

# Appendix C

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Environmental Checklist for the Friant  
Ranch Community Plan Update and  
Friant Ranch Specific Plan Project  
(February 2023)



# Environmental Checklist for the Friant Ranch Community Plan Update and Friant Ranch Specific Plan Project

County of Fresno  
Department of Public Works  
and Planning  
Development Services Division  
and Capital Projects Division  
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February 2023

Environmental Checklist  
for the  
**Friant Ranch Community Plan Update and  
Friant Ranch Specific Plan Project**

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## LIST OF ABBREVIATIONS

AB	Assembly Bill
BACT	Best Available Control Technology
BMP	best management practice
CalARP	California Accidental Release Prevention
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CDFG	California Department Fish and Game
CDFW	California Department of Fish and Wildlife
CFD	Community Facilities District
CMUTCD	California Manual on Uniform Traffic Control Devices
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
County	Fresno County
CTS	California tiger salamander
CUBC	California Uniform Building Code
CUSD	Clovis Unified School District
EIR	environmental impact report
EPA	US Environmental Protection Agency
federal ESA	federal Environmental Species Act
LID	Low Impact Development
LOS	level of service
LTRID	Lower Tule River Irrigation District
mph	miles per hour
NEV	neighborhood electric vehicle
NOP	notice of preparation
NO <sub>x</sub>	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
PG&E	Pacific Gas and Electric Company
PM <sub>10</sub>	particulate matter
PM <sub>2.5</sub>	fine particulate matter
ROG	reactive organic gases

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RWQCB	Regional Water Quality Control Board
SHPO	State Historic Preservation Officer
SJVAPCD	San Joaquin Valley Air Pollution Control District
TCR	tribal cultural resource
USACE	US Army Corps and Engineers
USBR	US Bureau of Reclamation
USFWS	US Fish and Wildlife Service
VMT	vehicle miles traveled
WSA	water supply assessment
WTP	water treatment plant
WWD	Waterworks District
WWTP	wastewater treatment plant

# 1 EVALUATION OF ENVIRONMENTAL IMPACTS

The County of Fresno has prepared this Environmental Checklist in order to comply with requirements of the California Environmental Quality Act (CEQA) that, in certain instances, may require that revisions to an EIR prepared on remand from an adverse court decision be expanded to address topics beyond those specifically identified by the reviewing court.

Depending on whether the court does or does not order the public agency to void or vacate its prior action certifying the EIR in question, the rules governing the agency's review on remand are set forth in Public Resources Code (PRC) Section 21092.1 and CEQA Guidelines Section 15088.5 (recirculation); or PRC Section 21166 and CEQA Guidelines Section 21166 and CEQA Guidelines Sections 15162, 15163, and 15164 (subsequent review). Recirculation applies where, after direction from a court, the prior EIR is no longer certified. Subsequent review applies where the EIR remains certified. (See *Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal.4th 1112, 1130.)

Because the Court of Appeal directed the Board of Supervisors (Board) to void its February 2011 action certifying the original EIR for the Friant Ranch Project (*Sierra Club v. County of Fresno* (2020) 57 Cal.App.5th 979, 991), and the Board took this action via Resolution No. 21-109 on April 21, 2021 to do so, there is currently no certified Final EIR for the Project. Accordingly, the recirculation procedures under Public Resources Code section 21092.1 and CEQA Guidelines section 15088.5, rather than the subsequent review procedures, would seem to apply.

Even so, this checklist follows the subsequent review procedures set forth in PRC Section 21166 and CEQA Guidelines Sections 15162, 15163, and 15164, including the question of whether changed circumstances may have given rise to new significant effects or substantially more severe significant effects that might require major revisions to the 2011 EIR. The County has undertaken such analysis out of an abundance of caution and out of a concern that, if any such new impacts truly have emerged, they should be disclosed to the public and dealt with through any feasible mitigation, as with new Mitigation Measures BIO-1 through BIO-5. An applicant's agreement to accept mitigation measures such as BIO-1 through BIO-5 may also obviate the need for either recirculation or subsequent review.

The checklist thus evaluates the environmental resource categories in terms of any "changed condition" (i.e., changed circumstances, project changes, or new information of substantial importance) that may result in environmental impact significance conclusions different from those found in the previously certified EIR. The row titles of the checklist include the full range of environmental topics, as presented in Appendix G of the State CEQA Guidelines. The column titles of the checklist have been modified from the Appendix G presentation to help answer the questions to be addressed pursuant to Public Resources Code Section 21166 and State CEQA Guidelines Sections 15162 to 15164 and 15088.5. A "no" answer does not necessarily mean that there are no potential impacts relative to the environmental category, but that there is no change in the condition or status of the impact as it was analyzed and addressed in the previously certified Friant Ranch EIR. The purpose of each column of the checklist is described below. In addition, the checklist tables in each section are followed by a summary of the Friant Ranch EIR analysis of that environmental topic, including impact summaries, and mitigation measures. Following the summary of the Friant Ranch EIR analysis is the consistency evaluation, which (i) describes how the project's potential impacts compare to the impacts evaluated in the Friant Ranch EIR, (ii) identifies Friant Ranch EIR mitigation measures that apply to the project, and (iii) recommends any additional mitigation measures that would be applied to reduce a significant impact.

The checklist includes the following questions:

## Where were impacts analyzed previously?

This column provides a cross-reference to the pages of the Friant Ranch EIR and other applicable documents where information and analysis are found relative to the environmental issue listed under each topic.

## Do proposed changes, new circumstances, or new information result in new significant/substantially more severe impacts?

Pursuant to CEQA Guidelines Section 15162, subsections (a)(1) and (a)(2) and Section 15088.5, this column indicates whether there are substantial changes in the project or circumstances or whether previously identified significant effects which, as a result of substantial changes or new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR. A “yes” answer will be followed by an indication of whether the impact is “potentially significant,” “less than significant with mitigation incorporated,” or “less than significant.” An analysis of the determination will appear in the Discussion section following the checklist.

## Is there substantial new information requiring new analysis or verification?

Pursuant to CEQA Guidelines Section 15162, subsections (a)(3)(A-D), and Section 15088.5, this column indicates whether new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:

- i. The project will have one or more significant effects not discussed in the previous EIR.
- ii. Significant effects previously examined will be substantially more severe than shown in the previous EIR.
- iii. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative.
- iv. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR, and would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

## Do mitigation measures from prior documents resolve significant impacts?

This column indicates whether the prior environmental document and/or the findings adopted by the lead agency decision-making body provides mitigation measures to address effects in the related impact category. A “yes” response will be provided if previously adopted mitigation would mitigate the impact to less than significant. If the impact would remain significant and unavoidable after implementation of previously adopted mitigation, the column will indicate “yes, but impact remains significant and unavoidable.” If “NA” is indicated, this Environmental Review concludes that the impact does not occur with this project and, therefore, no mitigation measures are needed.

## 1.1 CHANGED CONDITIONS

As discussed at length above, one of the purposes of this checklist is to evaluate the environmental resource categories in terms of any “changed condition” (i.e., changed circumstances, project changes, or new information of substantial importance) that may result in environmental impact significance conclusions different from those found in the previously certified EIR.

At the conclusion of the CEQA process in 2011, the Board of Supervisors approved Alternative 3 (the so-called “Northeast Development Configuration Alternative”) as described in the 2011 Final EIR, which is the environmentally superior alternative. The full project description is provided in the 2011 certified EIR, which is available online at <https://www.co.fresno.ca.us/departments/public-works-planning/divisions-of-public-works-and-planning/development-services-division/planning-and-land-use/environmental-impact-repo>. The description of Alternative 3 can be found starting on page 4-26 of the Draft EIR. Since the Friant Ranch Project was approved in February 2011, there have been no changes to the description of Alternative 3 that was provided in the Draft EIR (State CEQA Guidelines Section 15162[a]][1]). The Friant Ranch applicant is seeking reapproval of Alternative 3 as opposed to the original proposed project as described in the October 2009 Draft EIR.



The water supply assessment (WSA) that was prepared for the Friant Ranch Project and adopted in 2008 evaluated the original proposed project. Compared with the originally proposed project, Alternative 3 reduces the amount of developed acreage (from 942 acres to 460 acres) and reduces the number of residential units proposed by nearly 500 units, thereby reducing the project's water demand by 38 percent. Provost & Pritchard prepared an updated WSA memorandum in 2022 to update the water conditions that have occurred since adoption of the 2008 WSA, including review of the available water supplies, revision of estimated project demands, and determination of the adequacy of the available water supplies to meet the project's demand (Provost & Pritchard 2022); this memorandum is included as Appendix B of this checklist.

The project site also remains largely unchanged since the EIR was certified. No land use changes have occurred on the site and no construction has commenced. Some projects have been approved in the project vicinity. For example, Conditional Use Permit 3415, which allowed the construction of a tertiary-level wastewater treatment facility at 16356 N. Friant Road to serve the Friant Ranch Project and the greater Friant community, was approved by the County in 2014, but has not been constructed as of January 2023. Additionally, there may be some changes to the regulatory setting that apply to the project. For example, the County is currently preparing a General Plan Update to guide future development in the County; a notice preparation of an EIR was released in January 2021 and public review drafts of the General Plan Policy Document, Background Report, and Zoning Ordinance Update were released in July 2021 (Fresno County 2022). Because the General Plan Update has not been adopted yet, the 2000 General Plan is still the applicable planning document for the County (and was in effect at the time the Friant Ranch EIR was prepared). Other regulatory changes that have occurred since 2011 include changes to Appendix G of the State CEQA Guidelines. Each section of this checklist evaluates whether those changes (or other issue-specific changes) in the circumstances under which the project was undertaken *require major revisions to the previous EIR due to the involvement of a new or more severe significant environmental effects* (State CEQA Guidelines Section 15162[a][2]).

## 1.2 ALTERNATIVE 3

As described above, the project proponent is seeking approval of Alternative 3. This Environmental Checklist, therefore, focuses on the environmental effects of Alternative 3, and not the original proposed project. The State CEQA Guidelines require that the EIR include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative must be discussed, but in less detail than the significant effects of the project as proposed (CCR Section 15126.6[d]). Accordingly, the alternatives analysis provided in the Draft EIR presented a qualitative analysis of the potential effects of Alternative 3, as compared to those of the original proposed project.

Potential impacts, Specific Plan policies, and mitigation measures are identified throughout this Environmental Checklist. While some details (e.g., housing units, acreages) are specific to the original proposed project, they are presented here as a summary of the approved Friant Ranch Project (Alternative 3).

# I. AESTHETICS

Environmental Issue Would the Project:	Where were impacts analyzed previously?	Do proposed changes/ new circumstances/ new information result in new significant/ substantially more severe impacts?	Is there substantial new information requiring new analysis or verification?	Do mitigation measures from prior documents resolve significant impacts?
Except as provided in Public Resources Code section 21099 (where aesthetic impacts shall not be considered significant for qualifying residential, mixed-use residential, and employment centers), would the project:				
a) Have a substantial adverse effect on a scenic vista?	DEIR Impact 3.1.1	No	No	N/A
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	DEIR Impact 3.1.2	No	No	N/A
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	DEIR Impact 3.1.4	No	No	Yes
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	DEIR Impact 3.1.3	No	No	Yes

## Summary of EIR Analysis

This topic is addressed in Section 3.1, "Aesthetics," of the Friant Ranch Draft EIR. The regulatory and physical settings are described in Sections 3.1.1 and 3.1.2, respectively, of the Draft EIR.

## IMPACT ANALYSIS

Impacts from development of the Friant Ranch Project are evaluated in the Friant Ranch Draft EIR (pages 3-6 through 3-14) and are summarized below.

- ▶ **Impact 3.1.1: Scenic Vistas.** Implementation of the project would result in increased urbanization, which could be perceived as a negative aesthetic impact on the Friant Ranch Specific Plan’s current pastoral vistas. However, the project would be developed in compliance with the goals, policies, and community design guidelines of the Friant Community Plan Update and Friant Ranch Specific Plan and would preserve areas with scenic qualities and natural beauty, integrate new homes into the natural open space and rolling hillsides, and include landscaping that complements the open space areas and rural setting. As designed, the project would not have a substantially adverse effect on a scenic vista and this impact would be **less than significant**.
- ▶ **Impact 3.1.2: Scenic Resources within a State Designated Scenic Highway or County Designated Scenic Road.** A portion of the project (900 feet of Friant Ranch Specific Plan frontage) abuts the segment of Friant Road that is a

designated scenic highway. The project does not propose new uses that would substantially obstruct scenic views of the surrounding foothills or mountains along this scenic highway corridor. Further, the project would be developed in compliance with the goals, policies, and community design guidelines of the Friant Community Plan Update and Friant Ranch Specific Plan and would preserve areas with scenic qualities and natural beauty, integrate new homes into the natural open space and rolling hillsides, and include landscaping that complements the open space areas and rural setting. As designed, the project would not substantially damage scenic resources and this impact would be **less than significant**.

- ▶ **Impact 3.1.3: Introduction of New Sources of Light and Glare and Increased Lighting on the Night Sky as a Result of the Project.** The project would create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. However, mitigation measures are identified that require appropriate orientation and shielding of lighting. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.1.4: Degradation of the Existing Visual Character or Quality of the Project Area and its Surroundings Resulting from Utilities and Roadway Construction.** Visual impacts during construction would be temporary in nature and could include views of construction equipment, construction materials and earth stockpiling. Visual impacts related to removal of vegetation and permanent above-ground structures/lighting would occur as a result of installation of utility infrastructure, roadway widening, and construction of new above-ground utility structures. Mitigation measures are identified that require revegetation of disturbed areas, screening of above-ground utility structures, and appropriate orientation and shielding of lighting. This impact would be **less than significant after mitigation**.

### Friant Community Plan Update and Friant Ranch Specific Plan Policy Requirements

The Friant Community Plan Update proposes the following policies, as identified in the Friant Ranch EIR, to preserve and protect scenic resources consistent with the General Plan:

- ▶ **Policy 5.1:** Preserve areas with scenic qualities and natural beauty in open space or as farmland, where feasible.
- ▶ **Policy 5.2:** Encourage development within Friant Ranch to preserve existing scenic resources in open space, including natural drainage ways and vernal pools.
- ▶ **Policy 5.3:** Work with federal, state, regional, and other appropriate public agencies, non-profit organizations, and landowners to conserve, protect, and enhance natural resources in the Community Plan area.
- ▶ **Policy 5.4:** Protect “dark skies” by ensuring light and glare is minimized by using low-level lighting.

The Specific Plan proposes the following policies, as identified in the Friant Ranch EIR, that assure consistency with the General Plan policies:

- ▶ **Policy 2.5:** Require a minimum of 245 acres to be preserved as undisturbed permanent open space within the Specific Plan area.
- ▶ **Policy 5.48:** Use thematic landscaping to complement the natural and rural setting of the Friant area.
- ▶ **Policy 5.52:** Use native and non-invasive plant materials to transition into undisturbed open space areas. Landscaping shall blend in with the existing wetlands and natural drainages.
- ▶ **Policy 5.54:** Incorporate street lights and project entry signage into the streetscape landscaping and design to blend with the natural features of the site. Policy 5.70 Landscape parking areas with shade tree to visually soften the paved areas.
- ▶ **Policy 5.82:** Incorporate the use of native planting and/or compatible species of water-wise/low water plants into the landscaping.
- ▶ **Policy 5.100:** Maximize, interconnect and restore natural open space and include opportunities for local access to open space with limited human impact.
- ▶ **Policy 5.101:** Consider the existing topography of the site when designing and grading for the project.

- ▶ **Policy 5.102:** Pursue opportunities to preserve significant natural landforms and drainage features such as valleys and natural depressions within or next to the site, where possible, and as indicated on Friant Ranch Land Use Plan.
- ▶ **Policy 5.103:** Plan development outside of natural drainage areas, where feasible, to avoid environmental features, such as vernal pools and steep slopes, as indicated on the Friant Ranch Concept Plan.
- ▶ **Policy 5.104:** Plan around natural drainage areas, where feasible, particularly avoiding environmental features such as wetlands, vernal pools and steep slopes, as indicated on the Friant Ranch Project Concept Plan.
- ▶ **Policy 5.106:** Landscape trails with a variety of plants that enhance visual appeal and are compatible with the nearby native plant species.
- ▶ **Policy 5.110:** Locate nature trails along the edges of the developed areas and the periphery of natural open space areas to avoid unnecessary intrusion into sensitive habitat areas and vernal pools. Where appropriate, design trails to meander along natural topography.
- ▶ **Policy 5.111:** Provide multi-purpose trails with pedestrian-scaled lighting that is appropriately shielded to minimize light pollution and excessive glare. Lighting nature trails is prohibited.
- ▶ **Policy 5.116:** Avoid, to the maximum extent feasible, solid fences and walls, except where noise attenuation is required. Decorative walls may incorporate glass or acrylic to showcase scenic views and vistas.
- ▶ **Policy 5.117:** Paint or stain any solid walls or fences used to blend in with natural surroundings; provided, however, that unpainted/unstained synthetic fencing shall be allowed if durable and low maintenance and provided that it has the appearance of wood or other natural material.
- ▶ **Policy 5.119:** Coordinate the design and location of all retaining and freestanding walls so that they become an integral part of the natural and rural landscape.
- ▶ **Policy 7.1:** Minimize the impact area and/or utilize sensitive grading techniques when grading on sites located adjacent to natural open space in order to minimize impacts on sensitive natural areas.
- ▶ **Policy 7.2:** Utilize techniques including, but not limited to, terracing, varying slope heights, contour grading, rounding tops and bottoms of slopes and screening with landscaping to soften the visual impact of long or high slope banks.
- ▶ **Policy 7.3:** Contour slopes in lieu of using retaining walls where space permits.

## Mitigation Measures

The following mitigation measures were identified in the Friant Ranch EIR:

- ▶ **Mitigation Measure 3.1.3a:** Prior to issuance of any discretionary permit necessary for development within the Project Area, a lighting plan shall be prepared and submitted to Fresno County for approval in conjunction with the permit applications related to such development. The County shall ensure that the lighting plan incorporates the requirements set forth in mitigation measures 3.1.3b through 3.1.3f below.
- ▶ **Mitigation Measure 3.1.3b:** All lighting in the Project Area shall be shielded, directed downward and away from adjoining properties and rights-of-way. Light shields or equivalent shall be installed and maintained consistent with manufacturer's specifications, and shall reduce the spillage of light onto adjacent properties to less than a one-foot-candle standard, as measured at the adjacent property line.
- ▶ **Mitigation Measure 3.1.3c:** Development within the Project Area shall incorporate lighting fixtures designed to produce the minimum amount of light necessary for safety purposes. All parking lot pole lights and street lights shall be fully hooded and back shielded to prevent light spillage and glare.
- ▶ **Mitigation Measure 3.1.3d:** The design of any development proposed within the Project Area shall include the use of glare reducing materials, including non-reflective paints and building materials, to reduce the amount of glare created by the structures.

- ▶ **Mitigation Measure 3.1.3e:** Landscaping within the Project Area shall include vegetation designed to shield adjacent properties from Project-generated light and glare.
- ▶ **Mitigation Measure 3.1.3f:** Night lighting within the Project Area shall be limited to that necessary for security, safety, and identification. Night lighting shall also be screened from adjacent residential areas and not be directed in an upward manner or beyond the boundaries of the parcel on which the buildings are located.
- ▶ **Mitigation Measure 3.1.4a:** Those portions of the Project Area containing natural vegetation or landscape material that are disturbed during utility line and or roadway construction shall be revegetated upon completion of work utilizing plant materials similar to those disturbed. Revegetated areas within the Friant Ranch Specific Plan Area shall be actively maintained until fully established, in accordance with the landscape design guidelines contained in the Friant Ranch Specific Plan.
- ▶ **Mitigation Measure 3.1.4b:** All permanent utility buildings within the Friant Ranch Specific Plan Area extending above ground shall be screened where feasible using a combination of berms, mounds, landscape material, decorative fencing/walls, or other screening feature approved in the Friant Ranch Specific Plan. In addition, any proposed roadway and utility pump station lighting within the Project Area shall be directed downward using cut-off fixtures to minimize lighting effects on adjacent areas and the night sky.

The Friant Ranch EIR concluded that implementation of these mitigation measures would reduce aesthetic impacts to a less-than-significant level.

## CONSISTENCY EVALUATION

- a) As analyzed in the Friant Ranch EIR, the project area provides pastoral vistas, which would be altered by project development with more urban uses. However, the project would be developed in compliance with the goals, policies, and community design guidelines of the Friant Community Plan Update and Friant Ranch Specific Plan and would preserve areas with scenic qualities and natural beauty, integrate new homes into the natural open space and rolling hillsides, and include landscaping that complements the open space areas and rural setting. This impact was concluded to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to scenic vistas.
- b) As analyzed in the Friant Ranch EIR, no designated or eligible scenic highways are located in the project area. The nearest eligible state scenic highway, State Route 168 (Route 65 near Clovis/Huntington Lake), is located at least 8 miles away. A portion of the project (900 feet of Friant Ranch Specific Plan frontage) abuts the segment of Friant Road that is a locally designated scenic highway. The project does not propose new uses that would substantially obstruct scenic views of the surrounding foothills or mountains along this scenic highway corridor. Further, the project would be developed in compliance with the goals, policies, and community design guidelines of the Friant Community Plan Update and Friant Ranch Specific Plan and would preserve areas with scenic qualities and natural beauty, integrate new homes into the natural open space and rolling hillsides, and include landscaping that complements the open space areas and rural setting. This impact was concluded to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to scenic resources.
- c) As described in the Friant Ranch EIR, visual impacts during construction would be temporary in nature and could include views of construction equipment, construction materials and earth stockpiling. Visual impacts related to removal of vegetation and permanent above-ground structures/lighting would occur as a result of

installation of utility infrastructure, roadway widening, and construction of new above-ground utility structures. This impact was concluded to be less than significant after mitigation in the Friant Ranch EIR.

