have a substantive effect on migration and movement of terrestrial wildlife. General operational activities necessary to support the functionality of constructed facilities would primarily include regularly scheduled inspections and evaluation of facility performance. The level of activity associated with operations and maintenance would be similar to existing conditions and would not adversely affect migration or movement conditions for wildlife.

Findings for Impact 3.5-4: The Board finds that, based upon substantial evidence in the record, the potential impact to interference with wildlife movement is less than significant and no mitigation measures are required.

5.5 CULTURAL RESOURCES

Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5; or disturbance of human remains.

Operational and maintenance-related activities associated with actions that could be implemented by Contractors in response to the proposed Guidelines would be similar to existing conditions with respect to archaeological resources and human remains. Therefore, these are not the types of activities with potential to cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.

Findings for Cultural Resources: The Board finds that, based upon substantial evidence in the record, no impact would occur related to a substantial change of archaeological resources pursuant to CEQA Guidelines Section 15064.5 associated with operation and maintenance activities and no mitigation measures are required.

5.6 ENERGY

Impact 3.7-1: Implementation of the proposed Guidelines could result in the wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.

The amount of time needed for construction would likely range from as short as a few days to a couple of weeks. Therefore, energy use for construction of potential actions would be temporary and minimal compared to the total amount of direct and indirect energy used in the study area. It is assumed that any additional operational energy demand would be similar to existing conditions and would not be anticipated to result in a substantial increase in energy use over existing conditions. Given the nature of construction and operations, it is anticipated that energy use would be efficient and minimal and would not result in wasteful, inefficient, or unnecessary consumption of energy resources.

Findings for Impact 3.7-1: The Board finds that, based on substantial evidence in the record, the potential for wasteful, inefficient, or unnecessary consumption of energy resources is less than significant and no mitigation measures are required.

Impact 3.7-2: Implementation of the proposed Guidelines could conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Energy use for construction activities would be temporary and minimal compared to the total amount of direct and indirect energy used in the study area. Energy use for operations and maintenance would not be anticipated to result in a substantial increase in energy use over existing conditions and would be efficient. Therefore, it is not anticipated to conflict with or obstruct state and local plans for renewable energy or energy efficiency.

Findings for 3.7-2: The Board finds that, based on substantial evidence in the record, the potential to conflict with or obstruct a state or local plan for renewable energy or energy efficiency is less than significant and no mitigation measures are required.

5.7 GEOLOGY AND SOILS AND PALEONTOLOGY

Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

None of the proposed actions would involve construction of habitable structures that could require the use of septic tanks.

Findings: The Board finds that, based upon substantial evidence in the record, no impact would occur related to the use of septic tanks or alternative wastewater disposal systems and no mitigation measures are required.

Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.

The soil conditions throughout the study area vary widely. Soil expansion generally occurs in finegrained clayey sediments, which could be present within the study area. However, no new homes or businesses are proposed that would pose substantial direct or indirect risks to life or property due to potential effects of expansive soils on such occupancies.

Findings: The Board finds that, based upon substantial evidence in the record, no impact would occur related to expansive soil and no mitigation measures are required.

Impact 3.8-1: Implementation of the proposed Guidelines could directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death due to fault rupture, strong seismic ground shaking, seismic-related ground failure or landslides.

The study area is located in a moderately active seismic area, however the risk of ground failure due to fault rupture is considered low because no active faults are known to cross the study area. Seismic-related liquefaction is not expected for most of the study area due to the deep groundwater table. Because potential water treatment facilities would be small it is assumed that any required excavation would be minor and would not encounter shallow groundwater, and therefore would not be subject to liquefaction associated with a seismic event. The study area is not located in or near areas at-risk for landslides, nor would any actions involve the construction of habitable structures.

Findings for Impact 3.8-1: The Board finds that, based on substantial evidence in the record, the potential to cause direct or indirect substantial adverse effects due to fault rupture, strong seismic ground shaking, seismic-related ground failure or landslides is less than significant and no mitigation measures are required.

Impact 3.8-2: Implementation of the proposed Guidelines could result in substantial soil erosion or the loss of topsoil.

Because potential facilities would be small, ground disturbance associated with construction activities would be minor and associated soil erosion and potential loss of topsoil would also be minor. Further, disturbance of one acre or more during construction would be subject to the requirements of the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharge Associated with Construction and Land Disturbance Activities (Construction General Permit). Operational and maintenance activities would be similar to existing conditions and also would not result in substantial soil erosion or loss of topsoil.

Findings for3.8-2: The Board finds that, based on substantial evidence in the record, the potential to result in substantial soil erosion or the loss of topsoil is less than significant and no mitigation measures are required.