As described in the introduction to this checklist, no changes to the project description have occurred since the project was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Mitigation Measures 3.1.4a and 3.1.4b would continue to apply to the project and would require revegetation of disturbed areas, screening of above-ground utility structures, and appropriate orientation and shielding of lighting.

As described above, the project has been designed to comply with the goals, policies, and community design guidelines of the Friant Community Plan Update and Friant Ranch Specific Plan. All Friant Ranch policy requirements pertaining to visual character would remain applicable. In addition, all development within the project area is subject to review and approval by Fresno County.

Therefore, no additional environmental review is needed for the project related to the degradation of the existing visual character.

- d) As described in the Friant Ranch EIR, the project would create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. This impact was concluded to be less than significant after mitigation in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Mitigation Measures 3.1.3a through 3.1.3f would continue to apply to the project and would require appropriate orientation and shielding of lighting. Therefore, no additional environmental review is needed for the project related to light or glare.

## II. AGRICULTURAL AND FOREST RESOURCES

Environmental Issue Would the Project:	Where were impacts analyzed previously?	Do proposed changes/new circumstances/ new information result in new significant/ substantially more severe impacts?	Is there substantial new information requiring new analysis or verification?	Do mitigation measures from prior documents resolve significant impacts?
<p>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.</p>				
<p>In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.</p>				
<p>Would the project:</p>				
<p>a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</p>	<p>DEIR Impact 3.2.1</p>	<p>No</p>	<p>No</p>	<p>N/A</p>
<p>b) Conflict with existing zoning for agricultural use or a Williamson Act contract?</p>	<p>DEIR Impact 3.2.2</p>	<p>No</p>	<p>No</p>	<p>No mitigation available</p>
<p>c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?</p>	<p>Not evaluated</p>	<p>No</p>	<p>No</p>	<p>N/A</p>
<p>d) Result in the loss of forest land or conversion of forest land to non-forest use?</p>	<p>Not evaluated</p>	<p>No</p>	<p>No</p>	<p>N/A</p>
<p>e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?</p>	<p>DEIR Impact 3.2.3</p>	<p>No</p>	<p>No</p>	<p>N/A</p>

### Summary of EIR Analysis

This topic is addressed in Section 3.2, “Agricultural Resources,” of the Friant Ranch Draft EIR. The regulatory and physical settings are described in Sections 3.2.1 and 3.2.2, respectively, of the Draft EIR.

### IMPACT ANALYSIS

Impacts from development of the Friant Ranch Project are evaluated in the Friant Ranch Draft EIR (pages 3-23 through 3-25) and are summarized below.

- ▶ **Impact 3.2.1: Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to Non-agricultural Uses.** Although the project would convert an existing agricultural use (grazing land) and a vacant lot surrounded by development (The Depot Parcel) to residential, commercial, recreation, open space, and public uses; the project would not convert Prime Farmland or Farmland of Statewide Importance to non-agricultural uses. No lands within the project area are designated as Unique Farmland. This impact would be **less than significant**.
- ▶ **Impact 3.2.2: Conflict with Agricultural Zoning or Williamson Act Contracts.** The project would redesignate approximately 900 acres of grazing land within the Friant Ranch Specific Plan Area that is currently zoned for agriculture and 6.75 acres of land within the Depot Parcel that is currently zoned for Single-Family – Agricultural District. The proposed residential and commercial uses on approximately 482 acres of those lands under Alternative 3 would conflict with the existing agricultural zoning, which would be a **significant and unavoidable impact**.
- ▶ **Impact 3.2.3: Other Changes Resulting in the Conversion of Prime Farmland, Unique Farmland, Farmland of Local Importance, and Farmland of Statewide Importance to Non-agricultural Use.** The project would not result in the potential future conversion of farmland within the project area and vicinity because there are only a few parcels designated as Prime Farmland, Farmland of Statewide Importance, and Farmland of Local Importance within the project area and vicinity and the project would maintain sufficient buffers between these parcels (the majority of which are now subject to sand and gravel excavation) and the proposed development areas. Additionally, the project would not result in the potential future conversion of farmland within the Lower Tule River Irrigation District and surrounding area because the proposed transfer would provide for supplemental agricultural supplies and would not involve the fallowing or conversion of agricultural lands. Therefore, this impact would be **less than significant**.

### Friant Community Plan Update and Friant Ranch Specific Plan Policy Requirements

The Draft Friant Community Plan includes the following policies, as identified in the Friant Ranch EIR, to preserve prime agricultural land within the Friant Community Plan Area:

- ▶ **Policy 11.1:** To the extent practicable, direct urban growth away from prime agricultural land.
- ▶ **Policy 11.2:** Encourage growth on non-prime agricultural land in close proximity to existing development or with potential connectivity to existing public facilities and infrastructure.
- ▶ **Policy 11.3:** Encourage agricultural activities related to the production of food and fiber within the Friant Community Plan Area and support uses incidental and secondary to the on-site agricultural operation.
- ▶ **Policy 11.4:** Maintain appropriate buffers between prime agricultural lands and new growth within the Friant Community Plan Area.

### Mitigation Measures

No mitigation measures are available to avoid or reduce impacts related to conflicts with agricultural zoning. Therefore, this impact would remain significant and unavoidable.

## CONSISTENCY EVALUATION

- a) As analyzed in the Friant Ranch EIR, the project would convert an existing agricultural use (grazing land) and a vacant lot surrounded by development (The Depot Parcel) to residential, commercial, recreation, open space, and public uses; however, the project would not convert Prime Farmland or Farmland of Statewide Importance to non-agricultural uses. No lands within the project area are designated as Unique Farmland. This impact was concluded to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the



conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to conversion of Important Farmland.

- b) As analyzed in the Friant Ranch EIR, the project would redesignate approximately 900 acres of grazing land within the Friant Ranch Specific Plan Area that is currently zoned for agriculture and 6.75 acres of land within the Depot Parcel that is currently zoned for Single-Family – Agricultural District. The proposed residential and commercial uses on approximately 482 acres of those lands would conflict with the existing agricultural zoning, which would be a significant and unavoidable impact, for which no mitigation is available to fully reduce the impact.

As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to conflicts with existing agricultural zoning or Williamson Act contracts.

- c, d) The project site is zoned under various categories (see Figure 3.2-4 in the Friant Ranch Draft EIR); however, it is not used or zoned for forestland (as defined by PRC Section 12220[g]), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g]). There are no woodlands or forests in the project area; therefore, there would be no impact. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to forestland or timberland.

- e) As described in item a) above, the project would convert agricultural land, but not Important Farmland, to non-agricultural uses. As described in item c) above, the project site does not include forest or timberland uses. Thus, the project would not involve any changes that could result in conversion of forest land to non-forest use. This impact was concluded to be less than significant in the Friant Ranch EIR.

As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to the conversion of farmland or forest land.

### III. AIR QUALITY

Environmental Issue Would the Project	Where were impacts analyzed previously?	Do proposed changes/ new circumstances/ new information result in new significant/ substantially more severe impacts?	Is there substantial new information requiring new analysis or verification?	Do mitigation measures from prior documents resolve significant impacts?
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied on to make the following determinations.				
Are significance criteria established by the applicable air district available to rely on for significance determinations?				
a) Conflict with or obstruct implementation of the applicable air quality plan?	DEIR Impacts 3.3.1 and 3.3.2	No	No	Yes, but impacts remain significant and unavoidable
b) 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?	DEIR Impacts 3.3.1 and 3.3.2	No	No	Yes, but impacts remain significant and unavoidable
c) Expose sensitive receptors to substantial pollutant concentrations?	DEIR Impacts 3.3.1 and 3.3.2	No	No	Yes, but impacts remain significant and unavoidable
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	DEIR Impact 3.3.3	No	No	N/A

### Summary of EIR Analysis

This topic is addressed detail in Section 3.3, "Air Quality," of the Friant Ranch Draft EIR, consistent with the California Supreme Court's directive in *Friant Ranch I*. The regulatory and physical settings are described in Sections 3.3.1 and 3.3.2, respectively, of the Draft EIR.

### IMPACT ANALYSIS

Impacts from development of the Friant Ranch Project are evaluated in the Friant Ranch Draft EIR (pages 3-40 through 3-59) and are summarized below.

- ▶ **Impact 3.3.1: Construction Impacts for the development of the Friant Ranch Specific Plan (5 phases) and Community Plan Update Carbon Monoxide (CO), Reactive Organic Gases (ROG), Nitrogen Oxide (NO<sub>x</sub>), Particulate Matter (PM<sub>10</sub>), & Fine Particulate Matter (PM<sub>2.5</sub>).** Air pollutant emissions generated by project construction activities would degrade local air quality. Emissions were calculated for each of the five project construction phases, some of which would result in exceedances of the San Joaquin Valley Air Pollution Control District (SJVAPCD) thresholds (that were in effect in 2009) and some of which would not. Construction phases that generate emissions in exceedance of the SJVAPCD thresholds (that were in effect in 2009) would require mitigation measures, which include the use of construction vehicles and equipment that generate fewer emissions. For phase 1 of project construction, this mitigation would not be sufficient to reduce exhaust emissions

below SJVAPCD thresholds (that were in effect in 2009). Overall, this impact would be **significant and unavoidable**.

- ▶ **Impact 3.3.2: Violation of Air Quality Standards by Area and Operational Emissions.** The Friant Ranch Specific Plan and Community Plan Update propose to add land for residential, public facilities, commercial uses, public and open space and park uses. The primary source of emissions would be from vehicular traffic. Sensitive area and operational emission receptors in the vicinity of the project site are minimal at present and consist primarily of single-family residential structures. Future development in accordance with the proposed Community Plan Update and Friant Specific Plan would include a variety of commercial uses and there is some uncertainty as to what pollutants will be introduced to the area that could affect sensitive receptors that may emerge in the future. The proposed project would result in two new sources of toxic air contaminants, one mobile and one stationary. Mobile sources of toxic air contaminants are not subject to the regulations of the SJVAPCD, while stationary sources are subject to SJVAPCD regulations and must obtain a permit from the District. The impact would be lessened by policies of the proposed Specific Plan and Community Plan (listed below), which promote the use of alternative transportation, air quality mitigation for new developments, and strategies to minimize the number and length of vehicle trips. Mitigation Measure 3.3.2 would reduce project air quality impacts, but not below the SJVAPCD thresholds (that were in effect in 2009); therefore, project impacts on air quality would be **significant and unavoidable**.
- ▶ **Impact 3.3.3: Project could cause objectionable odors and the potential for odor complaints.** The project would not generate objectionable odors or related complaints. The majority of the odors resulting from the project area would be temporary or short-term during construction and would not be a permanent nuisance. Furthermore, the use of the closed MBR treatment plant and compliance with the requirements of Mitigation Measure 3.14.3g as well as any necessary RWQCB requirements pertaining to the reduction of odor would reduce odors. Therefore, the impact would be **less than significant**.

### Friant Community Plan Update and Friant Ranch Specific Plan Policy Requirements

The Specific Plan proposes the following policies, as identified in the Friant Ranch EIR, related to air quality:

- ▶ Require that residential development within the Medium Density Residential and Medium High Density Residential areas include neighborhood parks and parkways, at a rate of 5 to 8 acres per 1,000 dwelling units.
- ▶ Require that development within the Village Core (Community Commercial) include 5 acres parks, parkways, and town greens.
- ▶ Require a minimum of 245 acres to be preserved as undisturbed permanent open space within the Specific Plan area.
- ▶ Provide a variety of housing types that may include, but not be limited to, single-family detached homes, cluster homes, courtyard homes, alley-loaded homes, townhomes and apartments.

The Friant Community Plan Update proposes the following policies, as identified in the Friant Ranch EIR, related to air quality:

#### Land Use Element

- ▶ Promote walkability within Friant Community Plan Area for access to regional recreation areas through coordination and marketing of the Lost Lake Recreation Area and Millerton Lake.
- ▶ Create pedestrian linkages across Friant Road that will allow uninterrupted pedestrian trail connections between Lost Lake Recreation Area/San Joaquin River Parkway and new development east of Friant Road.
- ▶ For projects, requiring Site Plan Review, encourage development that is pedestrian-friendly with a village-like character.
- ▶ Condition new development projects, as appropriate, to provide streetscaping, sidewalks, and adequate lighting with a rustic/rural character in order to create more pedestrian-friendly areas that connect established residential neighborhoods to commercial areas along Friant Road.

- ▶ Require that new development provide pedestrian linkages to existing neighborhoods, where feasible, to facilitate pedestrian movement between neighborhoods.
- ▶ Encourage the development of a trail system that provides linkages between Lost Lake Recreation Area and the commercial and residential areas within the Friant Community Plan Area.
- ▶ Allow for the development of a wide variety of housing types in Friant including large-lot single family, moderate-lot single family, small-lot single family, apartments, townhomes and condominiums.
- ▶ Through future Specific Plans and zoning ordinances, facilitate moderate increases in density for multi-family units within Medium High Density Residential areas.
- ▶ As new development projects are approved along Friant Road, require the projects to provide landscaping and street trees along the project frontage.
- ▶ Encourage the establishment of open space corridors along drainageways, slopes, in valleys and in other constrained areas, whenever possible.
- ▶ Require new development to create parks and parkways within residential neighborhoods, public, and commercial areas.

### Transportation Element

- ▶ Promote a street and highway system that can accommodate alternative modes of travel.
- ▶ Support efforts to establish multiple forms of transit within the Community of Friant, including utilizing the existing rail right-of-way for trails for bicycles and pedestrians, Neighborhood Electric Vehicle access and a potential future light rail route.
- ▶ Promote the establishment of a town-wide pedestrian walkway and trail network that promotes the safe movement of people throughout the Community of Friant.
- ▶ Encourage the development of multi-use trails throughout the Friant Community Plan Area for bicyclists and pedestrians.

### Environmental Resources Management Element

- ▶ Implement land use patterns and policies that incorporate smart growth practices, including placement of higher densities near transit centers, providing alternative modes of transportation, and encouraging and accommodating pedestrian-friendly environments.
- ▶ Encourage the use of domestic and commercial solar energy uses to conserve fossil fuels and improve air quality.
- ▶ Facilitate the use of green building standards and Leadership in Energy and Environmental Design (LEED) in both private and public projects, where feasible.
- ▶ Promote sustainable building practices that go beyond the requirements of Title 24 of the California Administrative Code, and encourage energy-efficient design elements, as appropriate.
- ▶ Support sustainable building practices that integrate building materials and methods that promote environmental quality, economic vitality, and social benefit through the design, construction, and operation of the built environment, where feasible.
- ▶ Encourage the use of domestic and commercial solar energy in the Friant Community Plan Area in an effort to conserve fossil fuels and improve air quality.

### **Mitigation Measures**

The following mitigation measures were identified in the Friant Ranch EIR:

- ▶ **Mitigation Measures 3.3.1a:** To reduce emissions and thus reduce air quality impacts, the following Option 2 (enhanced mitigation) measures shall be implemented for Phase 1:

- The use of aqueous diesel fuel for the construction vehicles.
  - Use of diesel oxidation catalysts capable of a 40% reduction in NOx emissions on all diesel equipment with the exception of cranes and forklifts which will require a 15% reduction in accordance with URBEMIS 9.2.4 (see Appendix C.)
  - Use of low-volatile organic compound paints capable of reducing ROG emissions by 45% compared to existing architectural coating rules.
  - All heavy-duty diesel trucks shall comply with EPA on-road PM emissions standards and be equipped with Best Available Control Technology (BACT) devices certified by CARB.
  - Idling restrictions (maximum 5 minutes) shall apply to construction equipment, when not in use.
  - Construction equipment shall incorporate, where feasible, emissions-savings technology such as hybrid drives and specific fuel economy standards.
  - Use of alternative fueled or catalyst equipped diesel construction equipment.
  - Operation of heavy duty equipment and/or the amount of equipment in use shall be limited to the minimum number of hours practicable each day.
  - To the extent practicable fossil-fueled construction equipment shall be replaced with electrically driven equivalents (provided they are not run via a portable generator set).
  - Construction activities shall be curtailed during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak-hour of vehicular traffic on adjacent roadways.
  - Construction activity management shall be implemented as practicable (e.g., rescheduling activities to reduce short-term impacts).
  - During construction activity, traffic speeds on unpaved roads shall be limited to 15 mph.
  - During construction activity, sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.
  - During construction activity, wheel washers shall be installed for all exiting trucks, or wash off all trucks and equipment leaving the site.
  - During construction activity, wind breaks shall be installed at windward side(s) of construction areas.
  - During construction activity, excavation and grading activity shall be suspended when winds exceed 20 mph.
  - During construction activity, areas subject to excavation, grading, and other construction activity shall be limited at any one time.
- **Mitigation Measures 3.3.1b:** To reduce emissions and thus reduce air quality impacts, the following Option 2 (enhanced mitigation) measures shall be implemented for Phase 2:
- The use of aqueous diesel fuel for the construction vehicles.
  - Use of diesel oxidation catalysts capable of a 40% reduction in NOx emissions on all diesel equipment with the exception of cranes and forklifts which will require a 15% reduction in accordance with URBEMIS 9.2.4 (see Appendix C.)
  - Use of low-volatile organic compound paints capable of reducing ROG emissions by 45% compared to existing architectural coating rules.
  - All heavy-duty diesel trucks shall comply with EPA on-road PM emissions standards and be equipped with Best Available Control Technology (BACT) devices certified by CARB.
  - Idling restrictions (maximum 5 minutes) shall apply to construction equipment, when not in use.

- Construction equipment shall incorporate, where feasible, emissions-savings technology such as hybrid drives and specific fuel economy standards.
  - Use of alternative fueled or catalyst equipped diesel construction equipment.
  - Operation of heavy duty equipment and/or the amount of equipment in use shall be limited to the minimum number of hours practicable each day.
  - To the extent practicable fossil-fueled construction equipment shall be replaced with electrically driven equivalents (provided they are not run via a portable generator set).
  - Construction activities shall be curtailed during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak-hour of vehicular traffic on adjacent roadways.
  - Construction activity management shall be implemented as practicable (e.g., rescheduling activities to reduce short-term impacts).
  - During construction activity, traffic speeds on unpaved roads shall be limited to 15 mph.
  - During construction activity, sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.
  - During construction activity, wheel washers shall be installed for all exiting trucks, or wash off all trucks and equipment leaving the site.
  - During construction activity, wind breaks shall be installed at windward side(s) of construction areas.
  - During construction activity, excavation and grading activity shall be suspended when winds exceed 20 mph.
  - During construction activity, areas subject to excavation, grading, and other construction activity shall be limited at any one time.
- **Mitigation Measures 3.3.1c:** To reduce emissions and thus reduce air quality impacts, the following Option 2 (enhanced mitigation) measures shall be implemented for Phase 3.
- The use of aqueous diesel fuel for the construction vehicles.
  - Use of diesel oxidation catalysts capable of a 40% reduction in NOx emissions on all diesel equipment with the exception of cranes and forklifts which will require a 15% reduction in accordance with URBEMIS 9.2.4 (see Appendix C.)
  - Use of low-volatile organic compound paints capable of reducing ROG emissions by 45% compared to existing architectural coating rules.
  - All heavy-duty diesel trucks shall comply with EPA on-road PM emissions standards and be equipped with Best Available Control Technology (BACT) devices certified by CARB.
  - Idling restrictions (maximum 5 minutes) shall apply to construction equipment, when not in use.
  - Construction equipment shall incorporate, where feasible, emissions-savings technology such as hybrid drives and specific fuel economy standards.
  - Use of alternative fueled or catalyst equipped diesel construction equipment.
  - Operation of heavy duty equipment and/or the amount of equipment in use shall be limited to the minimum number of hours practicable each day.
  - To the extent practicable fossil-fueled construction equipment shall be replaced with electrically driven equivalents (provided they are not run via a portable generator set).
  - Construction activities shall be curtailed during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak-hour of vehicular traffic on adjacent roadways.

- Construction activity management shall be implemented as practicable (e.g., rescheduling activities to reduce short-term impacts).
  - During construction activity, traffic speeds on unpaved roads shall be limited to 15 mph.
  - During construction activity, sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.
  - During construction activity, wheel washers shall be installed for all exiting trucks, or wash off all trucks and equipment leaving the site.
  - During construction activity, wind breaks shall be installed at windward side(s) of construction areas.
  - During construction activity, excavation and grading activity shall be suspended when winds exceed 20 mph.
  - During construction activity, areas subject to excavation, grading, and other construction activity shall be limited at any one time.
- ▶ **Mitigation Measures 3.3.1d:** To reduce emissions and thus reduce air quality impacts, the following Option 2 (enhanced mitigation) measures shall be implemented for Phase 4.
- The use of aqueous diesel fuel for the construction vehicles.
  - Use of diesel oxidation catalysts capable of a 40% reduction in NO<sub>x</sub> emissions on all diesel equipment with the exception of cranes and forklifts which will require a 15% reduction in accordance with URBEMIS 9.2.4 (see Appendix C.)
  - Use of low-volatile organic compound paints capable of reducing ROG emissions by 45% compared to existing architectural coating rules.
  - All heavy-duty diesel trucks shall comply with EPA on-road PM emissions standards and be equipped with Best Available Control Technology (BACT) devices certified by CARB.
  - Idling restrictions (maximum 5 minutes) shall apply to construction equipment, when not in use.
  - Construction equipment shall incorporate, where feasible, emissions-savings technology such as hybrid drives and specific fuel economy standards.
  - Use of alternative fueled or catalyst equipped diesel construction equipment.
  - Operation of heavy duty equipment and/or the amount of equipment in use shall be limited to the minimum number of hours practicable each day.
  - To the extent practicable fossil-fueled construction equipment shall be replaced with electrically driven equivalents (provided they are not run via a portable generator set).
  - Construction activities shall be curtailed during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak-hour of vehicular traffic on adjacent roadways.
  - Construction activity management shall be implemented as practicable (e.g., rescheduling activities to reduce short-term impacts).
  - During construction activity, traffic speeds on unpaved roads shall be limited to 15 mph.
  - During construction activity, sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.
  - During construction activity, wheel washers shall be installed for all exiting trucks, or wash off all trucks and equipment leaving the site.
  - During construction activity, wind breaks shall be installed at windward side(s) of construction areas.
  - During construction activity, excavation and grading activity shall be suspended when winds exceed 20 mph.