Impact 3.8-3: Implementation of the proposed Guidelines could be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

Potential facilities could be located in areas subject to the potential effects of unstable soil. However, new facilities would not require extensive construction, or any soil-excavation. The study area is not located in any known landslide-prone areas and is located in relatively stable soil; and therefore would not be subject to the damaging effects of these hazards.

Findings for Impact 3.8-3: The Board finds that, based on substantial evidence in the record, the potential for facilities to be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse is less than significant and no mitigation measures are required.

Impact 3.8-4: Implementation of the proposed Guidelines could directly or indirectly destroy a unique paleontological resource or site or unique geologic features.

Given that potential water treatment facilities would be small, and any required excavation would be minor and the majority of the study area is already located in a highly disturbed landscape, the potential to destroy a unique paleontological resource or a unique geologic feature would be minimal.

Findings for Impact 3.8-4: The Board finds that, based on substantial evidence in the record, the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic features is less than significant and no mitigation measures are required.

5.8 GREENHOUSE GAS EMISSIONS

Impact 3.9-1: Implementation of the proposed Guidelines could generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

Construction equipment exhaust, as required by certain Contractor actions, haul trips, and construction worker commuting associated with these construction activities could generate GHG emissions. Operational and maintenance-related emissions would be similar to existing conditions and therefore would not be anticipated to result in an increase in any long-term or permanent GHG emissions. Construction GHG emissions will be determined using the California Emissions Estimator Model (CalEEMod) to determine if emissions would be less than the 1,100 metric tons of carbon dioxide equivalent (MTCO2e) threshold established by Sacramento Metropolitan Air Quality Management

District (SMAQMD). Operational and maintenance-related emissions would also be quantified to ensure additional electricity demand does not increase GHG emissions under existing conditions. It is anticipated that any emissions would not generate substantial GHG emissions beyond the approved quantitative threshold.

Findings for Impact 3.9-1: The Board finds that, based on substantial evidence in the record, the potential to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment is less than significant and no mitigation measures are required.

Impact 3.9-2: Implementation of the proposed Guidelines could conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Short-term, temporary construction activities could result in GHG emissions. The quantitative significance threshold developed by SMAQMD is considered sufficient to meet the state's GHG emission reduction goals as outlined in the applicable plans, policies and regulations and reduction goals set by AB 32, SB 32, the Scoping Plan, and Executive Orders. Detailed characteristics of potential actions would be used to quantify GHG emissions to determine whether the action would generate GHG emissions that may conflict with an applicable GHG plan, policy, or regulation. Operational and maintenance-related emissions should also be quantified to ensure additional electricity demand does not increase GHG emissions under existing conditions. It is anticipated that emission estimates would not generate substantial GHG emissions beyond the approved quantitative threshold.

Findings for 3.9-2: The Board finds that, based on substantial evidence in the record, the potential to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases is less than significant and no mitigation measures are required.

5.9 HAZARDS AND HAZARDOUS MATERIALS

Result in a safety hazard or excessive noise for people residing or working in the study area within 2 miles of an airport.

Potential actions would be of limited size, and construction activities would be of short-term duration and would require nominal construction personnel. Furthermore, no occupied structures would be constructed. Therefore, there would be no people residing or working in the study area that would be exposed to a safety hazard or excess noise levels.

Findings: The Board finds that, based upon substantial evidence in the record, no impact would occur related to a safety hazard or excessive noise for people residing or working in the study area within 2 miles of an airport and no mitigation measures are required.

Impact 3.10-1: Implementation of the proposed Guidelines 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.

Facilities would be of limited size and construction activities would be short-term and intermittent, the likelihood of creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials in the study area during construction is low. Numerous laws and regulations govern the transport, use, storage, handling and disposal of hazardous materials to reduce the potential hazards associated with these activities. Compliance with existing regulatory requirements would minimize the risk of accidental release of hazardous materials.

Findings for Impact 3.10-1: The Board finds that, based on substantial evidence in the record, the potential to create a hazard to the public or the environment, or be located within one-quarter mile of a school is less than significant and no mitigation measures are required.

Impact 3.10-2: Implementation of the proposed Guidelines could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Construction activities would be required to comply with applicable laws and regulations governing the use, transport, storage, and disposal of small amounts of hazardous materials to minimize risks of release of hazardous materials. Valley fever fungi are known to be present year-round in soils in the study area. Construction activities could involve soil-disturbing activities that could release fungal spores into the area. However, because potential water treatment facilities would be small (size of a small shed), ground disturbance associated with construction activities would be minor and would generate less dust than the intensive, agricultural operations that routinely occur throughout the region. All activities are required to comply with applicable rules and regulations consistent with SJVAPCD and State regulations that address fugitive dust. Operational and maintenance activities would be similar to existing conditions and would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Findings for Impact 3.10-2: The Board finds that, based on substantial evidence in the record, the potential for creation of a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment is less than significant and no mitigation measures are required.

Impact 3.10-3: Implementation of the proposed Guidelines could be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard to the public or the environment.

Five hazardous materials sites are located within 0.5 miles of the Friant-Kern Canal. Other sites might be located in other parts of the study area, including within the Contractor boundaries. Construction activities could be located on or near hazardous materials sites that have been included on the Cortese List, which could result in the risk of creating a significant hazard to the public or environment associated with the potential exposure of contaminated soil and/or groundwater. Laws governing the use, transportation, storage, and disposal of hazardous materials would apply to actions proposed on or near Cortese List sites. In addition, sites listed on the Cortese List are under the jurisdiction of a regulatory agency (e.g., Central Valley Regional Water Board, Fresno/Tulare/Kern County, or a local agency). As such, the overseeing regulatory agency requires the owners/operators of listed sites to bring their sites into compliance.

Findings for Impact 3.10-3: The Board finds that, based on substantial evidence in the record, the potential for creating a significant hazard to the public or the environment as a result of being located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 is less than significant and no mitigation measures are required.

Impact 3.10-4: Implementation of the proposed Guidelines could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Construction activities could temporarily increase vehicular traffic in the study area, but this increase would be limited given the small scale of the water treatment facilities or water quality monitoring

stations that may be constructed. Although this traffic could affect emergency access, the constructionrelated increase in vehicle traffic would be minor and would not substantially affect response times. It is not anticipated that construction work would occur within public roadways, meaning that emergency vehicle access would be preserved. Operational and maintenance activities would be similar to existing conditions and would not result in inadequate emergency access.

Findings for Impact 3.10-4: The Board finds that, based on substantial evidence in the record, the potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan is less than significant and no mitigation measures are required.

Impact 3.10-5: Implementation of the proposed Guidelines could expose people or structures, either directly or indirectly, to significant risk of loss, injury, or death involving wildland fires.

The study area generally has a low potential for wildfire and the topography in the area is generally level. There are locations where the study area traverses through moderate and high Fire Hazard Severity Zones in State Responsibility Areas, although there are no areas in or near very high Fire Hazard Severity Zones. No occupied structures would be built that could be exposed to wildfire risks. Construction activities, including the use of construction equipment and the possible temporary on-site storage of fuels and/or other flammable construction chemicals, could pose an increased fire risk resulting in injury to workers or the public. However, construction activities would be of limited size and duration. Additionally, construction activities would be required to comply with State and local regulations for fire protection, such as the California Fire Code, and chemical manufacturer requirements, which would minimize the potential for fire hazards.

Findings for 3.10-5: The Board finds that, based on substantial evidence in the record, the potential to expose people or structures, either directly or indirectly, to significant risk of loss, injury, or death involving wildland fires is less than significant and no mitigation measures are required.

5.10 HYDROLOGY AND WATER QUALITY

Impact 3.11-1: Implementation of the proposed Guidelines could violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

Construction activities could involve minor excavation, grading, or other ground-disturbing activities that could expose and disturb small areas. The construction period would be of short duration, ranging from as little as a few days to as much as a couple of weeks. Operational and maintenance-related activities would be similar to existing conditions, and thus would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Given the types of potential actions anticipated, it is not anticipated that surface and groundwater quality standards would be violated, and surface and groundwater quality would not be degraded. Additionally, the proposed Guidelines would require that water quality be monitored according to the in-prism water quality thresholds, further ensuring that there would not be a violation of existing water quality standards (i.e., basin plans) that would otherwise substantially degrade surface and groundwater quality in the Friant-Kern Canal for sustained use; therefore, the proposed Guidelines may improve water quality in the study area.

Findings for Impact 3.11-1: The Board finds that, based on substantial evidence in the record, the potential to violate any water quality standards or waste discharge requirements or otherwise

substantially degrade surface or groundwater quality is less than significant and no mitigation measures are required.

Impact 3.11-2: Implementation of the proposed Guidelines could substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

Excavation associated with construction of these small facilities would be minor and would not be anticipated to reach groundwater in the shallow aquifer (groundwater is well below the depth of any minor foundation that may be constructed); therefore, dewatering would not be anticipated to be required. Operational and maintenance-related activities associated with potential actions would be similar to existing conditions, and thus would not substantially decrease groundwater supplies or interfere with groundwater recharge.

To account for the "leave behind" water that a Contractor may be required to provide, the Contractor may seek alternative water supplies as part of the Contractor's overarching water portfolio management. Additionally, implementation of the proposed Guidelines, and water quality threshold management required for Non-Millerton water introduced into the Friant-Kern Canal, could reduce water supply deliveries via the Cross Valley Canal Intertie (approximately 400 acre-feet total on average), resulting in Contractors needing to seek alternative water supplies as part of Contractors' overarching water portfolio management. If a Contractor chose to utilize groundwater as an alternative supply, groundwater pumping would need to meet all Sustainable Groundwater Management Act (SGMA) requirements as guided by the subbasin's Groundwater Sustainability Plan (GSP) and require avoidance of undesirable results as defined by the applicable GSPs for the subbasin(s) in the study area. Therefore, potential increased groundwater pumping associated with implementation of the proposed Guidelines would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the proposed Guidelines would impede sustainable groundwater management of the basin.