- During construction activity, areas subject to excavation, grading, and other construction activity shall be limited at any one time.
- ▶ **Mitigation Measures 3.3.1e:** To reduce emissions and thus reduce air quality impacts, the following Option 2 (enhanced mitigation) measures shall be implemented for Phase 5:
  - The use of aqueous diesel fuel for the construction vehicles.
  - Use of diesel oxidation catalysts capable of a 40% reduction in NOx emissions on all diesel equipment with the exception of cranes and forklifts which will require a 15% reduction in accordance with URBEMIS 9.2.4 (see Appendix C.)
  - Use of low-volatile organic compound paints capable of reducing ROG emissions by 45% compared to existing architectural coating rules.
  - All heavy-duty diesel trucks shall comply with EPA on-road PM emissions standards and be equipped with Best Available Control Technology (BACT) devices certified by CARB.
  - Idling restrictions (maximum 5 minutes) shall apply to construction equipment, when not in use.
  - Construction equipment shall incorporate, where feasible, emissions-savings technology such as hybrid drives and specific fuel economy standards.
  - Use of alternative fueled or catalyst equipped diesel construction equipment.
  - Operation of heavy duty equipment and/or the amount of equipment in use shall be limited to the minimum number of hours practicable each day.
  - To the extent practicable fossil-fueled construction equivalents (provided they are not run via a portable generator set).
  - Construction activities shall be curtailed during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak-hour of vehicular traffic on adjacent roadways.
  - Construction activity management shall be implemented as practicable (e.g., rescheduling activities to reduce short-term impacts).
  - During construction activity, traffic speeds on unpaved roads shall be limited to 15 mph.
  - During construction activity, sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.
  - During construction activity, wheel washers shall be installed for all exiting trucks, or wash off all trucks and equipment leaving the site.
  - During construction activity, wind breaks shall be installed at windward side(s) of construction areas.
  - During construction activity, excavation and grading activity shall be suspended when winds exceed 20 mph.
  - During construction activity, areas subject to excavation, grading, and other construction activity shall be limited at any one time.
- ▶ **Mitigation Measure 3.3.2:** Implementation of the following mitigation measures will substantially reduce air quality impacts related to human activity within the entire Project area, but not to a level that is less than significant:
  - The following guidelines shall be used by the County during review of future project-specific submittals for non-residential development within the Specific Plan area and within the Community Plan boundary in order to reduce generation of air pollutants with intent that specified measures be required where feasible and appropriate:



- Trees shall be carefully selected and located to protect building(s) from energy consuming environmental conditions, and to shade paved areas. Trees selected to shade paved areas should be varieties that will shade 25% of the paved area within 20 years;
- Equip HVAC units with a PremAir or similar catalyst system, if reasonably available and economically feasible at the time building permits are issued. Catalyst systems are considered feasible if the additional cost is less than 10% of the base HVAC unit cost;
- Install two 110/208 volt power outlets for every two loading docks.

Implement the following, or equivalent measures, as determined by the County in consultation with the APCD:

- The following measures shall be used singularly or in combination to accomplish an overall reduction of 10 to 20% in residential energy consumption relative to the requirements of the 2008 State of California Title 24:
  - Use of air conditioning systems that are more efficient than the 2008 Title 24 requirements;
  - Use of high-efficiency heating and other appliances, such as water heaters, cooking equipment, refrigerators, and furnaces;
  - Establishment of tree-planting guidelines that require residents to plant trees to shade buildings primarily on the west and south sides of the buildings. Use of deciduous trees (to allow solar gain during the winter) and direct shading of air conditioning systems shall be included in the guidelines; and
  - Establish paving guidelines that encourage businesses, if feasible, to pave all privately owned parking areas with a substance with reflective attributes (albedo = 0.30 or better) similar to Portland cement concrete. The use of a paving substance with reflective attributes similar to Portland cement concrete is considered feasible under this measure if the additional cost is less than 10% of the cost of applying a standard asphalt product.

Bicycle usage shall be promoted by requiring the following:

- All non-residential projects shall provide bicycle lockers and/or racks; and
- All apartment complexes or condominiums without garages shall provide at least two Class I bicycle storage spaces per unit.

Transportation related mitigation measures (Extended Conditions of approval):

- Commute options: to inform Specific Plan area occupants of the alternative travel amenities provided, including ridesharing and public transit availability/schedules;
- Maps showing the Community Plan's pedestrian, bicycle, and equestrian paths to community centers, shopping areas, employment areas, schools, parks, and recreation areas; and
- Information regarding SJVAPCD programs to reduce county-wide emissions.

The County and SJVAPCD may substitute different air pollution control measures for individual projects, that are equally effective or superior to those proposed herein, as new technology and/or other feasible measures become available in the course of build-out within the Friant Community Plan boundary.

Implementation of the mitigation measures would reduce impacts to air quality, but not to a less-than-significant level. Therefore, as discussed in the Friant Ranch EIR, several of these impacts would remain significant and unavoidable.

## CONSISTENCY EVALUATION

- a–c) These issues are evaluated in the Friant Ranch Partially Revised and Recirculated Draft EIR. As shown in the Friant Ranch Partially Revised and Recirculated Draft EIR, construction-related impacts are concluded to be less than significant when compared to SJVAPCD's thresholds of significance. This conclusion differs from the

conclusion made in the Friant Ranch EIR, which determined construction-related emissions of criteria air pollutants and ozone precursor emissions to be significant and unavoidable following the application of mitigation measures. Consistent with SJVAPCD's guidance at the time, the Friant Ranch EIR did not quantify or disclose construction-generated emissions, therefore, the Friant Ranch EIR conservatively concluded that mitigation would not be sufficient to reduce impacts to a less-than-significant level. Consistent with SJVAPCD's most recent guidance (updated in 2015), the Friant Ranch Partially Revised and Recirculated Draft EIR quantifies the project's construction emissions, measures these levels against SJVAPCD's mass emissions thresholds of significance, and determines that these levels would not result in a significant air quality impact. Therefore, the requirements of previously adopted Mitigation Measures 3.3.1a, 3.3.1b, 3.3.1c, 3.3.1d, and 3.3.1e are no longer recommended.

The Friant Ranch Partially Revised and Recirculated Draft EIR also remodels and examines the significance of the project's operational emissions of criteria air pollutants and ozone precursors. Consistent with the findings of the Friant Ranch EIR, impacts are considered potentially significant and new Mitigation Measures 3.3-2a and 3.3-2b are recommended and supersede the project design features under the previously adopted Mitigation Measure 3.3-2 of the Friant Ranch EIR. Unlike the conclusion made in the Friant Ranch EIR, the mitigation measures recommended in the Friant Ranch Partially Revised and Recirculated Draft EIR are sufficient to reduce operational emissions to a less-than-significant level. This is attributable to the availability of a Voluntary Emission Reduction Program (VERA) as overseen and regulated by SJVAPCD, which was not available at the Friant Ranch EIR was certified. Through incorporation of on-site project design features (Mitigation Measure 3.3-2a), followed by the engagement with a VERA as administered and verified by SJVAPCD, the Friant Ranch Partially Revised and Recirculated Draft EIR concludes that the project's operational emissions would be less-than-significant with mitigation.

- d) As analyzed in the Friant Ranch EIR, the project would not generate objectionable odors or related complaints. The majority of the odors resulting from the project area would be temporary or short-term during construction and would not be a permanent nuisance. Furthermore, the use of the closed MBR treatment plant and compliance with the requirements of Mitigation Measure 3.14.3g as well as any necessary RWQCB requirements pertaining to the reduction of odor would reduce odors. This impact was concluded to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to odors.

## IV. BIOLOGICAL RESOURCES

Environmental Issue Would the Project	Where were impacts analyzed previously?	Do proposed changes/ new circumstances/ new information result in new significant/ substantially more severe impacts?	Is there substantial new information requiring new analysis or verification?	Do mitigation measures from prior documents resolve significant impacts?
a) Have 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 the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	DEIR Impacts 3.4.1a through 3.4.1j and 3.4.9a through 3.4.9l	No	No	Yes, with new mitigation measures recommended for new species
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	DEIR Impacts 3.4.2 and 3.4.10	No	No	Yes
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	DEIR Impacts 3.4.3a, 3.4.3b, 3.4.11a, and 3.4.11b	No	No	Yes
d) 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?	DEIR Impacts 3.4.4 and 3.4.12	No	No	N/A (for Impact 3.4.4) Yes (for Impact 3.4.12)
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	DEIR Impacts 3.4.5 and 3.4.13	No	No	Yes
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	DEIR Impacts 3.4.6 and 3.4.14	No	No	N/A

### Summary of EIR Analysis

This topic is addressed in Section 3.4, “Biological Resources,” of the Friant Ranch Draft EIR. The regulatory and physical settings are described in Sections 3.4.1 and 3.4.2, respectively, of the Draft EIR.

## IMPACT ANALYSIS

Impacts from development of the Friant Ranch Project are evaluated in the Friant Ranch Draft EIR (pages 3-101 through 3-146) and are summarized below. Impacts are presented separately for the "Friant Ranch Specific Plan Site" and the "Existing Friant Ranch Community Plan Area," consistent with the Friant Ranch Draft EIR.

### Friant Ranch Specific Plan Site

- ▶ **Impact 3.4.1a: Impacts to succulent owls clover.** Although direct impacts to this species are not expected to occur, indirect and significant impacts may occur through degradation of water quality in occupied wetlands and through changes in land management practices. However, mitigation measures are identified that require maintaining the wetlands that contain succulent owls clover as undisturbed open space and implementing a land management plan. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.1b: Impacts to Hartweg's golden sunburst.** The project would result in the loss of 0.02 acre of Hartweg's golden sunburst, would be a significant adverse impact. Furthermore, project impacts to this species would be subject to provisions of the state and federal Endangered Species Acts (ESA). Mitigation measures are identified that require conducting pre-construction surveys, establishing conservation easements, implementing a land management plan, conducting public outreach, and implementing a restoration plan. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.1c: Impacts to vernal pool fairy shrimp.** The likely mortality of vernal pool fairy shrimp from direct loss of habitat and the possible degradation of habitat in designated open space would be a significant adverse impact. Furthermore, project impacts to this species would be subject to provisions of the federal ESA. Mitigation measures are identified that require avoiding vernal pools, creating/restoring vernal pool habitat, creating buffers, and implementing a drainage plan. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.1d: Impacts to California tiger salamander.** The project would eliminate habitat for California tiger salamander (CTS) on the project site, which would result in direct mortality of the species and be a significant adverse impact. Project impacts to this species would be subject to provisions of the state and federal ESAs. Mitigation measures are identified that require avoiding elimination of habitat, managing undisturbed open space, and preserving grassland. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.1e: Impacts to Western Spadefoot.** The project would result in the mortality of an unknown number of western spadefoots and would permanently eliminate some of the breeding habitat and much of the aestivation habitat used by this species. Mitigation measures are identified that require avoiding elimination of habitat, managing undisturbed open space, and preserving grassland. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.1f: Impacts to Swainson's hawks.** The project would remove approximately 496 acres of Swainson's hawk foraging habitat, the loss of which would be less than significant in a regional context, particularly because Swainson's hawks are not known to nest within 5 miles of the project site and the only potentially available nesting location on the site are several power poles and a Fremont's cottonwood tree. Moreover, the project would conserve approximately 275 acres of potential foraging habitat onsite in a region where considerable foraging habitat exists. Therefore, this impact would be **less than significant**.
- ▶ **Impact 3.4.1g: Impacts to Burrowing Owls.** The project would remove approximately 496 acres of foraging habitat, the loss of which would be less than significant in a regional context because the project would conserve 460 acres of potential foraging habitat and up to an additional 1,1016 acres of off-site habitat. Mitigation measures are identified that require conducting pre-construction surveys, establishing an upland mitigation area for relocated species, establishing a conservation easement, establishing buffers during the breeding season, and monitoring throughout construction. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.1h: Impacts to American Badger.** Project construction could result in mortalities to badgers, which would be a significant adverse impact. Mitigation measures are identified that require conducting pre-construction surveys, monitoring and replacing dens, installing exclusion fencing, reducing vehicle speed during

construction, covering holes during construction, and storing construction equipment properly. This impact would be **less than significant after mitigation**.

- ▶ **Impact 3.4.1i: Impacts to nesting raptors.** Potential impacts to nesting raptors could result from the loss of nesting habitat, loss of foraging habitat, and disturbance to nearby nesting birds due to construction related disturbances. These would be significant adverse impacts. Mitigation measures are identified that require conducting pre-construction surveys and establishing buffers for nesting raptors. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.1j: Impacts to common and special status nesting birds.** The project could result in the removal of active birds' nests and the disruption of breeding behaviors, which would be a significant adverse impact. Mitigation measures are identified that require conducting pre-construction surveys, establishing buffers for nesting birds, and postponing tree removal. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.2: Impact of Friant Ranch Specific Plan development (including wastewater treatment plant and disposal) to riparian habitat or other sensitive natural communities.** The project would result in the loss of approximately 2.3 acres of vernal pool habitat, which would be a significant adverse impact. Mitigation measures are identified that require the acquisition, preservation, and management of large patches of vernal pool and grassland habitats in the project region. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.3a: Impact of Friant Ranch Specific Plan development (including wastewater treatment plant and disposal) to federally protected wetlands and other waters.** The project would result in the loss of approximately 12.3 acres of jurisdictional and isolated waters, which would be a significant adverse impact. Mitigation measures are identified that require the establishment of conservation easements and the creation/restoration of wetlands. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.3b: Impacts to water quality in seasonal creeks, reservoirs, and other downstream waters.** Project construction could result in the erosion of construction areas, deposition of silt into downstream waters, and the introduction of pollutants (both during construction and post-construction) into stormwater runoff entering the San Joaquin River. Mitigation measures are identified that require preparing and implementing an erosion control plan, confining construction to the dry season, and appropriate routing of post-construction runoff. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.4: Impacts of Friant Ranch Specific Plan development (including wastewater treatment plant and disposal) to fish or wildlife movement corridors.** The project site is not a movement corridor or substantial linkage for wildlife. Development of the site would not significantly affect wildlife movement in the region. This impact would be **less than significant**.
- ▶ **Impact 3.4.5: Consistency of the Friant Ranch Specific Plan with local policies or ordinances protecting biological resources.** Various project elements have the potential, without appropriate mitigation, to be inconsistent with certain County General Plan policies and result in significant impacts. Implementation of the mitigation measures listed above would require the establishment of conservation easements, creation/restoration of wetland habitats, maintenance of buffer zones around wetland features, preservation of vernal pool vegetation, maintenance of habitat functions and values, and control of siltation and pollutant entry into these habitats. Implementation of these measures would ensure consistency with local ordinances and policies, including the County General Plan. Moreover, a considerable amount of additional wildlife habitats and wetlands would be preserved off-site. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.6: Consistency of the Friant Ranch Specific Plan with adopted Habitat Conservation plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plan.** There are no local, regional, or State Habitat Conservation Plans or Natural Community Conservation Plans that include the project site. Thus, the project would not conflict with such plans. There would be **no impact**.
- ▶ **Impact 3.4.7: Potential biological impacts resulting from the transport and treatment of water.** The transport of water from the Friant Dam to the WWD-18 treatment facility would not result in significant impacts to biological resources. Upgrades to the treatment facility may be needed to process the additional 2,000 acre feet of annually

delivered water. Construction activities at WWD-18 would not result in significant impacts to sensitive wildlife species or result in the loss of sensitive species habitat because that area does not support sensitive biological resources, with the exception of potential habitat for CTS. The mitigation measures listed above would be implemented and this impact would be **less than significant after mitigation**.

- ▶ **Impact 3.4.8: Biological impacts associated with replacement of transferred water.** The replacement of transferred water within the Lower Tule River Irrigation District would occur through construction of the Tule River Intertie Project. The Tule River Intertie Project was evaluated under a separate CEQA process and, with mitigation measures developed for that project, biological impacts associated with replacement of transferred water would result in **no impacts** to biological resources.

### Existing Friant Ranch Community Plan Area

- ▶ **Impact 3.4.9a: Impacts to spiny-sepaled button celery.** Projects within the Existing Friant Community Plan Area could remove spiny-sepaled button celery, which would be a potentially significant adverse impact. Mitigation measures are identified that require conducting pre-construction surveys, avoiding the species, and (where avoidance is not possible) compensating for the loss of the species. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.9b: Impacts to vernal pool fairy shrimp.** Projects within the Existing Friant Community Plan Area could result in the mortality of vernal pool fairy shrimp from direct loss of habitat and the possible degradation of habitat in designated open space, which would be a significant adverse impact. Furthermore, project impacts to this species would be subject to provisions of the federal ESA. Mitigation measures are identified that require avoiding vernal pools, creating/restoring vernal pool habitat, creating buffers, and implementing a drainage plan. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.9c: Impacts to Valley elderberry longhorn beetle.** Projects within the Existing Friant Community Plan Area could result in the mortality of elderberry longhorn beetles or to elderberry bushes, their sole habitat, which would be a significant adverse impact. Mitigation measures are identified that require conducting pre-construction surveys, establishing buffers, conducting environmental awareness training, and compensating for loss of beetles. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.9d: Impacts to California tiger salamander.** Projects within the Existing Friant Community Plan Area could result in the mortality of CTS, which would be a significant adverse impact. Project impacts to this species would be subject to provisions of the state and federal ESAs. Mitigation measures are identified that require avoiding elimination of habitat, managing undisturbed open space, and preserving grassland. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.9e: Impacts to Western Spadefoot.** Projects within the Existing Friant Community Plan Area could result in the mortality of western spadefoots. Mitigation measures are identified that require avoiding elimination of habitat, managing undisturbed open space, and preserving grassland. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.9f: Impacts to western pond turtle.** Projects within the Existing Friant Community Plan Area could result in the direct mortality of western pond turtles and the degradation of their habitat. Mitigation measures are identified that require establishing a construction setback from the San Joaquin River and Lost Lake and implementing a stormwater pollution prevention plan. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.9g: Impacts to Swainson's hawks.** Projects within the Existing Friant Community Plan Area could remove Swainson's hawk foraging habitat. Additionally, grading in areas greater than 5 acres in size, particularly in the Lost Lake area, may result in a potentially significant effect to Swainson's hawks. Mitigation measures are identified that require conducting pre-construction surveys, replacing habitat, establishing buffers during construction, and avoiding take of Swainson's hawk nests. This impact would be **less than significant after mitigation**.

- ▶ **Impact 3.4.9h: Impacts to burrowing owls.** Projects within the Existing Friant Community Plan Area could remove foraging habitat, the loss of which would be a significant adverse impact. Mitigation measures are identified that require conducting pre-construction surveys, establishing an upland mitigation area for relocated species, establishing a conservation easement, establishing buffers during the breeding season, and monitoring throughout construction. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.9i: Impacts to other nesting raptors.** Breeding raptors on and within 1,000 feet of the Existing Friant Community Plan Area would be at risk from construction related disturbances. Potential impacts to nesting raptors could result from the loss of nesting habitat, loss of foraging habitat, and disturbance to nearby nesting birds. These would be significant adverse impacts. Mitigation measures are identified that require conducting pre-construction surveys and establishing buffers for nesting raptors. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.9j: Impacts to common and special status nesting birds.** Projects within the Existing Friant Community Plan Area could result in the removal of active birds nests and the disruption of breeding behaviors, which would be a significant adverse impact. Mitigation measures are identified that require conducting pre-construction surveys, establishing buffers for nesting birds, and postponing tree removal. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.9k: Impacts to American Badger.** Projects within the Existing Friant Community Plan Area could result in mortalities to badgers, which would be a significant adverse impact. Mitigation measures are identified that require conducting pre-construction surveys, monitoring and replacing dens, installing exclusion fencing, reducing vehicle speed during construction, covering holes during construction, and storing construction equipment properly. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.9l: Impacts to the pallid bat and western mastiff bat.** Projects within the Existing Friant Community Plan Area could remove roosting sites (trees and buildings) and disrupt breeding behaviors, which would be a significant adverse impact. Mitigation measures are identified that require conducting pre-construction surveys. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.10: Impacts to riparian habitat or other sensitive natural communities within the Existing Friant Community Plan Area.** Projects within the Existing Friant Community Plan Area could result in the loss of Great Valley Mixed Riparian Forest and other riparian habitats, which would be a significant adverse impact. Mitigation measures are identified that require the mapping of sensitive habitats, avoiding these habitats (where possible), and obtaining permits (where required). This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.11a: Impacts to federally protected wetlands and other waters within the Existing Friant Community Plan Area.** Projects within the Existing Friant Community Plan Area could result in the loss of wetlands and other waters, which would be a significant adverse impact. Mitigation measures are identified that require the preparation of a wetland delineation, establishment of conservation easements, and the creation/restoration of wetlands. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.11b: Impacts to water quality in seasonal creeks, reservoirs, and other downstream waters.** Construction of projects within the Existing Friant Community Plan Area could result in the erosion of construction areas, deposition of silt into downstream waters, and the introduction of pollutants (both during construction and post-construction) into stormwater runoff entering the San Joaquin River. Mitigation measures are identified that require preparing and implementing an erosion control plan, confining construction to the dry season, and appropriate routing of post-construction runoff. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.12: Impacts to Fish or Wildlife Movement Corridors within the Existing Friant Community Plan Area.** Degradation of the riparian habitat corridor along the San Joaquin River could obstruct wildlife movements and result in significant adverse impacts. Mitigation measures are identified that would ensure that movements of fish and wildlife within the San Joaquin River and adjacent riparian zone are maintained at levels that would not

jeopardize local or regional populations of fish and wildlife. This impact would be **less than significant after mitigation**.