Findings for Impact 3.11-2: The Board finds that, based on substantial evidence in the record, the potential to substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin is less than significant and no mitigation measures are required.

Impact 3.11-3: Implementation of the proposed Guidelines could alter existing drainage patterns.

Construction activities over these small footprints could include establishment and use of staging areas and access and haul roads (paved or unpaved), site preparation activities, and construction site restoration/demobilization. New facilities could introduce new impervious surface cover that could alter drainage patterns; however, because footprints would be small, any associated increase in runoff or change in drainage patterns would not be anticipated to result in substantial erosion or siltation on- or off-site, increase the rate or amount of surface runoff, create or contribute runoff water, or impede or redirect flood flows. Operational and maintenance-related activities would be similar to existing conditions, and thus would not alter existing drainage patterns.

Findings for Impact 3.11-3: The Board finds that, based on substantial evidence in the record, the potential to significantly alter existing drainage patterns is less than significant and no mitigation measures are required.

Impact 3.11-4: Implementation of the proposed Guidelines in flood hazard, tsunami, or seiche zones could risk releases of pollutants due to project inundation.

The study area is not located in a tsunami or seiche zone but is designated on FEMA's current FIRM as being within several flood hazard areas: Zone A, Zone AO, Zone AE, Zone X, and Zone IO-IC. It is anticipated that small amounts of fuels and lubricants would be used during construction and operational activities, but this would not result in risk of release of pollutants due to inundation. Additionally, implementation of a state required Stormwater Pollution Prevention Plan (SWPPP) would further reduce the potential for a release of pollutants. Furthermore, any impervious surface cover would be minimal and would not contribute to increased flooding. Operational and maintenance-related activities would be similar to existing conditions and would not include the storage or use of contaminants.

Findings for Impact 3.11-4: The Board finds that, based on substantial evidence in the record, the potential for risk of release of pollutants due to inundation because of being located in flood hazard, tsunami, or seiche zones is less than significant and no mitigation measures are required.

Impact 3.11-5: Implementation of the proposed Guidelines could conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Construction and operational activities are not anticipated to violate any water quality standards that would otherwise degrade surface and groundwater quality or impede sustainable groundwater management of the basin. Therefore, no potential to conflict with or obstruct implementation of the applicable water quality control plan (i.e., the Tulare Lake Basin Plan) or the GSPs for the applicable subbasin(s) in the study area would occur. The proposed Guidelines would serve agricultural and domestic interests by protecting water quality in the Friant-Kern Canal for sustained use; therefore, the proposed Guidelines may improve water quality and contribute toward sustainable groundwater management in the study area.

Findings for Impact 3.11-5: The Board finds that, based on substantial evidence in the record, the potential to conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan is less than significant and no mitigation measures are required.

5.11 LAND USE AND PLANNING

Impact 3.12-1: Implementation of the proposed Guidelines could conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Land uses in the study area are primarily agricultural and rural residential. The proposed Guidelines are consistent with these uses because they are intended to protect water quality in the Friant-Kern Canal for sustained use and would serve agricultural and domestic interests. Potential facilities also would not conflict with land uses because they would be of limited size and construction activities would be short-term and temporary. Operational and maintenance activities would be similar to existing conditions. Further, pursuant to Government Code Section 53091(e), the location or construction of facilities for the production, generation, storage, treatment, or transmission of water by a special district is not subject to the zoning ordinance of the county in which the project would be located.

Findings for Impact 3.12-1: The Board finds that, based on substantial evidence in the record, the potential for conflicts with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect is less than significant and no mitigation measures are required.

5.12 MINERAL RESOURCES

There are no mines in the study area. The study area does pass through a mineral resource zone in Tulare County or near a mineral resource zone in Kern County; no mineral resource zones are in the

portions of the study area that passes-through Fresno County. However, due to their limited size and temporary nature, construction activities associated with potential actions taken by Contractors in response to the proposed Guidelines (such as the establishment of staging areas, use of access and haul roads, site preparation, construction of features, site restoration and/or demobilization, and disposal of excess materials) for potential action to meet the water quality thresholds in the proposed Guidelines (such as small water treatment facilities or water quality monitoring stations) would not be substantial enough to result in a loss of access to known mineral resource deposits in the study area, or make access more difficult. The implementation of the proposed Guidelines could result in Friant installing small water quality monitoring stations to the Friant-Kern Canal but would not result in Friant making any substantial physical modifications to the Friant-Kern Canal that could result in the loss of a known mineral resources or the availability of locally important mineral resource recovery sites.

Findings for Mineral Resources: The Board finds that, based upon substantial evidence in the record, no impact would occur related to mineral resources and no mitigation measures are required.

5.13 POPULATION AND HOUSING

Construction activities would be limited in size and duration and would require nominal construction personnel. Furthermore, operation and maintenance of such activities would not be anticipated to result in the need for new employees over current conditions. Because of the limited amount of work that would be required during construction, and because the proposed Guidelines would not require a substantial workforce, no new homes, businesses, or public roads would be constructed, and the proposed Guidelines would not have a significant effect on the local workforce. Furthermore, construction is anticipated to occur in the largely rural location of the Friant-Kern Canal and adjacent study area, and would not result in the demolition of homes or displacement of people, necessitating replacement homes elsewhere. Introducing Non-Millerton water into the Friant-Kern Canal provides a supplemental source of water to meet existing and new water demands for farms and residents in the Central Valley. However, population in the study area would develop consistent with the overall framework for growth and development planned in the existing General Plans for the study area. Therefore, the proposed Guidelines would not remove an impediment to growth or result in population beyond that planned by local jurisdictions.

Findings for Population and Housing: The Board finds that, based upon substantial evidence in the record, no impact would occur related to population and housing and no mitigation measures are required.

5.14 PUBLIC SERVICES

There would be no construction of new facilities, housing, or other land uses that could increase the local population that could result in demand for governmental facilities and services, such as fire protection, police protection, schools, or parks over those that currently exist. Therefore, implementation of the proposed Guidelines would not affect response times or other performance objectives for public services and would not require construction of new or altered facilities that could result in a significant environmental impact.

Findings for Population and Housing: The Board finds that, based upon substantial evidence in the record, no impact would occur related to public services and no mitigation measures are required.

5.15 RECREATION

The proposed Guidelines would not involve an increase in population compared to the current population. Therefore, there would be no increased use of recreational facilities that could result in a substantial deterioration or the need to construct new or expand existing recreational facilities.

Findings for Recreation: The Board finds that, based upon substantial evidence in the record, no impact would occur related to recreation and no mitigation measures are required.

5.16 TRANSPORTATION

Impact 3.14-1: Implementation of the proposed Guidelines could conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Construction activities could include mobilization of off-road equipment and materials and transportation of construction personnel. These activities would add temporary and limited construction vehicle traffic to primarily rural roadways in and around the study area. Potential actions, such as the construction of small water treatment facilities (approximately the size of a shed) or of water quality monitoring stations such as wall-mounted racks, freestanding racks, enclosed stations, compact stations, or floating platforms, would be of limited size and therefore would require limited equipment and personnel to construct. General rule-of-thumb estimates are that two-lane rural roadways have a capacity of at least 5,000 vehicles per day. Construction trips would require minimal temporary action-related traffic within the range of typical daily variation in traffic levels (usually on the order of ±5 percent or 250 vehicles if 5,000 vehicles per day were on the road) that might be expected on major roadways serving the study area. Therefore, temporary limited construction traffic that may occur is not likely to degrade conditions for transit, roadway, bicycle or pedestrian facilities, such that they would conflict with applicable programs, plans, ordinances, or policies addressing the circulation system for those areas.

Findings for Impact 3.14-1: The Board finds that, based on substantial evidence in the record, the potential for conflicts with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities is less than significant and no mitigation measures are required.

Impact 3.14-2: Implementation of the proposed Guidelines could conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

Tulare County adopted guidelines in June 2020 to determine the significance of transportation impacts. Tulare County's guidelines state that some projects are small enough that they can be presumed to have a less-than-significant transportation impact without doing a detailed vehicle miles traveled (VMT) analysis. For Tulare County, projects that generate fewer than 500 trips per day can be presumed to have a less-than-significant impact. Fresno and Kern counties have not finalized or adopted the regulations of SB 743; therefore, the 110 trips per day small-project screening criterion in the Governor's Office of Planning and Research (OPR) Technical Guidelines is used for this analysis. Potential construction activities would generate minimal temporary trips and operational and maintenance activities would be similar to existing conditions. Potential actions, such as the construction of small water treatment facilities approximately the size of a shed or water quality monitoring stations, would be of limited size and therefore would require limited equipment and personnel to construct. Therefore, daily passenger vehicle trips would be well below OPR's recommended small-project screening criterion threshold of 110 trips per day.

Findings for Impact 3.14-2: The Board finds that, based on substantial evidence in the record, the potential for conflicts or be inconsistencies with CEQA Guidelines Section 15064.3, subdivision (b) is less than significant and no mitigation measures are required.