- ▶ **Impact 3.4.13: Consistency with local policies or ordinances protecting biological resources within the Friant Community Plan Area.** The Existing Friant Community Plan the potential, without appropriate mitigation, to be inconsistent with certain County General Plan policies and result in significant impacts. Implementation of the mitigation measures listed above would require the establishment of conservation easements, creation/restoration of wetland habitats, maintenance of buffer zones around wetland features, preservation of vernal pool vegetation, maintenance of habitat functions and values, and control of siltation and pollutant entry into these habitats. Implementation of these measures would ensure consistency with local ordinances and policies, including the County General Plan. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.4.14: Consistency of the Existing Friant Community Plan with adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plan.** There are no local, regional, or State Habitat Conservation Plans, or Natural Community Conservation Plans that include the Friant Community Plan Area. Thus, the project would not conflict with such plans. There would be **no impact**.

### Friant Community Plan Update and Friant Ranch Specific Plan Policy Requirements

The Friant Ranch EIR does not list any proposed policies of the Friant Community Plan Update or the Friant Ranch Specific Plan that are applicable to biological resources.

### Mitigation Measures

The following mitigation measures were identified in the Friant Ranch EIR:

- ▶ **Mitigation Measure 3.4.1a:** To ensure that indirect impacts to succulent owls clover will be less than significant; the following mitigation measures will be implemented:
  - The wetlands on the Friant Ranch Specific Plan Site that contain succulent owls clover shall be maintained as undisturbed open space, as required in mitigation measure 3.4.1c(4).
  - Prior to issuance of a grading permit that would result in activities affecting the succulent owls clover, a Land Management Plan shall be prepared for the open space that exists on the Specific Plan Site. That Land Management Plan shall include continued management by cattle grazing and shall:
    - be developed in cooperation with the California Department of Fish and Game and the United States Fish and Wildlife Service,
    - describe management goals and objectives,
    - include provisions for monitoring existing populations of protected biological resources (including succulent owls clover),
    - include the use of adaptive management to ensure that results of the monitoring efforts are incorporated into management actions, and follow the management goals and objectives, and
    - identify remedial actions and alternatives for protection (which may include off-site compensation) if management fails to protect on-site resources to the level established for each resource.
- ▶ **Mitigation Measure 3.4.1a(1):** The Specific Plan applicant will pay the market rate for 0.5 acres of succulent owl's clover creation/restoration credits from a Conservation Bank whose service area includes the Friant Ranch Specific Plan Area.
- ▶ **Mitigation Measure 3.4.1b:** The following measures shall be implemented to reduce the level of impacts to Hartweg's golden sunburst to a level that is less than significant.



- Prior to the issuance of a grading permit that would result in activities affecting the Hartweg's golden sunburst populations, the on-site open space which contains the species will be protected in perpetuity through a conservation easement to be held by a non-profit land trust.
  - The designated open space will be managed to preserve in perpetuity the populations of Hartweg's golden sunburst. Prior to issuance of a grading permit that would result in activities affecting the Hartweg's golden sunburst, a Land Management Plan will be prepared (see mitigation measure 3.4-1a2) that will include the protection of the golden sunburst population from human foot traffic and off road vehicles by restricting access to open space through fencing and signage.
  - Prior to issuance of an occupancy permit, an informational brochure will be prepared that educates Friant Ranch Community members about the sensitivity of this species to human trampling, discouraging trespass into conserved open space.
  - Where avoidance is not possible, the project applicant will have a qualified biologist develop a Restoration Plan to salvage populations of Hartweg's golden sunburst located in proposed development areas that would be destroyed during construction activities. A draft of this plan will be submitted to the California Department of Fish and Game and the U.S. Fish and Wildlife Service for review, comment, and approval. The plan will be finalized and implemented by the project applicant prior to issuance of a grading permit for the areas inhabited by Hartweg's golden sunburst. Elements of the Restoration Plan shall include the collection of mature seed prior to natural dispersal (late April or early May), the storage of the seed in a cool dry location until the fall, and the dispersal of the seed onto proposed open space areas of the Site where suitable Rocklin soils are known to be present. The selected planting areas would be mapped using GIS, fenced to reduce grazing pressure, and monitored after planting for a minimum of four years during a 7 year monitoring period. An annual monitoring report will be prepared and submitted to CDFG and the USFWS. The salvage and relocation of this species will be considered successful when a self-sustaining population of Hartweg's golden sunburst has been established on approximately 0.06 acres of the designated open space (representing a 3:1 ratio).
  - The Restoration Plan described in number 5 above shall include alternatives or contingencies for ensuring that appropriate compensation for the loss of Hartweg's golden sunburst is met (at a ratio of 3:1) should the initial relocation of the Hartweg's golden sunburst populations not meet established success criteria. These alternatives shall be approved by the CDFG and USFWS.
- ▶ **Mitigation Measure 3.4.1c:** The following measures shall be implemented to ensure that impacts to vernal pool fairy shrimp are less than significant.
- The Project shall avoid vernal pool fairy shrimp to the maximum extent feasible. The Friant Ranch Specific Plan has been designed to avoid the majority of vernal pools on the site. Of the 14.38 acres of vernal pool habitat identified on the project site, 12.09 acres of vernal pools shall be protected within approximately 233 acres of designated undisturbed open space that shall be placed under a conservation easement. The area of vernal pool fairy shrimp habitat to be protected within designated on-site open space shall be at a ratio of 5 acres of protected vernal pool habitat for each acre of such habitat directly or permanently disturbed by grading and construction associated with the development of the project.
  - Prior to the issuance of a grading permit the project applicant shall compensate for the loss of vernal pool habitat through the creation/restoration of additional vernal pool habitat at a ratio of one acre of creation/restoration for each acre of such habitat directly and permanently disturbed by grading and construction associated with the project development. Creation/restoration of vernal pool habitat shall be accomplished by one or a combination of the following three mitigation alternatives:
    - Off-Site Creation/Restoration. The project applicant shall conserve through acquisition or conservation easement off-site lands suitable for vernal pool creation/restoration in Fresno, Madera, or Merced County. Such lands shall consist of the following characteristics: natural undisturbed native wetlands and habitat suitable for threatened and endangered plant and animal species shall be absent (i.e., these lands

shall have been previously disturbed by farming, or some other intensive use); vernal pools once occurred on these lands naturally; the underlying hardpan layer is still intact; and the natural topography has not been eliminated through land leveling. Topographic depressions shall be created/restored on these lands according to a "mitigation and monitoring plan" prepared by a qualified biologist. The depressions shall hold water for approximately three months of every year. When full, the depth of the filled pools shall vary from 6 to 18 inches. The depressions shall be revegetated with vernal pool species native to the area; soil collected from existing pools in the region shall be distributed on the bottoms of the constructed pools in order to enhance the prospects for establishing vernal pool fairy shrimp populations. Efforts to establish fairy shrimp populations in the constructed pools shall only occur after receiving formal authorization to do so from the USFWS, as required by law. The components of this mitigation and monitoring plan shall be consistent with standard USACE guidelines.

- Purchase of Vernal Pool Creation/Restoration Credits from a Conservation Bank. The project applicant shall pay the market rate for Vernal Pool Creation/Restoration Credits at the stipulated 1:1 ratio from a Conservation Bank whose service area includes the Friant Ranch Specific Plan Area.
- Payment into the Vernal Pool Fund. Should a conservation bank having vernal pool creation credits for sale not exist in Fresno, Madera or Merced Counties, the project applicant shall pay the going rate per acre into the Vernal Pool Fund managed by the Center for Natural Lands Management. These funds may only be used for the purchase of vernal pool creation credits in a local conservation bank.
- The designated open space proposed for the project site shall provide buffers of 75 feet or greater between developed areas of the project site and vernal pools, to reduce encroachment into pools by foot and off-road vehicle traffic.
- Prior to issuance of a grading permit for the project site, a Drainage Plan shall be prepared for the undisturbed open space of the site. Elements of this plan shall include:
  - Design plans to ensure that winter stormwater runoff into open space areas of the project site shall mimic to the maximum extent feasible pre-project conditions. Upon project completion, surface and subsurface flows of runoff to preserved vernal pools shall be roughly equivalent to pre-project conditions,
  - All runoff originating in developed areas of the site shall pass through retention basins, bio-filtration swales, or both, which shall act together as stormwater filters such that water quality shall not be significantly reduced from pre-project conditions,
  - Irrigation runoff from landscaped areas shall be routed away from vernal pool habitats during the summer and fall to ensure that the hydrology of these habitats mimics pre-project conditions,
  - A grazing management plan shall be developed and implemented to control the proliferation of non-native annuals in grassland and vernal pool habitats of the on-site open space areas, and to control the build-up of flammable thatch,
  - Access to the open space areas shall be controlled in order to minimize impact to vernal pools and other habitats, and to ensure that cattle are confined to the open space areas when grazing is permitted. This plan shall be submitted to the USFWS for review and approval.
- ▶ **Mitigation Measure 3.4.1d:** The following measures shall be implemented to ensure that impacts to the California tiger salamander are at levels that are less than significant.
  - The Project shall be designed to avoid elimination of breeding and aestivation habitat to the maximum extent possible. The project applicant has designed the project to avoid a substantial amount of on-site habitats suitable for CTS. Of the 14.38 acres of on-site vernal pool habitat potentially used as breeding habitat by the CTS, 12.09 acres of vernal pools shall be protected in designated undisturbed open space (Table 3.4-2). The area of California tiger salamander breeding habitat to be protected within designated open space shall be at a ratio of 5 acres of protected vernal pool habitat for each acre of such habitat

directly and permanently disturbed by grading and construction associated with project development. Of the 927.82 acres of potential aestivation habitat now present in the Specific Plan Area, approximately 233 acres of undisturbed aestivation habitat shall be preserved within the proposed open space. An additional 30 acres of the site that are contiguous with undisturbed open space and that are to be temporarily disturbed by site grading shall be restored to native vegetation and managed as part of the proposed open space area. Open space areas with vernal pool complexes of the completed project, totaling 275.4 acres, shall be linked to one another to facilitate the movements of CTS from one preserved habitat area to another, and linked to significant breeding and aestivation habitats on lands to the south of the Site.

- Management of the undisturbed open space, as required in mitigation for vernal pool fairy shrimp set forth in mitigation measure 3.4.1c, shall ensure that vernal pools protected in open space areas of the Site shall continue to provide breeding habitat for CTS and that grasslands shall continue to provide habitat for burrowing rodents, which create aestivation habitat for CTS.
- Prior to issuance of a grading permit for all or any portion of the project site, the project applicant shall preserve grassland habitats suitable for CTS aestivation under conservation easement at a minimum ratio of two acres of habitat preservation for every acre of such habitat directly or permanently disturbed by project grading and construction. Such preservation shall include on-site (i.e., open space areas) and off-site habitat in Fresno, Madera and/or Merced Counties. Should the project be constructed in phases, preservation can be phased concurrent with development phases as long as the 2:1 ratio is met for the acreage subject to the grading permit. At full buildout the project shall eliminate approximately 694.5 acres of suitable on-site aestivation habitat. Under this mitigation measure, the applicant shall preserve two times that amount of known and created CTS aestivation habitat on-site and off-site in suitable habitat located on other parcels within Fresno, Madera and Merced Counties. Parcels that could meet the requirements of this mitigation measure and are available for mitigation purposes have been identified in Tables 3.4-2 and 3.4-3 and are further illustrated in Figure 3.4-7. These representative parcels provide up to 31.21 acres of breeding habitat in the form of vernal pools and 1,282.19 acres of aestivation habitat in the form of grasslands and other habitats supporting populations of burrowing animals such as California ground squirrels and pocket gophers. To meet the 2:1 preservation requirement set forth in the above mitigation measure the project applicant may identify additional or alternative parcels similar to those identified in Tables 3.4-2 and 3.4-3.
- ▶ **Mitigation Measure 3.4.1e:** To reduce impacts to western spadefoots to a level that is less than significant, the following measures shall be implemented:
  - The western spadefoot utilizes the same habitats as the California tiger salamander for breeding and aestivation (i.e., the western spadefoot breeds in vernal pools and aestivates in rodent burrows of surrounding grasslands). Therefore, implementation of mitigation measures for the California tiger salamander (Mitigation Measures 3.4.1d) would reduce the impact to the western spadefoot to a less than significant level.
- ▶ **Mitigation Measure 3.4.1g:** The following measures shall be implemented to ensure that impacts to the burrowing owl are less than significant:
  - A pre-construction survey shall be conducted on the Specific Plan Site and on the Depot Parcel for ground nesting raptors, including burrowing owls, within 14 to 30 days prior to initiation of site grading activities. If the grading activities are implemented in phases, then so shall the surveys be conducted in phases. If more than 30 days lapse between the time of the preconstruction survey (s) and the start of ground-disturbing activities, another preconstruction survey must be completed. This process should be repeated until the habitat is converted (e.g., graded and developed). The survey shall be completed in accordance with the survey requirements detailed in the CDFG's October 17, 1995 *Staff Report on Burrowing Owl Mitigation*.
  - If burrowing owls are identified onsite or within the area of influence of the project site (within 250 feet of the project site), during surveys required in mitigation measure 3.4.1g (1) above, an upland mitigation area for burrowing owls shall be established either on or offsite. The mitigation site must be determined to be suitable by a qualified biologist. The size of the required mitigation site shall be based on the number of

burrowing owls observed on the project site with a minimum of 6.5 acres preserved per pair of owls or single owl observed using the site. The number of owls for which mitigation is required shall be based on the combined results of the protocol-level survey and the preconstruction surveys (i.e., if two pairs of owls are observed on the project site during the protocol-level survey, the mitigation requirement shall be  $2 \times 6.5 = 13$  acres provided that no more than two pairs of owls are observed during the preconstruction survey; if three pairs of owls are observed during the preconstruction survey, then the mitigation requirement shall be  $3 \times 6.5 = 19.5$  acres). Two natural or artificial nest burrows shall be provided on the mitigation site for each burrow in the project area that shall be rendered biologically unstable.

- If burrowing owls are present on the site and require relocation, an upland mitigation site for burrowing owls shall be designated as provided for in item 2 above. This site may be located within the on-site open space area or it may be located off site. The mitigation site must consist of grassland habitat, contain small mammals (or other prey), and ground squirrel burrows. Habitat protected for the CTS (see mitigation measure #3.4.1e) may be sufficiently suitable. The mitigation site must be approved by the California Department of Fish and Game. The area shall be preserved in perpetuity as wildlife habitat through a conservation easement that designates the California Department of Fish and Game, or any other qualified conservation organization as the Grantee of the easement. The mitigation area need not be identified prior to finding burrowing owls on the Site, however advance planning would reduce the potential for construction delays.
- If a Conservation Easement is established for burrowing owl mitigation onsite, the project applicant shall provide the Grantee of the easement with an endowment to cover the management of the Conservation Easement within six months of breaking ground on the project site. The endowment amount necessary for the conservation easement shall be established after negotiations between the applicant, easement holder/land trust, and the regulatory agencies. The management fund shall be provided by the project applicant to the Grantee of the Conservation Easement within six months of breaking ground on the project site.
- If burrowing owls are present on the project site during the breeding season (peak of the breeding season is April 15 through July 15), and appear to be engaged in nesting behavior, a fenced 250 foot buffer would be required between the nest site(s) (i.e., the active burrow(s)) and any earth-moving activity or other disturbance on the project site. This 250 foot buffer could be removed once it is determined by a qualified biologist that the young have fledged. Typically, the young fledge by August 31st. This date may be earlier than August 31st, or later, and would have to be determined by a qualified biologist. If burrowing owls are present in the non-breeding season a 160 foot buffer area will be established. If construction activities require the removal of an active den, the occupying burrowing owls must be passively relocated from the project site, as approved by the California Department of Fish and Game, passive relocation shall not commence until October 1st and must be completed by February 1st. After passive relocation, the project site and vicinity shall be monitored by a qualified biologist daily for one week and once per week for an additional two weeks to document where the relocated owls move and to ensure that the owls are not reoccupying the project site. A report detailing the results of the relocation and subsequent monitoring shall be submitted to CDFG and the County within two months of the relocation. That report can be incorporated into the monthly monitoring reports as required in item 6 below.
- Monitoring of the project site shall occur on a weekly basis to identify any burrowing owls that may move into the construction area. Monitoring shall be conducted by a qualified biologist provided by the project applicant. Monitoring may be suspended or discontinued if, in the opinion of the qualified biologist, it is determined that suitable habitat for the burrowing owl is absent from the site following mass grading. Monthly reports of monitoring activities shall be submitted by the biologist to the project applicant, the County of Fresno, and the California Department of Fish and Game. A final report of all monitoring application shall be prepared by the biologist and submitted to the project applicant, the County of Fresno, and the California Department of Fish and Game within 90 days of project completion.

- ▶ **Mitigation Measure 3.4.1h:** The following measures shall be implemented to ensure that impacts to American badgers are less than significant:
  - Pre-construction surveys shall be conducted in development zones 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 American badger. If construction activities (including ground disturbing activities) are phased, then so shall the pre-construction surveys be phased.
  - If dens are found within the construction area and require removal, they shall be monitored for badger presence using a tracking medium or a video probe. Tracking medium must be monitored for 3 consecutive days to provide evidence of vacancy. All dens and burrows within the construction area and which contain badger sign must be hand excavated by a trained wildlife biologist. If a den is found to be occupied by a badger, the den shall not be excavated until the badger is allowed to passively vacate the den.
  - If dens are located within 100 feet of construction areas, but not within construction areas, they shall not be removed. Instead, exclusion fencing shall be constructed around the den(s). The exclusion fencing shall consist of plastic construction fencing held in place by t-posts every 25 feet, or by a rope and flagging fence. The purpose of the fencing is to exclude construction activities occurring near the den(s).
  - Project-related vehicles shall observe a 20-mph speed limit while on the project site, except on County roads and State and Federal highways. This is particularly important at night (between sunset and sunrise) when American badgers are most active. Construction activities at night (sunset to sunrise) should be prohibited.
  - Off-road construction traffic outside of designated construction areas shall be prohibited.
  - To prevent inadvertent entrapment of American badgers or other animals during the construction phase of the project, all excavated, steep-walled holes or trenches more than 2 feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals by a qualified biologist or trained monitor.
  - In the case of trapped animals, escape ramps or structures shall be installed immediately to allow the animal(s) to escape. If an entrapped animal is incapable of escaping or is otherwise trapped for an excess of 12 hours, the California Department of Fish and Game should be contacted for advice.
  - American badgers are attracted to den-like structures such as pipes and may enter stored pipe, becoming trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored in an unfenced storage yard (see item 4a and b above for appropriate fencing and clearance conditions) for one or more overnight periods should be thoroughly inspected for American badgers before the pipe is subsequently buried, capped, or otherwise used or moved in anyway. Inspections may be conducted by a qualified biologist or trained monitor. If necessary, and under the direct supervision of a biologist, a pipe inhabited by a badger may be moved once to remove it from the path of construction activity, until the animal has escaped.
  - During construction, all food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in closed containers and removed at least once a week from the construction site.
  - No firearms shall be allowed on the project site during construction activities.
- ▶ **Mitigation Measure 3.4.1i:** To protect breeding raptors, the following measures shall be implemented:
  - The typical breeding period for raptors is March 1 to September 1. If construction commences between March 1 and September 1, surveys shall be conducted 30 days prior to the start of construction for the project. The raptor nesting surveys shall include examination of all trees and shrubs on the project site and within a 300 foot area of influence surrounding the Site. Suitable nesting sites in the Specific Plan area are extremely limited; surveys need only be performed in areas containing suitable nesting habitat as determined

by a qualified biologist. If construction begins between September 2 to February 28, nest surveys shall not be required since this is outside the typical breeding period for raptors.

- If nesting raptors are identified during the surveys on the project site or within the 300 foot areas of influence, a 300-foot radius buffer around the nest tree or shrub must be fenced with orange construction fencing or rope and flagging. If a nest site is on an adjacent property, the portion of the buffer that occurs on the Site shall be fenced with orange construction fencing. The 300-foot buffer may be reduced in size if a qualified biologist determines through monitoring that the nesting raptors are acclimated to people and disturbance, and otherwise would not be adversely affected by construction activities. The buffer areas shall not be reduced in size to less than a radius of 200 feet. When construction buffers are reduced in size, the biologist shall monitor distress levels of the nesting birds while the birds nest and construction persists. If at any time the nesting raptors show levels of distress that could cause nest failure or abandonment, the qualified biologist shall re-implement the full 300-foot buffer.
  - No construction or earth-moving activity shall occur within a non-disturbance buffer until it is determined by a qualified biologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones. This typically occurs by early July, but September 1 is considered the end of the nesting period unless otherwise determined by a qualified biologist. Once raptors have completed nesting and young have fledged, disturbance buffers shall no longer be needed and can be removed, and monitoring can be terminated.
- ▶ **Mitigation Measure 3.4.1j:** To protect common and special status nesting birds, the following measures shall be implemented:
- A nesting bird survey shall be conducted prior to commencing with construction work (including site grading and vegetation removal) if that work would commence between March 15th and August 31st. The nesting bird survey shall be conducted no greater than 30 days prior to commencement of work, nor sooner than 14 days prior to commencement of work. If the construction activities are conducted in phases, then so shall the survey be conducted in phases.
  - If special status birds are identified nesting on the construction area or within a 250 foot area of influence, a 150-foot non-disturbance radius around the nest must be fenced using orange plastic construction fencing or rope and stake fencing as previously described (this fencing requirement shall not replace or be constructed in lieu of fencing discussed above for impacts to nesting raptors). No construction or earth-moving activity shall occur within the 150-foot buffer until it is determined by a qualified biologist that the nest is no longer occupied and young have fledged (that is, left the nest and attained sufficient flight skills to avoid project construction activities). This typically occurs by July 1st, but the date may vary, and would need to be confirmed by a qualified biologist. Similarly, the qualified biologist could modify the size of the buffer based upon site conditions and the bird's apparent acclimation to human activities.
  - If non-special status birds are identified nesting in any tree or shrub proposed for removal, tree removal would have to be postponed until it is determined by a qualified biologist that the young have fledged and have attained sufficient flight skills to leave the project site. Typically, most passerine birds can be expected to complete nesting by July 1st, with young attaining sufficient flight skills by this date that are sufficient for young to avoid project construction zones. Unless otherwise prescribed for special status bird species, upon completion of nesting no further protection or mitigation measures would be warranted for nesting birds. The mitigation measure shall be implemented by the project applicant and the construction contractor.
  - Results of the surveys and monitoring shall be provided in monthly monitoring reports submitted to the project applicant, County of Fresno, and the California Department of Fish and Game.
- ▶ **Mitigation Measure 3.4-2:** The following measure shall be implemented to reduce impacts to the northern hardpan vernal pool sensitive natural community to a level that is less than significant:
- Implementation of mitigation for federally protected wetlands and jurisdictional Waters (Mitigation Measure #3.4.3) shall ensure the long-term conservation of northern hardpan vernal pools in the region. That

measure provides for the acquisition, preservation, and management of large patches of vernal pool and grassland habitats in the project region.

- ▶ **Mitigation Measure 3.4.3a:** The following measures shall be implemented to reduce impacts to wetlands and other waters to a level that is less than significant:
  - Mitigation measures for vernal pool fairy shrimp and California tiger salamanders (mitigation measures 3.4.1c and 3.4.1d) are designed to ensure the long-term conservation of wetlands and other waters in the region. Implementation of these measures shall result in the preservation under conservation easement of wetlands and other waters. For example, mitigation parcels currently under evaluation to meet mitigation measures for vernal pool fairy shrimp and CTS would result in preservation of 22.67 acres of wetlands on-site and up to 60.30 acres off-site (Tables 3.4-5 and 3.4-6), for a combined total of 82.97 acres. As can be seen in these tables (Tables 3.4-5 and 3.4-6), the preservation under conservation easement of wetlands and other waters pursuant to mitigation measures for vernal pool and CTS could achieve preservation ratios of:
    - Wetland Channels: 1 acre of disturbed habitat to every 11.1 acres of preserved habitat;
    - Vernal Swales: 1 acre of disturbed habitat to every 3.7 acres of preserved habitat;
    - Vernal Pools: 1 acre of disturbed habitat to every 13.6 acres of preserved habitat;
  - Prior to the issuance of a grading permit, the project applicant shall create/restore wetlands to compensate for any wetlands and other water bodies subject to the jurisdiction of the USACE that are directly and permanently disturbed by grading and construction associated with the project. The creation/restoration of such wetlands and other waters shall be at a ratio of one acre of created/restored wetlands and other jurisdictional waters for each acre of jurisdictional wetlands and other waters directly and permanently disturbed by grading and construction associated with the project development. Mitigation measure for vernal pool fairy shrimp (mitigation measure 3.4.1c) provides specifically for the creation/restoration of vernal pool habitat. This mitigation measure provides for the creation/restoration of wetlands and other waters such as wetland and non-wetland channels and vernal swales. Creation/restoration of wetland habitat and other water bodies shall be accomplished by one or a combination of the following two mitigation alternatives:
    - Off-Site Creation/Restoration. The Project applicant shall conserve through acquisition or conservation easement, off-site lands suitable for the creation/restoration of wetlands and other water bodies in Fresno, Madera, or Merced County. Such lands shall have the following characteristics: natural undisturbed native wetlands and habitat suitable for threatened and endangered plant and animal species shall be absent (i.e., these lands shall have been previously disturbed by farming, or some other intensive human use); native wetlands and/or other water bodies once occurred on these lands naturally; the soils and hydrology of these lands are suitable for the creation of naturally occurring wetlands and other water bodies; and the natural topography has not been eliminated through land leveling. Topographic depressions, swales and naturalistic drainage channels shall be created/restored on these lands according to a "mitigation and monitoring plan" prepared by a qualified biologist. These engineered features must be inundated and/or experience soil saturation for a duration sufficient to naturally support hydrophytic vegetation native to wetlands of the region. All engineered wetlands and other water bodies shall be revegetated with native hydrophytic species. The wetland creation/restoration plan prepared by the biologist shall provide for long-term management of the mitigation site, mitigation objectives by which the success of the mitigation can be measured, and a monitoring plan for determining the success of the mitigation. The components of this mitigation and monitoring plan shall be consistent with standard USACE guidelines.
    - Purchase of Wetland Creation Credits from a Conservation Bank. The Project applicant shall pay the market rate for Wetland Creation Credits at a 1:1 ratio from a Conservation Bank whose service area includes the Friant Ranch Specific Plan Site.
- ▶ **Mitigation Measure 3.4.3b:** To ensure protection of water quality in seasonal creeks, reservoirs, and other downstream waters, the following measures shall be implemented:

- Prior to the onset of construction, an erosion control plan shall be prepared by a qualified engineer consistent with the requirements of a Fresno County grading permit and a General Construction Permit (an NPDES permit issued by the Regional Water Quality Control Board for projects in which one or more acres of land are graded). Typically, specified erosion control measures must be implemented prior to the onset of the rainy season. The project site must then be monitored periodically throughout the rainy season to ensure that the erosion control measures are successfully preventing on-site erosion and the associated deposition of sediment off the project site. Elements of this plan would address both the potential for soil erosion and non-point source pollution. At a minimum, elements of an erosion control plan typically include:
  - Protection of exposed graded slopes from sheet, rill and gully erosion. Such protection could be in the form of erosion control fabric, hydromulch containing the seed of native soil-binding plants, straw mechanically imbedded in exposed soils, or some combination of the three.
  - Protection of natural drainage channels from sedimentation. Hay bale check dams should be installed below graded areas so that any sediment carried by surface runoff is intercepted and retained behind the check dams before it can enter the creek.
  - Use of best management practices (BMPs) to control soil erosion and non-point source pollution. BMPs may include measures in a and b above, but they may include any number of additional measures appropriate for this particular project site and this particular project, including grease traps in parking lots, landscape management practices to reduce the use of pesticides and herbicides, the discharge of stormwater runoff from “hardscapes” into grassy swales, regular site inspections for pollutants that could be carried by runoff into natural drainages, etc.
- Where possible, project construction should be confined to the dry season, when the chance for significant rainfall and stormwater runoff is very low. Construction during the spring, summer, and fall shall not eliminate the need to implement erosion control measures described in mitigation measures above, but shall ensure that the threat of soil erosion has been minimized to the maximum extent possible.
- All post-construction runoff shall be routed through a system of grease traps, stormwater retention/detention basins, and bio-filtration swales to ensure that water quality of on-site and off-site wetlands, creeks and rivers are maintained at roughly pre-project levels.
- ▶ **Mitigation Measure 3.4.5:** Mitigation Measures #3.4.1c and #3.4.1d shall be implemented to preserve pools as breeding habitat and open space for aestivation habitat for tiger salamanders and western spadefoots, through a combination of on-site and off-site conservation easements. These measures shall also serve to maintain buffer zones around wetland features, preserve vernal pool vegetation, maintain habitat functions and values and control siltation and pollutant entry into these habitats. Implementation of Mitigation Measure 3.4.3a would create/restore wetland habitats to preserve the “no net loss” policy of the ACOE, and mitigate for the loss of wildlife habitat. Implementation of Mitigation Measure 3.4.3b establishes best management practices for preventing impacts to waters via pollutants, siltation, etc. Along with mitigation measures prescribed in Chapter 3.8 of this EIR, “Hydrology and Water Quality”, the mitigation measures just described shall ensure consistency with local ordinances and policies, including the County General Plan Policies. Moreover a considerable amount of additional wildlife habitats and wetlands would be preserved off-site incidental to the mitigation measures required for project impacts to California tiger salamanders.
- ▶ **Mitigation Measure 3.4.7:** Because the treatment facility is located immediately adjacent to the Friant Ranch Specific Plan Area, and potential impacts associated with its expansion are treated at a project level, all potential impacts and mitigation measures which would apply to construction associated with increasing treatment capacity would be covered by impact and Mitigation Measures 3.4.1 to 3.4.6 of this EIR. Similarly, potential impacts to biological resources resulting from construction of on-site conveyance systems, which would be needed to transport the treated water to end users, are covered by impacts and Mitigation Measures 3.4.1 through 3.4.6 (for areas within the Friant Ranch Specific plan Site) and 3.4.9 through 3.4.14 (for areas within the Friant Community Plan Area). No additional mitigation measures are warranted.



- ▶ **Mitigation Measure 3.4.9a:** To ensure that there is no take of spiny-sepaled button celery, the following measures shall be implemented.
  - Prior to the issuance of a grading permit within the Existing Friant Community Plan Area, a biological survey shall be conducted on the project site during the appropriate phenological period for spiny-sepaled button celery. This period generally occurs between April 1 and May 31, but this species persists and is identifiable through July of most years. Surveys need only be conducted within vernal pools and swales capable of supporting this species.
  - If spiny-sepaled button celery is not present, no further action is warranted. If spiny-sepaled button-celery is found to occur on a project site, then the following actions shall be taken.
    - Any population of spiny-sepaled button celery shall be completely avoided by grading and construction activities and there shall be no modifications to existing land management practices, or
    - If any population of spiny-sepaled button celery cannot be avoided, then the project proponent must:
      - Compensate for the loss of spiny-sepaled button celery at a ratio of 3 acres for each 1 acre of take, either through implementation of a conservation agreement or through purchase of conservation credits in an approved mitigation bank.
- ▶ **Mitigation Measure 3.4.9b:** The following measures shall be implemented to ensure that impacts to vernal pool fairy shrimp are less than significant.
  1. Prior to issuance of a grading permit, the project proponent must ensure that a qualified biologist conduct a survey for ephemeral pools which potentially support vernal pool fairy shrimp. That survey must be conducted during the wet season (October through April), and immediately after a substantial rainfall event (of 0.5 inches of rainfall or more). If ephemeral pool habitat is found on the project site that is suitable for supporting vernal pool fairy shrimp, then the project applicant must ensure that a qualified biologist implement a standard vernal pool fairy shrimp protocol survey. Alternatively, the project applicant could assume presence of the vernal pool fairy shrimp and implement the provisions listed in a-d below. If vernal pool fairy shrimp or other sensitive vernal pool invertebrates are not found during protocol surveys, then no other actions are warranted. If vernal pool fairy shrimp are found, then the following measures shall be implemented:
    - a. The Project shall avoid vernal pool fairy shrimp to the maximum extent feasible.
    - b. Prior to the issuance of a grading permit the project applicant shall compensate for the loss of occupied ephemeral pool habitat through the conservation of vernal pool habitat at a ratio of two acres of conservation for each acre of such habitat directly and permanently disturbed by grading. Conservation of occupied ephemeral pool habitat shall be accomplished by placing a conservation easement on existing pools, either on-site or off-site, or by purchasing credits in an approved conservation bank that has the Existing Friant Community Plan Area within its service boundaries.
    - c. A Section 10(a) 1b permit for take must be acquired from the United States Fish and Wildlife Service, or a Section 7 consultation must be conducted, whichever is appropriate.
    - d. Prior to issuance of a grading permit for a project site, a Drainage Plan shall be prepared for the site. Elements of this plan shall include:
      - ▶ Design plans to ensure that winter stormwater runoff into open space areas of the project site shall mimic to the maximum extent possible pre-project conditions. Upon project completion, surface and subsurface flows of runoff to preserved ephemeral pools shall be roughly equivalent to pre-project conditions.
      - ▶ All runoff originating in developed areas of the site shall pass through retention basins, bio-filtration swales, or both, which shall act together as stormwater filters such that water quality shall not be significantly reduced from pre-project conditions, and

- ▶ Irrigation runoff from landscaped areas shall be routed away from ephemeral pool habitats during the summer and fall to ensure that the hydrology of these habitats mimics pre-project conditions.

**Mitigation Measure 3.4.9c:** The following measures shall be implemented to ensure that impacts to the Valley elderberry longhorn beetle are at levels that are less than significant.

1. Prior to issuance of a grading permit, the project proponent must ensure that a qualified biologist conduct a survey for elderberry bushes. If elderberry bushes with stem diameters of 1 inch or greater are found on or within 100 feet of the project site, then standard stem counts and searches for sign (e.g., exit holes) of the Valley elderberry beetles must be conducted.
2. If elderberry bushes do not occur on or within 100 feet of the project site, then no further actions are warranted.
3. If elderberry bushes are found on or within 100 feet of the project site, then the following measures shall be implemented:
  - a. For those bushes in which the beetle does not occur, construction within the 100 foot buffer area shall be allowed, provided that:
    - ▶ A letter of concurrence shall be obtained from the United States Fish and Wildlife Service authorizing construction within the buffer area.
    - ▶ A biologist is present on-site during construction within the 100 foot buffer area to monitor construction activities and ensure that there are no impacts to the elderberry bushes.
    - ▶ Restoration of habitat within the 100 foot buffer area occurs once construction is complete, except in those instances where permanent facilities are constructed. The applicant must provide a written description to the USFWS of how the buffer areas are to be restored, protected, and maintained after construction is completed. Mowing of grasses/ground cover may occur from July through April to reduce fire hazard. No mowing should occur within five (5) feet of elderberry plant stems. Mowing must be done in a manner that avoids damaging plants (e.g., stripping away bark through careless use of mowing/trimming equipment).
    - ▶ All areas to be avoided during construction activities shall be fenced and flagged. In areas where encroachment on the 100-foot buffer has been approved by the Service, provide a minimum setback of at least 20 feet from the dripline of each elderberry plant.
    - ▶ Erect signs every 50 feet along the edge of the avoidance area with the following information: "This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." The signs should be clearly readable from a distance of 20 feet, and must be maintained for the duration of construction.
    - ▶ A qualified biologist shall conduct a training program for all construction contractors that shall be working on the project to inform workers of the need to avoid damaging elderberry plants and the possible penalties for not complying with these requirements. The training program must include information on the status of the beetle and the need to protect its elderberry host plant.
    - ▶ No insecticides, herbicides, fertilizers, or other chemicals that might harm the beetle or its host plant should be used in the buffer areas, or within 100 feet of any elderberry plant.
    - ▶ Other protection measures and replacement of elderberry bushes, when applicable, are implemented as outlined in Conservation Guidelines for the Valley Elderberry Longhorn Beetle (USFWS 1999, Appendix H),
  - b. For each bush in which the Valley elderberry longhorn beetle is found, the 100 foot buffer area shall be observed during the activity period of the Valley elderberry longhorn beetle (from April to July). Construction activities may occur within the 100 foot buffer area during other periods provided the mitigation measures outlined above are implemented and restoration within the buffer area is completed by beetle emergence (April).

- c. If elderberry bushes that contain elderberry longhorn beetles cannot be avoided and must be removed, then:
  - ▶ Compensation for the loss of elderberry beetles must be accomplished through replanting of elderberries and other native plant species at ratios provided in Conservation Guidelines for the Valley Elderberry Longhorn Beetle (USFWS 1999, Appendix H), and
  - ▶ A Section 10(a) 1B permit for take must be acquired from the United States Fish and Wildlife Service or a Section 7 consultation must be conducted.

If the elderberry longhorn beetle is de-listed by the United States Fish and Wildlife Service prior to implementation of the Project, then these measures need not apply.

**Mitigation Measure 3.4.9d:** The following measures shall be implemented to ensure that impacts to the California tiger salamander are at levels that are less than significant:

1. Prior to issuance of a grading permit, the Applicant shall provide sufficient documentation that determines whether the site contains wetlands that could potentially support breeding California tiger salamanders. If so, the project proponent must ensure that a qualified biologist conduct a survey for wetlands which potentially support breeding California tiger salamanders. That survey must be conducted during the wet season (October through April), and immediately after a substantial rainfall event (of 0.5 inches of rainfall or more).
2. If wetlands are found on a project site that are suitable for supporting breeding California tiger salamanders, then the project applicant must either presume presence in all wetlands onsite and mitigate as prescribed in section 3(a) through (d) below as if breeding California tiger salamanders were found or ensure that a qualified biologist implement a standard California tiger salamander protocol survey (see Appendix I, California Tiger Salamander Protocol Survey).
3. If pools containing breeding California tiger salamanders are found, then the following measures shall be implemented:
  - a. The Project shall avoid California tiger salamanders to the maximum extent feasible.
  - b. Prior to the issuance of a grading permit the project applicant shall compensate for the loss of occupied ephemeral pool habitat through the conservation of suitable ephemeral pool habitat at a ratio of two acres of conservation for each acre of such habitat directly and permanently disturbed by grading. Conservation of suitable ephemeral pool habitat shall be accomplished by placing a conservation easement on existing pools, either on-site or off-site, or by purchasing credits in an approved conservation bank that has the Friant Community Plan Area within its service boundaries.
  - c. A Section 10(a) 1b permit for take must be acquired from the United States Fish and Wildlife Service, or a Section 7 consultation must be conducted. A 2080 or 2081 Management Agreement with the California Department of Fish and Game may also be needed if the California tiger salamander is listed as a State threatened or endangered species prior to development.
  - d. Prior to issuance of a grading permit for the project site, a Drainage Plan shall be prepared for the site. Elements of this plan shall include:
    - ▶ Design plans to ensure that winter stormwater runoff into open space areas of the project site shall mimic to the maximum extent possible pre-project conditions. Upon project completion, surface and subsurface flows of runoff to preserved vernal pools shall be roughly equivalent to pre-project conditions,
    - ▶ All runoff originating in developed areas of the site shall pass through retention basins, bio-filtration swales, or both, which shall act together as stormwater filters such that water quality shall not be significantly reduced from pre-project conditions, and
    - ▶ Irrigation runoff from landscaped areas shall be routed away from vernal pool habitats during the summer and fall to ensure that the hydrology of these habitats mimics pre-project conditions.

4. If grassland habitat is present on a project site that is capable of supporting aestivating California tiger salamanders (as determined by a qualified biologist), then compensation for the loss of aestivation habitat shall occur prior to issuance of a grading permit. Compensation shall be provided at a ratio of 0.5 acres for each 1 acre removed. Compensation shall be provided by establishing a permanent conservation easement on on-site or off-site grassland habitat that supports aestivating California tiger salamanders or by purchasing credits in an established California tiger salamander Conservation Bank that includes the Friant Community plan within its service area.

**Mitigation Measure 3.4.9e:** To reduce impacts to western spadefoots to a level that is less than significant, the following measures shall be implemented:

1. The western spadefoot utilizes the same habitats as the California tiger salamander for breeding and aestivation (i.e., the western spadefoot breeds in vernal pools and aestivates in rodent burrows of surrounding grasslands). Therefore, implementation of mitigation measures for the California tiger salamander (Mitigation Measures 3.4.9d) would reduce the impact to the western spadefoot to a less than significant level.

**Mitigation Measure 3.4.9f:** The following measures shall be implemented to ensure that impacts to the western pond turtle are at levels that are less than significant:

1. Projects within the Existing Friant Community Plan Area shall maintain a 100 foot construction setback area from the Ordinary High Water Mark of the San Joaquin River (including any backwaters) and from the Ordinary High Water Mark of Lost Lake to protect potential basking sites and upland aestivation sites for the western pond turtle.
2. Projects exceeding one acre in size within the Existing Friant Community Plan Area shall be required to implement a stormwater pollution prevention plan and implement other protective measures as required in mitigation measure 3.4.11b for the protection of downstream water quality.

**Mitigation Measure 3.4.9g:** The following measures shall be implemented to ensure that impacts to breeding and foraging Swainson's hawks are less than significant:

1. Prior to the issuance of any grading permits exceeding 5 acres in the southern half of the Existing Friant Community Plan Area (exclusive of the Friant Specific Plan Area, Depot Parcel, Beck Property, and Water Treatment Plant and associated pumping facilities), a qualified biologist shall survey the site for Swainson's hawks. The survey area shall encompass all trees within 0.5 mile of the individual project site. Several projects proposed for construction within a single nesting period may use the results from a single survey, provided the surveyed is conducted within 0.5 mile or more from all individual project boundaries. The survey shall consist of:
  - a. All trees within the survey area suitable for nesting by hawks shall be inspected by a qualified biologist.
  - b. Survey periods and survey lengths shall be:
    - ▶ Period I. January-March 20. All trees shall be inspected at least once during this period to locate potential nests. The survey(s) may be conducted throughout daylight hours.
    - ▶ Period II. March 20 to April 5. Survey sunrise to 10:00 a.m. and 4:00 p.m. to sunset. Three complete surveys are recommended within this period to locate hawks preparing to nest.
    - ▶ Period III. April 5 to April 20. Survey sunrise to 12:00 p.m. and 4:30 p.m. to Sunset. Three surveys within this period recommended within this period to locate hawks preparing to nest.
    - ▶ Period IV. April 21 to June 10. Monitor known nest sites only.
    - ▶ Period V. June 10 to July 30 (post-fledging). Survey sunrise to 12:00 p.m. and 14:00 p.m. to sunset.
2. If Swainson's hawks are not found to nest within the survey area, then no further action is warranted.
3. If Swainson's hawks are found to nest within the survey area then the following measures shall be implemented:

- a. Foraging habitat shall be replaced at a ratio of 1 acre of grassland habitat known to provide foraging habitat for Swainson's hawk for each 1 acre of grassland habitat subject to grading and construction within the Community Plan Area.
- b. If construction is to occur within the breeding period for Swainson's hawk (15 February to 15 September), then a 2,500 foot radius no construction area is to be installed around each active Swainson's hawk nesting site. If a construction area falls within this nesting site, construction must be delayed until the young have fledged (left the nest). The 2,500 foot radius no construction zone may be reduced in size. A qualified biologist must conduct construction monitoring on a daily basis, inspect the nest on a daily basis, and ensure that construction activities do not disrupt breeding behaviors. In no case shall the no construction zone be reduced to less than 500 feet.
- c. Take of active or inactive Swainson's hawk nests shall be prohibited within the Existing Community Plan Area.