Impact 3.14-3: Implementation of the proposed Guidelines could substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Neither construction or operational and maintenance activities would require permanent modifications to existing public roadways or other transportation infrastructure. The proposed Guidelines are intended to protect water quality in the Friant-Kern Canal for sustained use and would serve agricultural and domestic interests. Facilities would be of limited size (at most, the size of a shed) and associated construction activities would be limited in scope, short-term, and temporary. Operational and maintenance activities would be similar to existing conditions.

Findings for Impact 3.14-3: The Board finds that, based on substantial evidence in the record, the potential to substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) is less than significant and no mitigation measures are required.

Impact 3.14-4: Implementation of the proposed Guidelines could result in inadequate emergency access.

Construction activities could temporarily increase vehicular traffic in the study area; however, this increase would be limited, given the small scale of the water treatment facilities or water quality monitoring stations that may be constructed. Although this traffic could affect emergency access, the construction-related increase in vehicle traffic would be minor and would not substantially affect response times. It is not anticipated that construction work would occur within public roadways, meaning that emergency vehicle access would be preserved. Operational and maintenance activities would be similar to existing conditions and would not result in inadequate emergency access.

Findings for Impact 3.14-4: The Board finds that, based on substantial evidence in the record, the potential to result in inadequate emergency access is less than significant and no mitigation measures are required.

5.17 UTILITIES AND SERVICE SYSTEMS

Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the action's projected demand in addition to the provider's existing commitments.

Construction activities could temporarily generate wastewater at the construction site. However, generation of wastewater during construction activities would be negligible because such activities would be short-term, ranging from as short as a few days to as long as a couple of weeks. All wastewater generated on site would be collected and disposed of in accordance with state and federal regulations and would cease once construction is complete. Operational and maintenance activities would be similar to existing conditions and would not cause an increase in wastewater.

Findings: The Board finds that, based upon substantial evidence in the record, there would not be a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the action's projected demand in addition to the provider's existing commitments; therefore, no impact would occur and no mitigation measures are required.

Impact 3.16-1: Implementation of the proposed Guidelines could require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

Construction activities could involve the use of small amounts of water during construction for dust suppression. Water needed during construction may be taken from the Friant-Kern Canal from willing sellers, groundwater, or it may be trucked in from outside sources. The amount of water that would be required for construction would be negligible and would not require the relocation or construction of new or expanded water facilities. Similarly, construction activities could also involve minor wastewater generation from certain construction activities. All wastewater generated on-site would be collected and disposed of in accordance with state and federal regulations and would cease once construction is complete. Therefore, no local wastewater treatment or collection systems would be affected.

Because of the small scale of potential facilities, the relocation of stormwater drainage features or power/natural gas/telecommunication facilities would not be required. Proposed facilities would have limited footprints and the duration of construction activities would be short-term (a few days to a couple of weeks), potential impacts associated with relocation of utility lines would be nominal. Furthermore, the construction and operation of the small-scale facilities would also not be anticipated to result in the need to construct new or expand existing utilities.

Findings for Impact 3.16-1: The Board finds that, based on substantial evidence in the record, the potential to require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects is less than significant and no mitigation measures are required.

Impact 3.16-2: Implementation of the proposed Guidelines would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

Construction activities could involve the use of small amounts of water for dust suppression that could be supplied from the Friant-Kern Canal from willing sellers, groundwater, or trucked in from outside sources. However, construction water demand would be negligible, and operational and maintenance activities would be similar to existing conditions.

Findings for Impact 3.16-2: The Board finds that, based on substantial evidence in the record, the potential for there being insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years is less than significant and no mitigation measures are required.

Impact 3.16-3: Implementation of the proposed Guidelines could generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, and would comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Construction activities may temporarily cause an increase in solid waste generation in the study area, such as from construction-related debris from demolition or leftover materials. However, due to the small scale of the potential activities and proper waste management, solid waste would not be created in excess of state or local standards or in excess of the capacity of local infrastructure or impair the attainment of solid waste reduction goals. The generation of solid waste from potential construction

activities would have a negligible impact on the permitted capacity at landfills within the study area given the current available landfill capacities. Operational and maintenance activities would be similar to existing conditions and would not generate new volumes of solid waste.

Findings for Impact 3.16-3: The Board finds that, based on substantial evidence in the record, the potential to generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, and would comply with federal, state, and local management and reduction statutes and regulations related to solid waste is less than significant and no mitigation measures are required.

5.18 WILDFIRE

The study area generally has a low potential for wildfire and the topography in the area is generally level. There are locations where the study area traverses through moderate and high Fire Hazard Severity Zones in State Responsibility Areas, although there are no areas in or near very high Fire Hazard Severity Zones, which are the focus of the wildfire analysis in Appendix G of the CEQA Guidelines. Further, potential actions would not involve the construction or habitation of occupied structures that could be exposed to wildfire risks.