**Mitigation Measure 3.4.9h:** The following measures shall be implemented to ensure that impacts to the burrowing owl are less than significant:

1. A pre-construction survey shall be conducted for ground nesting raptors, including burrowing owls, within 14 to 30 days prior to initiation of site grading activities. If the grading activities are implemented in phases, then so shall the surveys be conducted in phases. If more than 30 days lapse between the time of the preconstruction survey (s) and the start of ground-disturbing activities, another preconstruction survey must be completed. This process should be repeated until the habitat is converted (e.g., graded and developed). The survey shall be completed in accordance with the survey requirements detailed in the CDFG's October 17, 1995 *Staff Report on Burrowing Owl Mitigation*.
2. If burrowing owls are identified onsite or within the area of influence of the project site (within 250 feet of the project site), an upland mitigation area for burrowing owls shall be established either on or offsite. The mitigation site must be determined to be suitable by a qualified biologist. The size of the required mitigation site shall be based on the number of burrowing owls observed on the project site with a minimum of 6.5 acres preserved per pair of owls or single owl observed using the site. The number of owls for which mitigation is required shall be based on the combined results of the protocol-level survey and the preconstruction surveys (i.e., if two pairs of owls are observed on the project site during the protocol-level survey, the mitigation requirement shall be  $2 \times 6.5 = 13$  acres provided that no more than two pairs of owls are observed during the preconstruction survey; if three pairs of owls are observed during the preconstruction survey, then the mitigation requirement shall be  $3 \times 6.5 = 19.5$  acres). Two natural or artificial nest burrows shall be provided on the mitigation site for each burrow in the project area that shall be rendered biologically unstable.
3. If burrowing owls are present on the site and require relocation, an upland mitigation site for burrowing owls shall be designated as provided for in item 2 above. This site may be located within the on-site open space area or it may be located off site. The mitigation site must consist of grassland habitat, contain small mammals (or other prey), and ground squirrel burrows. The mitigation site must be approved by the California Department of Fish and Game. The area shall be preserved in perpetuity as wildlife habitat through a conservation easement that designates the California Department of Fish and Game, or any other qualified conservation organization as the Grantee of the easement. The mitigation area need not be identified prior to finding burrowing owls on the site, however advance planning would reduce the potential for construction delays.
4. If a Conservation Easement is established for burrowing owl mitigation, an endowment to cover the management of the area must be provided. The management fund shall be provided by the project applicant to the Grantee of the Conservation Easement within six months of breaking ground on the project site.
5. If burrowing owls are present on the project site during the breeding season (peak of the breeding season is April 15 through July 15), and appear to be engaged in nesting behavior, a fenced 250 foot buffer would be required between the nest site(s) (i.e., the active burrow(s)) and any earth-moving activity or other disturbance on the project site. This 250 foot buffer could be removed once it is determined by a qualified biologist that the young have fledged. Typically, the young fledge by August 31st. This date may be earlier than August 31st, or

later, and would have to be determined by a qualified biologist. If burrowing owls are present in the non-breeding season a 160 foot buffer area will be established. If construction activities require the removal of an active den, the occupying burrowing owls must be passively relocated from the project site, as approved by the California Department of Fish and Game, passive relocation shall not commence until October 1st and must be completed by February 1st. After passive relocation, the project site and vicinity shall be monitored by a qualified biologist daily for one week and once per week for an additional two weeks to document where the relocated owls move and to ensure that the owls are not reoccupying the project site. A report detailing the results of the relocation and subsequent monitoring shall be submitted to CDFG and the County within two months of the relocation. That report can be incorporated into the monthly monitoring reports as required in item 6 below.

6. Monitoring of the project site shall occur on a weekly basis to identify any burrowing owls that may move into the construction area. Monitoring shall be conducted by a qualified biologist provided by the project applicant. Monitoring may be suspended or discontinued if, in the opinion of a qualified biologist, it is determined that suitable habitat for the burrowing owl is absent from the site following mass grading. Monthly reports of monitoring activities shall be submitted by the biologist to the project applicant, the County of Fresno, and the California Department of Fish and Game. A final report of all monitoring application shall be prepared by the biologist and submitted to the project applicant, the County of Fresno, and the California Department of Fish and Game within 90 days of project completion.

**Mitigation Measure 3.4.9i:** To protect breeding raptors, the following measures shall be implemented: The typical breeding period for raptors is March 1 to September 1. If construction commences between March 1 and September 1, surveys shall be conducted 30 days prior to the start of construction for the project. The raptor nesting surveys shall include examination of all trees and shrubs on the project site and within a 1,000 foot area of influence surrounding the Site. If construction begins between September 2 to February 28, nest surveys shall not be required since this is outside the typical breeding period for raptors.

1. The typical breeding period for raptors is March 1 to September 1. If construction commences between March 1 and September 1, surveys will be conducted 30 days prior to the start of construction for the project. The raptor nesting surveys shall include examination of all trees and shrubs on the project site and within a 300 foot area of influence surrounding the Site. If construction begins between September 2 to February 28, nest surveys will not be required since this is outside the typical breeding period for raptors. Surveys need only be performed in areas containing suitable nesting habitat as determined by a qualified biologist.
2. If nesting raptors are identified during the surveys on the project site or within the 300 foot areas of influence, a 300-foot radius buffer around the nest tree or shrub must be fenced with orange construction fencing or rope and flagging. If a nest site is on an adjacent property, the portion of the buffer that occurs on the Site shall be fenced with orange construction fencing. The 300-foot buffer may be reduced in size if a qualified biologist determines through monitoring that the nesting raptors are acclimated to people and disturbance, and otherwise would not be adversely affected by construction activities. The buffer areas shall not be reduced in size to less than a radius of 200 feet. When construction buffers are reduced in size, the biologist shall monitor distress levels of the nesting birds while the birds nest and construction persists. If at any time the nesting raptors show levels of distress that could cause nest failure or abandonment, the qualified biologist shall re-implement the full 300-foot buffer.
3. No construction or earth-moving activity shall occur within a non-disturbance buffer until it is determined by a qualified biologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones. This typically occurs by early July, but September 1 is considered the end of the nesting period unless otherwise determined by a qualified biologist. Once raptors have completed nesting and young have fledged, disturbance buffers will no longer be needed and can be removed, and monitoring can be terminated.

**Mitigation Measure 3.4.9j:** To protect common and special status nesting birds, the following measures shall be implemented:

1. A nesting bird survey shall be conducted prior to commencing construction work (including site grading and vegetation removal) if that work would commence between March 15th and August 31st. The nesting bird survey shall be conducted no greater than 30 days prior to commencement of work, nor sooner than 14 days prior to commencement of work. If the construction activities are conducted in phases, then so shall the survey be conducted in phases.
2. If special status birds are identified nesting on the construction area or within a 250 foot area of influence, a 150-foot non-disturbance radius around the nest must be fenced using orange plastic construction fencing or rope and stake fencing as previously described (this fencing requirement shall not replace or be constructed in lieu of fencing discussed above for impacts to nesting raptors). No construction or earth-moving activity shall occur within the 150-foot buffer until it is determined by a qualified biologist that the nest is no longer occupied and young have fledged (that is, left the nest and attained sufficient flight skills to avoid project construction activities). This typically occurs by July 1st, but the date may vary, and would need to be confirmed by a qualified biologist. Similarly, the qualified biologist could modify the size of the buffer based upon site conditions and the bird's apparent acclimation to human activities.
3. If non-special status birds are identified nesting in any tree or shrub proposed for removal, tree removal would have to be postponed until it is determined by a qualified biologist that the young have fledged and have attained sufficient flight skills to leave the project site. Typically, most passerine birds can be expected to complete nesting by July 1st, with young attaining sufficient flight skills by this date that are sufficient for young to avoid project construction zones. Unless otherwise prescribed for special status bird species, upon completion of nesting no further protection or mitigation measures would be warranted for nesting birds. The mitigation measure shall be implemented by the project applicant and the construction contractor.
4. Results of the surveys and monitoring shall be provided in monthly monitoring reports submitted to the project applicant, County of Fresno, and the California Department of Fish and Game.

**Mitigation Measure 3.4.9k:** The following measures shall be implemented to ensure that impacts to American badgers are less than significant:

1. Pre-construction surveys shall be conducted in development zones 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 American badger. If construction activities (including ground disturbing activities) are phased, then so shall the pre-construction surveys be phased.
2. If dens are found within the construction area and require removal, they shall be monitored for badger presence using a tracking medium or a video probe. Tracking medium must be monitored for 3 consecutive days to provide evidence of vacancy. All dens and burrows within the construction area and which contain badger sign must be hand excavated by a trained wildlife biologist. If a den is found to be occupied by a badger, the den shall not be excavated until the badger is allowed to passively vacate the den.
3. If dens are located within 100 feet of construction areas, but not within construction areas, they shall not be removed. Instead, exclusion fencing shall be constructed around the den (s). The exclusion fencing shall consist of plastic construction fencing held in place by t-posts every 25 feet, or by a rope and flagging fence. The purpose of the fencing is to exclude construction activities occurring near the den (s).
4. Project-related vehicles shall observe a 20-mph speed limit while on the project site, except on County roads and State and Federal highways. This is particularly important at night (between sunset and sunrise) when American badgers are most active. Construction activities at night (sunrise to sunset) should be prohibited.
5. Off-road construction traffic outside of designated construction areas shall be prohibited.
6. To prevent inadvertent entrapment of American badgers or other animals during the construction phase of the project, all excavated, steep-walled holes or trenches more than 2 feet deep shall be covered at the close of each

working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals by a qualified biologist or trained monitor.

7. In the case of trapped animals, escape ramps or structures shall be installed immediately to allow the animal(s) to escape. If an entrapped animal is incapable of escaping or is otherwise trapped for an excess of 12 hours, the California Department of Fish and Game should be contacted for advice.
8. American badgers are attracted to den-like structures such as pipes and may enter stored pipe, becoming trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored in an unfenced storage yard (see item 4a and b above for appropriate fencing and clearance conditions) for one or more overnight periods should be thoroughly inspected for American badgers before the pipe is subsequently buried, capped, or otherwise used or moved in anyway. Inspections may be conducted by a qualified biologist or trained monitor. If necessary, and under the direct supervision of a biologist, a pipe inhabited by a badger may be moved once to remove it from the path of construction activity, until the animal has escaped.
9. During construction, all food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in closed containers and removed at least once a week from the construction site.
10. No firearms shall be allowed on the project site during construction activities.

**Mitigation Measure 3.4.9i:** Implementation of the following measures shall reduce impacts to the pallid bat and the western mastiff bat to levels that are less than significant:

1. Prior to the removal of trees or the demolition of buildings, a qualified biologist shall conduct a pre-construction survey between 14 and 30 days prior to activities, to inspect buildings and trees for the presence of bats. If pallid bats or western mastiff bats are identified to be roosting in the trees or structures, those trees or structures shall not be removed until:
  - a. Permanent, elevated bat houses have been installed outside of, but near the construction area. Placement and height shall be determined by a qualified biologist, but the height of bat house shall be at least 15 feet. Bat houses shall be multi-chambered and be purchased or constructed to the specifications provided in Appendix J (bat house design). The number of bat houses required shall be dependent upon the size and number of colonies present, but at least 1 bat house shall be installed for each pair of bats (if occurring individually) or each colony of bats found.
  - b. Bats have been passively relocated from the tree or structure by progressively boarding up any entrances at night while bats are foraging away from the tree or structure. Relocation of bats may not be performed during the breeding season (March 1 to September 15).

**Mitigation Measure 3.4.10:** The following measure shall be implemented to reduce impacts to riparian habitats and other sensitive natural communities to a level that is less than significant:

1. The distribution of riparian habitats and other sensitive natural communities within the Existing Friant Community Plan Area shall be mapped prior to issuance of any grading permit. All mapping shall be accomplished using high resolution aerial photographs (1 meter accuracy or better) and be verified by ground inspections using sub-meter GPS. The final map of the distribution of these habitat types shall be rendered using GIS at sub-meter accuracy. All riparian areas and other sensitive natural communities shall be avoided by construction activities, including grading, unless the following measures are implemented prior to site grading:
  - a. The following measures shall be conducted prior to removal of riparian habitat or other sensitive natural community:
    - ▶ A Stream Alteration Agreement (SAA) must be obtained prior to removal of riparian habitat, unless it is determined by the California Department of Fish and Game that SAA is not necessary.



- ▶ For each 1 acre of riparian habitat or other sensitive natural community removed, a total of 3 acres of in-kind habitat shall be acquired by fee title, placed into a permanent conservation easement, and a management endowment provided. Any riparian habitat acquired must be located along the San Joaquin River in Fresno or Madera Counties.
- ▶ Temporary disturbance to riparian habitat may be mitigated by restoration. A restoration plan must be prepared in cooperation with the California Department of Fish and Game and a SAA must be obtained if required by the California Department of Fish and Game.

**Mitigation Measure 3.4.11a:** The following measures shall be implemented to reduce impacts to wetlands and other waters to a level that is less than significant:

1. Prior to issuing a grading permit for a project within the Existing Friant Community Plan Area, a survey for potential wetlands shall be conducted. If potential wetlands are present, a wetland delineation to ACOE standards shall be conducted for the project site. Either a single wetland delineation can be prepared for the entire Existing Community Plan Area, or individual delineations can be prepared for each project. Regardless, the USACE must verify the delineation(s) and, if necessary, appropriate Clean Water Act 401 and 404 permits be obtained.
2. Prior to the issuance of a grading permit in areas containing jurisdictional wetlands the project applicant shall acquire, or purchase and donate a conservation easement on, suitable off-site lands in Fresno and/or Madera County for the creation/restoration of wetlands and other waters to compensate for any wetlands and other water bodies subject to the jurisdiction of the USACE that are directly and permanently disturbed by grading and construction associated with the project. The creation/restoration of such wetlands and other waters shall be at a ratio of one acre of created/restored wetlands and other jurisdictional waters for each acre of jurisdictional wetlands and other waters directly and permanently disturbed by grading and construction associated with the project development. Creation/restoration of wetland habitat and other water bodies shall be accomplished by one or a combination of the following two mitigation alternatives:
  - a. Off-Site Creation/Restoration. The Project applicant shall conserve through acquisition or conservation easement, off-site lands suitable for the creation/restoration of wetlands and other water bodies in Fresno, Madera, or Merced County. Such lands shall have the following characteristics: natural undisturbed native wetlands and habitat suitable for threatened and endangered plant and animal species shall be absent (i.e., these lands shall have been previously disturbed by farming, or some other intensive human use); native wetlands and/or other water bodies once occurred on these lands naturally; the soils and hydrology of these lands are suitable for the creation of naturally occurring wetlands and other water bodies; and the natural topography has not been eliminated through land leveling. Topographic depressions, swales and naturalistic drainage channels shall be created/restored on these lands according to a "mitigation and monitoring plan" prepared by a qualified biologist. These engineered features must be inundated and/or experience soil saturation for a duration sufficient to naturally support hydrophytic vegetation native to wetlands of the region. All engineered wetlands and other water bodies shall be revegetated with native hydrophytic species. The wetland creation/restoration plan prepared by the biologist shall provide for long-term management of the mitigation site, mitigation objectives by which the success of the mitigation can be measured, and a monitoring plan for determining the success of the mitigation. The components of this mitigation and monitoring plan shall be consistent with standard USACE guidelines.
  - b. Purchase of Wetland Creation Credits from a Conservation Bank. The Project applicant shall pay the market rate for Wetland Creation Credits at a 1:1 ratio from a Conservation Bank whose service area includes the Friant Community Plan Area.

**Mitigation Measure 3.4.11b:** To ensure protection of water quality in the San Joaquin River and other downstream waters, the following measures shall be implemented:

1. Prior to the onset of construction which would disturb one acre or more, an erosion control plan shall be prepared by a qualified engineer consistent with the requirements of a Fresno County grading permit and a General Construction Permit (an NPDES permit issued by the Regional Water Quality Control Board for projects

in which one or more acres of land are graded). Typically, specified erosion control measures must be implemented prior to the onset of the rainy season. Each project site must then be monitored periodically throughout the rainy season to ensure that the erosion control measures are successfully preventing on-site erosion and the associated deposition of sediment off the project site. Elements of this plan would address both the potential for soil erosion and non-point source pollution. At a minimum, elements of an erosion control plan typically include:

- a. Protection of exposed graded slopes from sheet, rill and gully erosion. Such protection could be in the form of erosion control fabric, hydromulch containing the seed of native soil-binding plants, straw mechanically imbedded in exposed soils, or some combination of the three.
  - b. Protection of natural drainage channels from sedimentation.
  - c. Use of best management practices (BMPs) to control soil erosion and non-point source pollution. BMPs may include measures in 1 and 2 above, but they may include any number of additional measures appropriate for this particular project site and this particular project, including grease traps in parking lots, landscape management practices to reduce the use of pesticides and herbicides, the discharge of stormwater runoff from "hardscapes" into grassy swales, regular site inspections for pollutants that could be carried by runoff into natural drainages, etc.
2. Where possible, project construction should be confined to the dry season, when the chance for significant rainfall and stormwater runoff is very low. Construction during the spring, summer, and fall shall not eliminate the need to implement erosion control measures described in mitigation measures above, but shall ensure that the threat of soil erosion has been minimized to the maximum extent possible.
  3. All post-construction runoff shall be routed through a system of grease traps, stormwater retention/detention basins, and bio-filtration swales to ensure that water quality of on-site and off-site wetlands, creeks and rivers are maintained at roughly pre-project levels.

**Mitigation Measure 3.4.12:** Implementation of mitigation measures 3.4.10, 3.4.11a and 3.4.11b shall ensure that the riparian zone around the San Joaquin River and water quality in the San Joaquin River are maintained at level that are appropriate for fish and wildlife migratory movements. No other mitigation measures are warranted.

**Mitigation Measure 3.4.13a:** Mitigation Measures to Ensure Consistency with Local Policies or Ordinances Protecting Biological Resources: Implementation of mitigation measures 3.4.9a through 3.4.9l shall compensate for potential loss of foraging and/or breeding habitat for special status plant and wildlife species. Mitigation Measures #3.4.10, #3.4.11a and #3.4.11b provide for protection and compensation of riparian and wetland habitats potentially affected by projects within the Existing Friant Community Plan Area, and mitigation for potential impacts to water quality downstream of projects. These measures shall also serve to maintain habitat functions and values in riparian and wetland areas and control siltation and pollutant entry into these habitats. Along with mitigation measures prescribed in Chapter 3.8 of this EIR, "Hydrology and Water Quality," the mitigation measures just described shall ensure consistency with local ordinances and policies, including the County General Plan Policies.

**Mitigation Measure 3.4.13a:** Implementation of the various mitigation measures described in the preceding paragraph required for projects within the Existing Friant Community Plan Area shall ensure compliance with County General Plan Policies.

**Mitigation Measure 3.4.13b:** To ensure compliance with State and local ordinances protecting oak trees and oak woodland habitat, the following measure shall be implemented: Replanting of individual oak trees removed: To compensate for individual oak trees removed by project construction, oaks will be replanted at a ratio of 1:2 for every oak removed, or compensation will be in the form of contribution of funds to the Oak Woodlands Conservation Fund. (Section 1363 of the Fish and Game Code), or some combination of these.

The Friant Ranch EIR concluded that implementation of these mitigation measures would reduce biological resources impacts to a less-than-significant level.

## CONSISTENCY EVALUATION

- a) As analyzed in the Friant Ranch EIR, the project would have direct and indirect effects on special-status plant and animal species and their habitat due to the development of a large, undeveloped site. Mitigation measures are identified in the Friant Ranch EIR that would avoid or minimize impacts. These impacts were concluded to be less than significant after mitigation in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project was approved in February 2011. To assess whether there are any changed circumstances for biological resources, Ascent biologists conducted a review of special-status species results presented in the *Final Biological Evaluation Report and Supplement for the Friant Ranch Specific Plan* by Live Oak Associates (Live Oak Associates 2009) and a current search of the California Natural Diversity Database (CNDDDB); the results are included in Appendix A to this Environmental Checklist. The original CNDDDB query used a 3-mile search from the project site. The 2022 CNDDDB search used the current industry standard and California Department of Fish and Wildlife's (CDFW) recommended 9-quad search for the CNDDDB and California Native Plant Society (CNPS) electronic database queries. Given this larger search area, additional species were identified in the 2022 results as compared with the original results. Additionally, since the initial site surveys in 1998, 2006, and 2007, some species have changed names, some species' status have changed, and new observations have been added. The updated special-status species tables included in Appendix A to this Environmental Checklist include a column indicating whether the species was analyzed in the Friant Ranch EIR and, if it was not analyzed previously, a brief discussion is provided regarding whether there is suitable habitat present. New species that have been added to the tables and have potential to occur on the project site include three special-status plants (Hoover's cryptantha, Forked hare-leaf, pincushion navarretia), Crotch bumble bee, coast horned lizard, Northern California legless lizard, tricolored blackbird, and least Bell's vireo. These species, which were not specifically addressed in the Friant Ranch EIR (with the exception of tricolored blackbird), are discussed below. This new information clarifies and amplifies the biological resources impact analysis presented in the Friant Ranch EIR.

**Special-status plants (Hoover's cryptantha, Forked hare-leaf, pincushion navarretia):** Special-status plants added to the analysis include Hoover's cryptantha (*Cryptantha hooveri*) and forked hare-leaf (*Lagophylla dichotoma*), which have potential to occur in the valley and foothill grassland habitat in the project area, and pincushion navarretia (*Navarretia myersii* ssp. *myersii*), which has potential to occur in vernal pool habitat in the project area (Appendix A). Hoover's cryptantha has a CRPR ranking of 1A and forked hare-leaf and pincushion Navarretia both have a CRPR ranking of 1B.1.

As evaluated in Impacts 3.4.1a, 3.4.1b, and 3.4.9a for succulent owls clover, Hartweg's golden sunburst, and spiny-sepaled button celery, respectively, project construction would result in the loss or temporary disturbance of habitat for special-status plants. The impacts described in the Friant Ranch EIR are similar to the impacts that would occur to Hoover's cryptantha, Forked hare-leaf, and pincushion navarretia. Project construction could result in the crushing or removal of individual special-status plants noted in Appendix A, if they occur within the disturbance footprint, because suitable habitat is present in the project area. This could result in a substantial adverse effect on local and regional populations of these species. However, under the project (Alternative 3), approximately 460 acres of dedicated onsite open space would be maintained under conservation easement. (Draft EIR, pp. 4-27, 4-30.) Additionally, the newly proposed Mitigation Measure BIO-1, to which the project applicant has agreed, would require protocol-level surveys for special-status plants within the project area to be conducted as well as implementation of avoidance measures and mitigation. Therefore, the project would have a potentially significant impact to special-status plants that would be less than significant with mitigation incorporated.

**Crotch bumble bee:** Crotch bumble bee has recently undergone a decline in abundance and distribution and is no longer present across much of its historic range. In California, Crotch bumble bee populations are currently largely restricted to the Central Valley and adjacent foothills (Williams et al. 2014; Xerces 2018). The closest documented occurrence of Crotch bumble bee is approximately 4 miles northeast of the project area (CNDDDB 2022). Bumble bees in general are capable of flying up to approximately 6 miles from the nest while

foraging; however, most foraging activity is likely conducted much closer to the nest (Williams et al. 2014). Grassland habitat within the project site is dominated by nonnative grasses and forbs and may include flowering plants that could be used by bumble bees for foraging. Vegetation removal activities would result in removal of this potential foraging habitat, and conversion of the habitat to urban uses.

Project implementation could potentially result in loss of individual Crotch bumble bees, loss of foraging and breeding habitat for the species, and potentially Crotch bumble bee colonies (e.g., in underground rodent holes, loose soil, surface vegetation). While loss of individual Crotch bumble bees or a colony as a result of project activities may not cause the population to drop below self-sustaining levels, threaten to eliminate the species, or substantially reduce the range of the species, the population status of this species is poorly understood, and loss of a colony could have a substantial effect on the population. To avoid and minimize impacts, the newly proposed mitigation Measure BIO-2, to which the project applicant has agreed, would require focused surveys to be conducted for Crotch bumble bee. If Crotch bumble bees are found to be present in the project area, a combination of buffers, avoidance of construction activities during flight season, and phased vegetation removal would be implemented. Therefore, the effect of the project on Crotch bumble bee would be a potentially significant impact that would be reduced to less than significant with mitigation incorporated.

**Coast horned lizard:** Coast horned lizard (*Phrynosoma blainvillii*), a CDFW species of special concern, may also occur in the project area (Appendix A). The project area is within the range of each species and there is suitable grassland habitat present in the project area. Coast horned lizard has a historical documented occurrence around Fresno southwest of the project area but this species is presumed to be extirpated at this site (CNDDDB 2022). If coast horned lizards are present in the project area during construction, ground disturbing activities, vehicle use, and other construction activities could result in injury or death of individuals. However, the newly proposed Mitigation Measure BIO-3, to which the project applicant has agreed, would require preconstruction surveys for coast horned lizard to be conducted, implementation of avoidance measures, and relocation of individuals. Therefore, the effect of the project on coast horned lizard would be a potentially significant impact that would be reduced to less than significant with mitigation incorporated.

**Northern California legless lizard:** Northern California legless lizard (*Anniella pulchra*) is a CDFW species of species concern. Although the project area may be at the northeastern limit of the species range, it still has the potential to occur within the project area (Appendix A). Northern California legless lizard has a documented historical occurrence 14 miles southwest of the project area (CNDDDB 2022). This species is presumed extant in this location. If northern California legless lizards are present in the project area during construction, ground disturbing activities, vehicle use, and other construction activities could result in injury or death of individuals. However, the newly proposed Mitigation Measure BIO-3, to which the project applicant has agreed, would require preconstruction surveys for northern California legless lizard to be conducted, implementation of avoidance measures, and relocation of individuals. Therefore, the effect of the project on northern California legless lizard would be a potentially significant impact that would be reduced to less than significant with mitigation incorporated.

**Tricolored blackbird:** Tricolored blackbird (*Agelaius tricolor*), which is listed as threatened under CESA and has potential to be present in the project area and vicinity. While there are no previous records of tricolored blackbird nesting within the project area in the CNDDDB, the nearest documented occurrence of tricolored blackbird nesting is approximately 4.4 miles northwest of the project area (CNDDDB 2022). Nesting habitat for tricolored blackbird includes flooded, thorny, or spiny vegetation (e.g., cattails, bulrushes, willows, blackberries, thistles, or nettles). Potentially suitable nesting habitat is located in the project area along the San Joaquin River. If tricolored blackbirds are actively nesting within 500 feet of project activities during construction, loss of the nests including eggs and young could occur due to noise and other human disturbance. There is also potential for loss of tricolored blackbird foraging grassland habitat in the project area. To avoid and minimize impacts, surveys for nesting tricolored blackbird are required under the newly proposed Mitigation Measure BIO-4, to which the project applicant has agreed, within the project area and a 500-foot buffer no more than 48 hours before the onset of activities. Surveys will evaluate signs of tricolored

blackbird individuals or nesting/colonial activity. If nests or colony activity is observed, a 500-foot non-disturbance buffer zone will be established around active nests or colony. Therefore, the project would have a potentially significant impact to tricolored blackbird that would be less than significant with mitigation incorporated.

**Least Bell's vireo:** Least Bell's vireo (*Vireo bellii pusillus*), which is listed as endangered under CESA and ESA has potential to occur within the project area and vicinity. Least Bell's vireo nests in early successional vegetation typically dominated by willow shrubs and other thick understory vegetation as well as forages in riparian corridors. New modeled habitat from the USGS shows the San Joaquin River riparian habitat in the project area as suitable for the species (Preston et al 2021). There are two historical documented occurrences in the Fresno area but least Bell's vireo is presumed extirpated from this location (CNDDDB 2022). There is also a documented occurrence along the San Joaquin River of a Bell's vireo winter migrant from 2006 (eBird 2022). If active nests are present in or near the project area, loss of the nests including eggs and young could occur due to noise and other human disturbance. There is also the potential for loss of foraging habitat for this species as well. To avoid and minimize impacts, surveys for Least Bell's Vireo would be conducted within the project area and a 500-foot buffer. Therefore, the impact on this species would be less than significant.

Mitigation Measures 3.4.1a through 3.4.1j and 3.4.9a through 3.4.9l would continue to apply to the project and would avoid or minimize impacts to special-status species. Newly proposed Mitigation Measures BIO-1 through BIO-5, presented in the following section, all of which the project applicant has agreed to, would reduce potential impacts to the special-status species identified above to less-than-significant levels. No new significant impacts than cannot be mitigated would occur.

As described in the introduction to this checklist, at the conclusion of the CEQA process in 2011, the Board of Supervisors approved Alternative 3 (the so-called "Northeast Development Configuration Alternative"), which is the environmentally superior alternative. As described in the Friant Ranch EIR (page 4-30), Alternative 3 would have less of an impact on biological resources because this alternative would concentrate development on 496 acres of Friant Ranch as opposed to 667 acres of development under the original proposed project. Under Alternative 3, the preservation of grassland and seasonal wetland habitat (excluding vernal pools) would increase from the approximately 250 acres under the original proposed project to 460 acres, an increase of approximately 83 percent. Furthermore, most designated open space would be contiguous with lands supporting a mosaic of grasslands and seasonal wetlands to the south. Thus, the viability of preserved open space for many vernal pool and grassland species would be greater for Alternative 3 than would be the case for the original proposed project. Therefore, there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to impacts to special-status species and their habitat.

- b) As analyzed in the Friant Ranch EIR, the project would result in the loss of vernal pool habitat, which is a sensitive natural community. Mitigation measures are identified in the Friant Ranch EIR that would avoid or minimize impacts. This impact was concluded to be less than significant after mitigation in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project was approved in February 2011. Mitigation Measures 3.4.2 and 3.4.10 would continue to apply to the project and would reduce impacts to northern hardpan vernal pools. As described in the introduction to this checklist, at the conclusion of the CEQA process in 2011, the Board of Supervisors approved Alternative 3 (the so-called "Northeast Development Configuration Alternative"), which is the environmentally superior alternative. As described in the Friant Ranch EIR (page 4-30), Alternative 3 would have less of an impact on biological resources because this alternative would concentrate development on 496 acres of Friant Ranch as opposed to 667 acres of development under the original proposed project. Under Alternative 3, the preservation of grassland and seasonal wetland habitat (excluding vernal pools) would increase from the approximately 250 acres under the original proposed project to 460 acres, an increase of approximately 83 percent. Furthermore, most designated open space would be contiguous with lands supporting a mosaic of grasslands and seasonal wetlands to the south. Thus, the viability of preserved

open space for many vernal pool and grassland species would be greater for Alternative 3 than would be the case for the original proposed project. Therefore, there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to adverse effects on riparian habitat or sensitive natural communities.

- c) As analyzed in the Friant Ranch EIR, the project would result in the loss of jurisdictional waters of the United States and isolated, non-jurisdictional waters. Mitigation measures are identified in the Friant Ranch EIR that would avoid or minimize impacts. This impact was concluded to be less than significant after mitigation in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project was approved in February 2011. Mitigation Measures 3.4.3a, 3.4.3b, 3.4.11a, and 3.4.11b would continue to apply to the project and would reduce impacts to jurisdictional wetland habitats and other waterbodies. As described in the introduction to this checklist, at the conclusion of the CEQA process in 2011, the Board of Supervisors approved Alternative 3 (the so-called "Northeast Development Configuration Alternative"), which is the environmentally superior alternative. As described in the Friant Ranch EIR (page 4-30), Alternative 3 would have less of an impact on biological resources because this alternative would concentrate development on 496 acres of Friant Ranch as opposed to 667 acres of development under the original proposed project. Under Alternative 3, the preservation of grassland and seasonal wetland habitat (excluding vernal pools) would increase from the approximately 250 acres under the original proposed project to 460 acres, an increase of approximately 83 percent. Furthermore, most designated open space would be contiguous with lands supporting a mosaic of grasslands and seasonal wetlands to the south. Thus, the viability of preserved open space for many vernal pool and grassland species would be greater for Alternative 3 than would be the case for the original proposed project. Therefore, there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to adverse effects on jurisdictional waters of the United States.
- d) As analyzed in the Friant Ranch EIR, the project site is not a movement corridor or substantial linkage for wildlife. Development of the site would not significantly affect wildlife movement in the region. This impact was concluded to be less than significant after mitigation in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project was approved in February 2011. Mitigation Measure 3.4.12 would continue to apply to the project and would reduce impacts related to wildlife movement. As described in the introduction to this checklist, at the conclusion of the CEQA process in 2011, the Board of Supervisors approved Alternative 3 (the so-called "Northeast Development Configuration Alternative"), which is the environmentally superior alternative. As described in the Friant Ranch EIR (page 4-30), Alternative 3 would have less of an impact on biological resources because this alternative would concentrate development on 496 acres of Friant Ranch as opposed to 667 acres of development under the original proposed project. Under Alternative 3, the preservation of grassland and seasonal wetland habitat (excluding vernal pools) would increase from the approximately 250 acres under the original proposed project to 460 acres, an increase of approximately 83 percent. Furthermore, most designated open space would be contiguous with lands supporting a mosaic of grasslands and seasonal wetlands to the south. Thus, the viability of preserved open space for many vernal pool and grassland species would be greater for Alternative 3 than would be the case for the original proposed project. Therefore, there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to the interference with wildlife movement.
- e) As analyzed in the Friant Ranch EIR, various project elements have the potential, without appropriate mitigation, to be inconsistent with certain County General Plan policies and result in significant impacts. Implementation of mitigation measures would require the establishment of conservation easements, creation/restoration of wetland habitats, maintenance of buffer zones around wetland features, preservation of vernal pool vegetation, maintenance of habitat functions and values, and control of siltation and pollutant entry into these habitats. Implementation of these measures would ensure consistency with local ordinances

and policies, including the County General Plan. Moreover, a considerable amount of additional wildlife habitats and wetlands would be preserved off-site. This impact was concluded to be less than significant after mitigation in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Mitigation Measures 3.4.5, 3.13a, and 3.13b would continue to apply to the project and would reduce inconsistencies with local policies and ordinances. Therefore, no additional environmental review is needed for the project related to conflicts with local policies or ordinances protecting biological resources.

- f) As described in the Friant Ranch EIR, there are no local, regional, or State Habitat Conservation Plans, or Natural Community Conservation Plans that include the Friant Ranch Specific Plan or Friant Community Plan Area. It was determined that there would be no impact. As described in the introduction to this checklist, no changes to the project description have occurred since the project was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. As of February 2022, there are still no local, regional, or State Habitat Conservation Plans, or Natural Community Conservation Plans that include the Friant Ranch Specific Plan or Friant Community Plan Area (CDFW 2019). Therefore, no additional environmental review is needed for the project related to consistency with adopted Habitat Conservation Plans or Natural Community Conservation Plans.

## NEW MITIGATION MEASURES

### Mitigation Measure: BIO-1: Conduct Special-Status Plant Surveys and Implement Avoidance Measures and Mitigation

- ▶ Before implementation of project activities and during the blooming period for the special-status plant species with potential to occur on the project site, a qualified botanist shall conduct protocol-level surveys for special-status plants within the project site following survey methods from CDFW’s Protocols for Surveying and Evaluating Impacts on Special-Status Native Plant Populations and Natural Communities (CDFW 2018 or most recent version). The qualified botanist shall: (1) be knowledgeable about plant taxonomy, (2) be familiar with plants of the region, including special-status plants and sensitive natural communities, (3) have experience conducting floristic botanical field surveys as described in CDFW 2018, (4) be familiar with the California Manual of Vegetation (Sawyer et al. 2009 or current version, including updated natural communities data at <http://vegetation.cnps.org/>), and (5) be familiar with federal and state statutes and regulations related to plants and plant collecting.
- ▶ If special-status plants are not found, the botanist shall document the findings in a report to the applicant and the county, and no further mitigation shall be required.
- ▶ Typical Blooming Period for Special-Status Plants That May Occur within the Project Site<sup>1</sup>

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Hoover’s crypthantha												
Forked hare-leaf												
Pincushion navarretia												

<sup>1</sup> This is the published blooming period for the species across their entire range and through history. The actual blooming period for any species at a given location in a given year is variable and should be based on observations of nearby reference populations.

Sources: Data compiled by Ascent Environmental in 2022; CNPS 2022.

- ▶ If special-status plants are found during special-status plant surveys and cannot be avoided, the applicant shall, in consultation with CDFW if appropriate depending on species status, develop and implement a site-specific

mitigation strategy to compensate for loss of occupied habitat or individuals. Consultation with CDFW shall be required only where the plant species is officially designated as rare, threatened, or endangered under the California Native Plant Protection Act or the California Endangered Species Act. Mitigation measures shall include, at a minimum, preserving and enhancing existing populations, establishing populations through seed collection or transplantation from the site that is to be affected, and/or restoring or creating habitat in sufficient quantities to offset loss of occupied habitat or individuals. Potential mitigation sites could include suitable locations within or outside of the project site. Habitat and individual plants lost shall be mitigated at a minimum 1:1 ratio, considering acreage as well as function and value. Success criteria for preserved and compensatory populations shall include:

- The extent of occupied area and plant density (number of plants per unit area) in compensatory populations shall be equal to or greater than the affected occupied habitat.
- Compensatory and preserved populations shall be self-producing. Populations would be considered self-producing when:
  - plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and
  - reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the project vicinity.
  - If off-site mitigation includes dedication of conservation easements, purchase of mitigation credits, or other off-site conservation measures, the details of these measures shall be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, success criteria such as those listed above and other details, as appropriate to target the preservation of long-term viable populations.

#### **Significance after Mitigation**

Implementation of Mitigation Measure BIO-1 would reduce significant impacts on special-status plants to a less-than-significant level by requiring protocol-level surveys for special-status plants and implementation of avoidance measures and compensation for impacts on special-status plants if present on the project site and offsite infrastructure improvements.

#### **Mitigation Measure BIO-2: Conduct Focused Surveys for Crotch Bumble Bee and Implement Avoidance Measures**

Before implementation of vegetation removal of ground disturbing activities, the applicant shall implement the following measures:

- ▶ The applicant shall retain a qualified biologist familiar with bumble bees of California, with experience using survey methods for bumble bees, to conduct focused surveys of suitable habitat within the project site. Because a survey protocol for this species has not been established, survey methods shall include but not be limited to the following elements (included in survey protocols for other bumble bee species in the United States [USFWS 2018]):
  - Surveys shall be conducted during the active flight season (typically March through September).
  - Surveys shall be conducted by walking transects through suitable habitat, or by surveying a minimum of one person-hour per three acres of suitable habitat without transects.
  - Bumble bees within the project site shall be identified through passive, non-lethal methods (e.g., visual surveys using binoculars, photographic documentation).
- ▶ If no crotch bumble bees are detected during focused surveys, the survey results shall be submitted to Fresno County, and further mitigation would not be required.
- ▶ If crotch bumble bees are detected during focused surveys, the survey results shall be submitted to Fresno County, and appropriate avoidance measures shall be implemented. Avoidance measures may include but not be limited to one or more of the following:



- Protective buffers shall be implemented around active overwintering or breeding colonies until the colonies are no longer active.
  - Vegetation removal shall occur from October through February to avoid the bumble bee flight season.
  - Vegetation removal and ground disturbance shall be conducted using a phased approach, such that the entirety of the habitat is not removed at once; the objective of this measure is to provide refuge for bumble bees during project activities and temporary retention of suitable floral resources proximate to the active construction areas.
- ▶ If the candidacy of crotch bumble bee under CESA is reinstated before completion of the project, and project activities that could result in take of crotch bumble bees (e.g., ground disturbance, vegetation removal) would occur, the applicant shall implement the above measures in consultation with and with approval from CDFW. If crotch bumble bees are detected on the project site and the candidacy of the species under CESA has been reinstated, then an incidental take permit pursuant to California Fish and Game Code Section 2081, and implementation of measures required under such a permit (i.e., potentially including compensatory mitigation to fully mitigate impacts on crotch bumble bee) may be required.

#### Significance after Mitigation

Implementation of Mitigation Measure BIO-2 would reduce potential impacts on crotch bumble bee to a **less-than-significant** level by requiring focused surveys for the species and implementation of measures to avoid injury or mortality of crotch bumble bees if detected.

#### **Mitigation Measure BIO-3: Conduct Preconstruction Surveys for Coast Horned Lizard and Northern California Legless Lizard, Implement Avoidance Measures, and Relocate Individuals**

- ▶ A qualified biologist familiar with the life history of coast horned lizard and northern California legless lizard shall conduct a focused visual survey of habitat suitable for this species within the project site, which shall include walking linear transects of the project site.
- ▶ If coast horned lizards and/or northern California legless lizard are not detected during the focused survey, the qualified biologist shall submit a report summarizing the results of the survey to the applicant and county, and further mitigation shall not be required.
- ▶ If coast horned lizards and/or northern California legless lizard are detected, a qualified biologist with an appropriate CDFW Scientific Collecting Permit that allows handling of reptiles shall be present during initial ground disturbance activities and shall inspect the project site before initiation of project activities. If coast horned lizards and/or northern California legless lizard are detected, the qualified biologist shall move individuals into nearby suitable habitat for the respective species that will not be disturbed by project activities. Coast horned lizard frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects. California legless lizard are typically found in chaparral, riparian scrub with sandy or loose loamy soils under sparse vegetation and prefer soils with a high moisture content.

#### Significance after Mitigation

Implementation of Mitigation Measure BIO-3 would reduce potential impacts on coast horned lizard to a **less-than-significant** level by requiring focused visual surveys for the species and relocation to protected suitable habitat of individuals by a qualified biologist with an appropriate CDFW Scientific Collecting Permit, if detected.

#### **Mitigation Measure BIO-4: Conduct Preconstruction Surveys for Tricolored Blackbirds, Implement Avoidance Measures.**

In addition to the avoidance and minimization measures described in Mitigation Measure 3.4.1j, the following measures will be implemented to avoid and minimize potential impacts on tricolored blackbird.

- ▶ A qualified biologist shall conduct a focused tricolored blackbird nesting survey within the project site and a 500-foot buffer no more than 48 hours before the onset of activities for signs of tricolored blackbird individuals or nesting/colonial activity.
- ▶ If tricolored blackbirds are not detected during the focused survey, the qualified biologist shall submit a report summarizing the results of the survey to the applicant and county, and further mitigation shall not be required.
- ▶ If active tricolored blackbird nests are found in or within 500 feet of the project footprint during the nesting season (March 15 to August 31), the following steps will be implemented:
- ▶ A 500-foot non-disturbance buffer zone will be established around active nests or colony identified within a 500-foot radius of the project footprint.
- ▶ Active nests will be monitored daily by a qualified, CDFW-approved biologist throughout the breeding season (March 15 to August 31) to assess the health and status of the nest and for any signs of stress in response to construction activities until the young fledge or for the length of construction, whichever occurs first. The biologist shall have the authority to increase the buffer if construction activities are resulting in signs of distress to the birds. Reduction of the buffer(s) size may be made in consultation with CDFW if the reduced buffer is determined to be sufficiently protective after consideration of the natural history of the species, the proposed activity level adjacent to the nest, the nest occupants' habituation to existing or ongoing activity, nest concealment (i.e., whether there are visual or acoustic barriers between the proposed activity and the nest), and what (if any) nest monitoring is proposed.
- ▶ If ground-disturbing activities are delayed or suspended for more than 15 days during the breeding season, additional preconstruction nesting bird survey will be conducted.
- ▶ If the project results in loss of habitat, it shall be mitigated at least at a 1:1 ratio.