Findings for Wildfire: The Board finds that, based upon substantial evidence in the record, no impact would occur related to wildfire and no mitigation measures are required.

5.19 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Implementing of actions to meet the water quality thresholds in the proposed Guidelines could indirectly result in the commitment of nonrenewable natural resources used in the construction process and during operation and maintenance activities, including gravel, petroleum products, steel, and other materials. Actions could also result in the commitment of slowly renewable resources, such as wood products. Due to the small scale of proposed facilities, such as small water treatment facilities, earthmoving activities would not generate large amounts of construction waste and operations and maintenance activities also would not generate large amounts of waste. Implementing actions to meet the water quality thresholds in the proposed Guidelines could also result in the commitment of energy resources such as fossil fuels. Construction-related energy consumption would be temporary, occurring only during the construction period (ranging from as short as a few days to as long as a couple of weeks), and use would be minimal given the limited size of facilities. General operation and maintenance activities could require use of electricity for all processes, equipment, and operational lights. However, these activities would be similar to existing conditions and would not be anticipated to result in a substantial increase in energy use over existing conditions. Compliance with all applicable state, county, and local plans, policies, and regulations pertaining to energy standards would ensure that natural resources are conserved to the maximum extent possible. It is therefore concluded that the rate and amount of energy consumed during construction or operation and maintenance activities would not result in the unnecessary, inefficient, or wasteful use of resources, and that energy use would be accomplished in a manner consistent with applicable laws and regulations.

To the extent that actions implemented by Contractors in response to the proposed Guidelines (including small water treatment facilities) would be constructed in currently sensitive natural communities, the potential actions could result in an irreversible conversion of sensitive natural communities; however, temporary and/or permanent conversion would not be considered substantial due to the small size of the facilities and avoidance of such resources through project siting and through restoration of temporarily affected areas for construction areas associated with new water treatment facilities (see Impact 5.3-2 above).

It is not anticipated that actions constructed near agricultural land would result in the conversion of agricultural land nor would construction activities have the potential to result in accidental release of hazardous materials, which may lead to irreversible damage.

Findings for Irreversible and Irretrievable Commitments of Resources: The Board finds that, based upon substantial evidence in the record, the potential impact on irreversible effects is less than significant and no mitigation measures are required.

5.20 GROWTH INDUCING

The proposed Guidelines would not directly induce growth because they do not involve the development of new housing or job centers that would attract an additional population. Although implementation of the proposed Guidelines may include minor construction activities, those activities would be of limited size and duration (such as small water treatment facilities approximately the size of a shed or water quality monitoring stations such as wall-mounted racks, free-standing racks, enclosed stations, compact stations, or floating platforms) and would require nominal numbers of construction workers. Because of the limited amount of work that would be required at any given time, and because the proposed Guidelines would not require a substantial workforce, no new homes, businesses, or public roads would be constructed, and the proposed Guidelines would not require construction workers to relocate to the area or result in the need for additional operations or maintenance employees. The proposed Guidelines also would not increase the area available for development of housing or include infrastructure that could indirectly induce growth. Therefore, the proposed Guidelines would not directly induce growth.

The proposed Guidelines would not indirectly induce growth because construction and maintenance activities would not require a substantial workforce and would not require relocation of employees to the area. No new homes or businesses would need to be constructed. Introduction of Non-Millerton water into the Friant-Kern Canal would provide a supplemental source of water to meet existing and new water demands for farmland and people in Central California; however, population in the study area would develop consistent with the overall framework for growth and development planned in the existing general plans for the study area.

The proposed Guidelines would not remove an impediment to growth or result in indirect population growth because construction of new residences and commercial development would not occur as a result of implementation of the proposed Guidelines.

Findings for Growth Inducing: The Board finds that, based upon substantial evidence in the record, the potential impact on growth-inducing effects is less than significant and no mitigation measures are required.

6. FINDINGS REGARDING ALTERNATIVES ANALYZED IN THE EIR

The alternatives to the proposed Guidelines considered in the Draft EIR were developed based on information gathered during development of the proposed Guidelines and many iterations of water quality thresholds and management protocols were considered. In 2018 a "Friant-Kern Canal Water Quality Ad Hoc Committee" formed with the task of preparing an update to Reclamation's 2008 Policy. Through a negotiation process, thresholds were established, and management protocols were determined. Various draft versions of the proposed Guidelines were prepared based on input received from Ad Hoc Committee members, Reclamation, and the Friant Board of Directors. The result of this process was the development of the proposed Guidelines.

As part of consideration of alternatives to the proposed Guidelines considered in the Draft EIR, potential alternatives were screened based on their ability to feasibly attain most of the basic project objectives, their feasibility within the limits of Friant's jurisdiction, and their ability to reduce or eliminate any significant environmental impacts of the proposed Guidelines. The alternative considered but rejected was a large-scale, regional desalination plant. This alternative proposed constructing a 90-million-gallon-per-day plant that could process approximately 100,880 acre-feet per year. A desalination plant would meet the project objectives, including protecting the quality of water introduced to or received from the Friant-Kern Canal for sustained domestic and agricultural use. However, the construction and operation of the desalination plant, including the brine disposal, would not avoid or lessen environmental impacts compared to the proposed Guidelines. Therefore, this alternative was rejected from further consideration. As a result of the proposed Guidelines development process and alternatives screening, one feasible alternative, the No Project alternative, was fully evaluated in the Draft EIR.

6.1 NO PROJECT ALTERNATIVE

Description of Alternative: Under the No Project Alternative, water would continue to be introduced into the Friant-Kern Canal consistent with the water quality monitoring requirements of the 2008 Policy. The 2008 Policy provides limited protections for water quality with a focus on domestic use water quality thresholds only. Under the No Project Alternative, there would be no water quality threshold management based on agronomic principles that are protective of the most sensitive crops in the region. No "leave behind" water would be available to provide additional leaching water and support agronomic practices to effectively manage applied salts and long-term salt loading in the root zone, nor would monitoring and communication protocols be implemented. Under the No Project Alternative, Contractors and water users may need to act to appropriately manage applied salts and salt loading as a result of changes to the quality of water conveyed in the Friant-Kern Canal, and to protect their water supply for sustained domestic and agricultural use. Actions that Contractors are currently implementing and may need to implement under the No Project Alternative (i.e., should the 2008 Policy remain unchanged) could include operational and maintenance activities associated with water quality monitoring stations and/or manage applied salts and salt loading under the No Project Alternative.

Under the No Project Alternative, no action would be taken to approve the proposed Guidelines. None of the water quality requirements defined in the proposed Guidelines would be implemented, including water quality threshold management or the quantified "leave behind" water required for Non-Millerton water being introduced into the canal. In addition, potential actions (other than installation of small water quality monitoring stations) that might be taken by Contractors to meet the proposed Guidelines' requirements would not occur.

Environmental Effects: The No Project Alternative would result in construction-related impacts similar to those of the proposed Guidelines, given that ground-disturbing activities may occur. However, the No Project Alternative could result in greater water quality impacts, and potentially greater impacts on agricultural resources and water supply (including groundwater demand or the need for new water supplies or water facilities), than the proposed Guidelines because water quality thresholds and actions would not be implemented for Non-Millerton water entering the Friant-Kern Canal.

6.2 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The proposed Guidelines are considered the environmentally superior alternative because the proposed Guidelines would result in potential impacts on fewer environmental resources than the No Project Alternative. Implementation of appropriate general protection measures, species protection measures, and mitigation measures would minimize the potential for significant impacts from the proposed Guidelines.

The No Project Alternative would result in construction-related impacts similar to those of the proposed Guidelines; however, the No Project Alternative could result in some greater impacts than the proposed Guidelines. In addition, the No Project Alternative would not provide greater protection of the quality of water introduced to or received from the Friant-Kern Canal for sustained domestic and agricultural use. It would not define the water quality thresholds, including the "leave behind" water associated with introduced Non-Millerton water and corresponding water quality, or the methodologies and tools for monitoring and forecasting water quality in the Friant-Kern Canal. The No Project Alternative also would not guide the application review process, implementation procedures, and the responsibilities of water into or from the Friant-Kern Canal. The No Project Alternative does not meet the project objectives of the proposed Guidelines.

7. FINDINGS WITH RESPECT TO MITIGATION OF SIGNIFICANT ADVERSE IMPACTS, AND ADOPTION OF MITIGATION MONITORING AND REPORTING PROGRAM

Based on the entire record before the Board, the Board hereby determines that all feasible mitigation within the responsibility and jurisdiction of the Board and/or Contractors' Boards as required by the Cooperative Agreement has been adopted to reduce or avoid the potentially significant impacts identified in the EIR, and that no additional feasible mitigation or alternatives are available to further reduce significant impacts. The feasible mitigation measures are discussed in Section 2 and are set forth in the MMRP. Section 21081.6 of the Public Resources Code requires the Board to adopt a monitoring or compliance program regarding the changes in the Project and mitigation measures imposed to lessen or avoid significant effects on the environment. The MMRP for the Project is adopted by the Board because it fulfills the CEQA mitigation monitoring requirements:

- The MMRP is designed to ensure compliance with adopted mitigation measures required as required by the Cooperative Agreement to reduce significant impacts associated with actions taken in response to the proposed Guidelines; and
- Measures to mitigate or avoid significant effects on the environment are fully enforceable through conditions of approval, permit conditions, agreements, or other measures.