#### Significance after Mitigation

Implementation of Mitigation Measure BIO-4 would reduce potential impacts on tricolored blackbird to a **less-than-significant** level by requiring focused visual surveys for the species and implementation of a 500-foot non-disturbance buffer or smaller but protective buffer around the nest or colony if detected.

#### **Mitigation Measure BIO-5: Conduct Preconstruction Surveys for Least Bell's Vireo, Implement Avoidance Measures.**

In addition to the avoidance and minimization measures described in Mitigation Measure 3.4.1j, the following measures will be implemented to avoid and minimize potential impacts on least Bell's vireo.

- ▶ If least Bell's vireo has the potential to be present within a work area, a qualified biologist will an initial site visit to determine if suitable habitat for this species exists within the project disturbance boundary or within 500 feet of the project disturbance area.
- ▶ Where suitable habitat is present, surveys will be conducted by biologists adhering to guidance offered in *Least Bell's Vireo Survey Guidelines* (USFWS 2001 or as updated).
- ▶ If nests are detected, the biologist will establish buffers around nests that are sufficient to ensure that breeding is not likely to be disrupted or adversely impacted by construction. No-disturbance buffers around active nests will be a minimum of 500 feet, unless the qualified biologist determines that smaller buffers would be sufficient to avoid impacts to nesting birds. Factors to be considered for determining buffer size will include: the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; and baseline levels of noise and human activity. Buffers will be maintained until the qualified biologist has determined that young have fledged and are no longer reliant upon the nest or parental care for survival.
- ▶ If the project results in loss of habitat, it shall be mitigated at least at a 1:1 ratio.

**Significance after Mitigation**

Implementation of Mitigation Measure BIO-5 would reduce potential impacts on least Bell's vireo to a **less-than-significant** level by requiring focused surveys for the species and implementation of a minimum 500-foot non-disturbance buffer around active nests, if detected.

## V. CULTURAL RESOURCES

Environmental Issue Would the Project	Where were impacts analyzed previously?	Do proposed changes/new circumstances/ new information result in new significant/ substantially more severe impacts?	Is there substantial new information requiring new analysis or verification?	Do mitigation measures from prior documents resolve significant impacts?
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	DEIR Impact 3.5.1	No	No	Yes
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	DEIR Impact 3.5.1	No	No	Yes
c) Substantially disturb human remains, including those interred outside of formal cemeteries?	DEIR Impact 3.5.2	No	No	Yes

### Summary of EIR Analysis

This topic is addressed in Section 3.5, "Cultural Resources," of the Friant Ranch Draft EIR. The regulatory and physical settings are described in Sections 3.5.1 and 3.5.2, respectively, of the Draft EIR.

### IMPACT ANALYSIS

Impacts from development of the Friant Ranch Project are evaluated in the Friant Ranch Draft EIR (pages 3-161 through 3-164) and are summarized below.

- ▶ **Impact 3.5.1: Substantial Adverse Changes in the Significance of Historical and/or Archaeological Resources and Destruction of Unique Paleontological Resources.** Implementation of the project would adversely affect the significant cultural resource site (CA-FRe-2653). Additionally, the project may adversely affect previously undiscovered, buried prehistoric and historic period resources or paleontological resources. Mitigation measures are identified that require avoidance or long-term protection (if possible), and (where it is not possible) data recovery, construction monitoring, work stoppage in the area of a find, consultation, and environmental awareness training for workers. Because mitigation requires adherence to proper protocols in the event that cultural resources are discovered, the impact would be **less than significant after mitigation**.
- ▶ **Impact 3.5.2: Disturbance of Human Remains.** Human remains may be present at the significant cultural resource site (CA-FRe-2653), and it is possible that historic period or prehistoric period interments are present elsewhere in the project area. Mitigation measures are identified that require avoidance or long-term protection (if possible), and (where it is not possible) data recovery, construction monitoring, work stoppage in the area of a find, consultation, and environmental awareness training for workers. Because mitigation requires adherence to proper protocols in the event that human remains are discovered, the impact would be **less than significant after mitigation**.

### Friant Community Plan Update and Friant Ranch Specific Plan Policy Requirements

The Friant Community Plan Update proposes the following policies, as identified in the Friant Ranch EIR, to preserve and protect cultural resources consistent with the General Plan:

- ▶ **Policy 2.7** Support the preservation of cultural and historic resources that provide ties to the Community of Friant's past.

- ▶ **Policy 6.1** Protect and preserve historic and archeological sites in open space easements, where feasible, and document such sites when preservation is not feasible.

## Mitigation Measures

The following mitigation measures were identified in the Friant Ranch EIR:

- ▶ **Mitigation Measure 3.5.1a:** Given that excavation is ultimately destructive and avoidance is generally the preferred alternative and consistent with Fresno County General Plan policy, the preferred mitigation is that the significant cultural resource site (CA-FRE-2z653) be placed within a development exclusion zone, thus avoiding impacts to the significant cultural resource site (CA-FRE-2653). Subsurface testing suggests that the cultural deposit is contained within a limited area, which roughly coincides with the identified midden deposit and the area of bedrock milling features. Prior to issuance of a grading permit affecting the area surrounding the significant cultural resource site (CA-FRE-2653), the developer shall do one of the following:
  - **3.5.1a(1):** Retain a qualified archaeologist to identify and mark the boundaries of the cultural deposit so that it is avoided during construction. The significant cultural resource site (CA-FRE2653) shall be included within a designed open space within the Friant Ranch Specific Plan Area, which may include interpretive information regarding the archaeological site; or
  - **3.5.1a(2):** If avoidance of the significant cultural resource site (CA-FRE-2653) through design, during construction activities, and long-term protection are not feasible, then treatment of significant effects on the site(s) shall be accomplished through a program of controlled data recovery. A qualified archaeologist shall meet at the site and review the development plans vis-à-vis the significant cultural resource site (CA-FRE-2653) area and put together a data recovery plan (Phase III) to recover the information that would be lost as a result of Project development. The archaeologist shall excavate the significant cultural resource site (CA-FRE-2653) and recover the materials that would otherwise be destroyed. The bedrock milling features will be thoroughly documented; therefore any adverse impacts as a result of disturbance to these features would be mitigated. Such work is designed to compensate for the impacts of the Project by collecting a representative sample of the cultural remains and other data that would otherwise be destroyed.
- ▶ **Mitigation Measure 3.5.1b:** A qualified archaeologist and a member of the Dumna Wo-Wah Tribal Government shall be retained by the developer to monitor construction activities around the significant cultural resource site (CA-FRE-2653) to ensure that there is no impact to any significant cultural resource. Prior to construction, the developer shall consult with a designated representative of the Dumna Wo-Wah Tribal Government on the appropriate course of action to be taken should unanticipated cultural materials, and specifically human remains, be discovered during construction
- ▶ **Mitigation Measure 3.5.1c:** Cultural resource sites protected pursuant to mitigation measure 3.5.1a(1) shall be protected after development from vandalism, illicit excavation or artifact collection. The County shall discuss measures for long-term protection with the Dumna Wo-Wah Tribal Government, and an appropriate plan for permanent protection of the resource shall be instituted by the developer prior to issuance of building permits for the Friant Ranch Specific Plan. The final plan could include any or all of the following: permanent fencing; funding for permanent maintenance of the fencing; annual or semi-annual monitoring by archaeologists and/or by the Dumna Wo-Wah Tribal Government with reports filed with the County and other agencies; acquisition of the site by a group such as the Archaeological Conservancy.
- ▶ **Mitigation Measure 3.5.1d:** During construction within the Friant Ranch Specific Plan Area, protected cultural resource sites (including CA-FRE-2651, -2652, -2653) shall be protected from vandalism, illicit excavation or artifact collection, or inadvertent direct impact. This may be accomplished in part through the installation of orange protective fencing prior to initiation of any construction activities within 200 feet of the site area.
- ▶ **Mitigation Measure 3.5.1e:** If unknown cultural resources are discovered during Project construction, all work in the area of the find shall cease, and a qualified archaeologist and a member of the Dumna Wo-Wah Tribal Government shall be retained by the developer, and approved by the County, to assess the significance of the find, make recommendations on its disposition, and prepare appropriate field documentation, including

verification of the completion of required mitigation. If archaeological or paleontological resources are discovered during earth moving activities, all construction activities within 50 feet of the find shall cease until the archaeologist evaluates the significance of the resource. In the absence of a determination, all archaeological and paleontological resources shall be considered significant. If the resource is determined to be significant, the archaeologist, as appropriate, shall prepare a research design for recovery of the resource in consultation with SHPO that satisfies the requirements of Public Resources Code Section 21083.2. The archaeologist shall complete a report of the excavations and findings. Upon approval of the report, the developer shall submit the report to the regional office of the California Historical Resources Information System and Fresno County.

- ▶ **Mitigation Measure 3.5.1f:** Construction personnel shall be informed of the potential for encountering significant archaeological or paleontological resources within the Project Area, and shall be instructed in the identification of artifacts, bone and other potential resources. For any construction within the Project area, all construction personnel shall be informed of the need to stop work on the construction site until a qualified archaeologist and a Dumna Wo-Wah Tribal Government Monitor has been provided the opportunity to assess the significance of the find and implement appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed that unauthorized collection of cultural resources is prohibited.
- ▶ **Mitigation Measure 3.5.1g:** If unknown cultural resources are discovered during future development in the existing Friant Community Plan Area, including the Depot parcel, all work in the area of the find shall cease, and a qualified archaeologist and a Dumna Wo-Wah Tribal Government Monitor shall be retained by the developer, and approved by the County, to assess the significance of the find, make recommendations on its disposition, and prepare appropriate field documentation, including verification of the completion of required mitigation. If archaeological or paleontological resources are discovered during earth moving activities, all construction activities within 50 feet of the find shall cease until the archaeologist evaluates the significance of the resource. In the absence of a determination, all archaeological and paleontological resources shall be considered significant. If the resource is determined to be significant, the archaeologist, as appropriate, shall prepare a research design for recovery of the resource in consultation with SHPO that satisfies the requirements of Public Resources Code Section 21083.2. The archaeologist shall complete a report of the excavations and findings. Upon approval of the report, the developer shall submit the report to the regional office of the California Historical Resources Information System and Fresno County.
- ▶ **Mitigation Measure 3.5.1h:** Future construction personnel shall be informed of the potential for encountering significant archaeological or paleontological resources within the existing Friant Community Plan Area (other than Friant Depot Parcel and Friant Ranch Specific Plan Area), and shall be instructed in the identification of artifacts, bone and other potential resources. For any future construction within the existing Friant Community Plan Area (other than Friant Depot Parcel and Friant Ranch Specific Plan Area), all construction personnel shall be informed of the need to stop work on the construction site until a qualified archaeologist and a Dumna Wo-Wah Tribal Government Monitor has been provided the opportunity to assess the significance of the find and implement appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed that unauthorized collection of cultural resources is prohibited.
- ▶ **Mitigation Measure 3.5.2:** If human remains are encountered during Project construction, all work shall cease within 50 feet of the find and the Fresno County Coroner's Office shall be contacted and procedures implemented pursuant to California Public Resources Code Section 5097 et seq. and California Health and Safety Code Sections 7050.5, 7051, and 7054 with respect to treatment and removal, Native American involvement, burial treatment, and re-burial, if necessary.

The Friant Ranch EIR concluded that implementation of these mitigation measures would reduce cultural resources impacts to a less-than-significant level.

## CONSISTENCY EVALUATION

- a-c)** As described in the Friant Ranch EIR, one significant cultural resource site (CA-FRe-2653) is located within the project area and would be adversely affected by the project. Two other cultural resources (CA-RE-2651 and CA-RE-2652) are located within an undisturbed open space area of the Friant Ranch Specific Plan that will be subject to a conservation easement; therefore, these two sites would not be adversely affected. Additionally, previously undiscovered, buried prehistoric and historic period resources or paleontological resources could be adversely affected. Mitigation measures are identified that require avoidance or long-term protection (if possible), and (where it is not possible) data recovery, construction monitoring, work stoppage in the area of a find, consultation, and environmental awareness training for workers. These impacts were concluded to be less than significant after mitigation in the Friant Ranch EIR.

As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Mitigation Measures 3.5.1a through 3.5.1h and 3.5.2 would continue to apply to the project and would avoid or minimize impacts related to historic resources, archaeological resources, and human remains. Therefore, no additional environmental review is needed for the project related to cultural resources.

## VI. ENERGY

Since certification of the Friant Ranch EIR in 2011, Appendix G of the State CEQA Guidelines has been amended to address energy consumption and compliance with applicable renewable energy or energy efficiency plans. At the time the Friant Ranch EIR was prepared and certified, energy efficiency related impacts were included as Appendix F to the State CEQA Guidelines. The Friant Ranch EIR did evaluate the project’s energy demand and the impacts related to it, but in the context of utilities and utility infrastructure.

Environmental Issue Would the Project:	Where were impacts analyzed previously?	Do proposed changes/ new circumstances/ new information result in new significant/ substantially more severe impacts?	Is there substantial new information requiring new analysis or verification?	Do mitigation measures from prior documents resolve significant impacts?
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	DEIR Impact 3.14.7	No	No	Yes
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	DEIR Impact 3.14.7	No	No	Yes

### Summary of EIR Analysis

This topic is addressed in Section 3.14, “Utilities and Service Systems,” of the Friant Ranch Draft EIR. The regulatory and physical settings are described in Sections 3.14.1 and 3.14.2, respectively, of the Draft EIR.

### IMPACT ANALYSIS

Impacts from development of the Friant Ranch Project are evaluated in the Friant Ranch Draft EIR (pages 3-376 and 3-377) and are summarized below.

- **Impact 3.14.7: Development of the Community Plan area will increase the demand for electricity and natural gas and will result in the need to construct new infrastructure to serve the Community Plan area.** Extensions of existing electrical and natural gas facilities by PG&E would be necessary to provide adequate electrical and natural gas service to support the demands of the Friant Ranch Specific Plan and subsequent development in the Community Plan Area. PG&E has indicated that it has or can develop the necessary capacity to serve the project with both electricity and natural gas. Energy supply is surpassed by energy demand during peak usage times in California. Increased energy efficiency and conservation could reduce the need for additional power plants or other energy facilities that could cause undesirable environmental effects, as well as reducing costs for future homeowners and businesses. Energy efficiency measures may be used in the design of subdivisions and the location and design of commercial and residential properties. Title 24 of the California Code of Regulations addresses required energy efficiency measures for construction. The Community Plan and Friant Ranch Specific Plan specify that all residential units would be built to Title 24 standards. The Specific Plan also encourages integration of solar orientation and design of buildings. Because mitigation requires coordination among the project applicant, future developers, and PG&E regarding the timing of utility installation to coincide with roadway construction, the impact would be **less than significant after mitigation**.

### Friant Community Plan Update and Friant Ranch Specific Plan Policy Requirements

The Friant Ranch EIR does not list any proposed policies of the Friant Community Plan Update or the Friant Ranch Specific Plan that are applicable to energy.



## Mitigation Measures

The following mitigation measures were identified in the Friant Ranch EIR:

- ▶ **Mitigation Measure 3.14.7a:** The Specific Plan applicants and subsequent developers within the Community Plan area shall work closely with PG&E to ensure that development of electrical and natural gas infrastructure with the capacity to service the entire Community Plan area is located and provided concurrently with roadway construction and in accordance with PUC regulations. The applicant(s) shall grant all necessary easements for installation of electrical and natural gas facilities, including utility easements along existing and future on-site arterial roads for the development of area-wide utility corridors. Coordination with PG&E shall occur, and any required agreements shall be established prior to recordation of the first final subdivision map.
- ▶ **Mitigation Measure 3.14.7b:** Implement Mitigation Measure 3.3.2 as set forth in Section 3.3 of the Draft EIR.

The Friant Ranch EIR concluded that implementation of these mitigation measures would reduce energy impacts to a less-than-significant level.

## CONSISTENCY EVALUATION

- a-b) As described in the Friant Ranch EIR, extensions of existing electrical and natural gas facilities by PG&E would be necessary to provide adequate electrical and natural gas service to support the demands of the Friant Ranch Specific Plan and subsequent development in the Community Plan Area. PG&E has indicated that it has or can develop the necessary capacity to serve the project with both electricity and natural gas. The environmental impacts of installation new utility infrastructure are evaluated throughout the Friant Ranch EIR and mitigation measures are identified where appropriate. Energy supply is surpassed by energy demand during peak usage times in California. Increased energy efficiency and conservation could reduce the need for additional power plants or other energy facilities that could cause undesirable environmental effects, as well as reducing costs for future homeowners and businesses. Energy efficiency measures may be used in the design of subdivisions and the location and design of commercial and residential properties. Title 24 of the California Code of Regulations addresses required energy efficiency measures for construction. The Community Plan and Friant Ranch Specific Plan specify that all residential units would be built to Title 24 standards. The Specific Plan also encourages integration of solar orientation and design of buildings. Mitigation measures are identified that require coordination among the project applicant, future developers, and PG&E regarding the timing of utility installation to coincide with roadway construction. The impact was concluded to be less than significant after mitigation in the Friant Ranch EIR.

As described in the introduction to this checklist, no changes to the project description have occurred since the project was approved in February 2011. As described in the introduction to this checklist, at the conclusion of the CEQA process in 2011, the Board of Supervisors approved Alternative 3 (the so-called "Northeast Development Configuration Alternative"), which is the environmentally superior alternative. As described in the Friant Ranch EIR (page 4-33), Alternative 3 would have less of an impact on electricity and natural gas because this alternative would include fewer residential units than the original proposed project; thereby resulting in less electricity and natural gas being used. Therefore, there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Mitigation Measures 3.14.7a and 3.14.7b would continue to apply to the project and would avoid or minimize impacts related to energy. Additionally, the project would be required to comply with state regulations related to energy efficiency and renewable energy, including the Title 24 California Building Code, the California Energy Code, and California's Renewable Portfolio Standard Program (current and future versions). Compliance with these mitigation measures and the above state regulations would ensure that the project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, no additional environmental review is needed for the project related to energy.

## VII. GEOLOGY AND SOILS

Environmental Issue Would the Project:	Where were impacts analyzed previously?	Do proposed changes/ new circumstances/ new information result in new significant/ substantially more severe impacts?	Is there substantial new information requiring new analysis or verification?	Do mitigation measures from prior documents resolve significant impacts?
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	DEIR Impact 3.6.1	No	No	N/A
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)	DEIR Impact 3.6.1	No	No	N/A
ii) Strong seismic ground shaking?	DEIR Impact 3.6.1	No	No	N/A
iii) Seismic-related ground failure, including liquefaction?	DEIR Impact 3.6.1	No	No	N/A
iv) Landslides?	DEIR Impact 3.6.1	No	No	N/A
b) Result in substantial soil erosion or the loss of topsoil?	DEIR Impact 3.6.2	No	No	N/A
c) 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?	DEIR Impact 3.6.3	No	No	N/A
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?	DEIR Impact 3.6.3	No	No	N/A
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	DEIR Impact 3.6.4	No	No	N/A
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	DEIR Impact 3.5.1	No	No	Yes

### Summary of EIR Analysis

This topic is addressed in Section 3.5, "Cultural Resources," and Section 3.6, "Geology, Soils, and Mineral Resources," of the Friant Ranch Draft EIR. The regulatory and physical settings for paleontological resources are described in

Sections 3.5.1 and 3.5.2, respectively, and the regulatory and physical settings for geology and soils are described in Sections 3.6.1 and 3.6.2, respectively, of the Draft EIR.

## IMPACT ANALYSIS

Impacts from development of the Friant Ranch Project are evaluated in the Friant Ranch Draft EIR (pages 3-161 through 3-164 [for Cultural Resources] and pages 3-173 through 3-177 [for Geology and Soils]) and are summarized below.

- ▶ **Impact 3.6.1: Seismic and Related Hazards.** No known earthquake faults are within or close to the Project Area and the vicinity is designated as an area of minimal ground shaking, with a very low possibility of ground failure or liquefaction as designated in the Five-County Seismic Safety Element. Slopes are minimal within the community of Friant and are slightly greater for the Friant Ranch Specific Plan Area. To minimize the potential of landslides, no building would occur on slopes that are greater than 30 percent and all proposed buildings would adhere to the Zone 3 standards of the California Uniform Building Code (CUBC). As designed, the project would have a **less-than-significant impact** related to seismic hazards.
- ▶ **Impact 3.6.2: Soil Erosion and Loss of Topsoil.** Within the Project Area, slopes are minimal, and soils are not considered highly erodible. The Friant Ranch Specific Plan calls for minimal grading in areas with slopes in excess of 30 percent to reduce erosion and loss of topsoil. In areas where hillside grading is necessary, the Specific Plan requires hillsides to be designed with contoured slopes and/or revegetated with native and water-wise landscaping to reduce erosion and loss of topsoil. Development of the project would not create substantial soil erosion or loss of topsoil; therefore, the potential impact would be **less than significant**.
- ▶ **Impact 3.6.3: Soil Instability.** The potential of liquefaction and seismically induced settlement are low within the Project Area because the soils present consist of silt, clay, poorly graded sand, silty sand, gravel and cobble, and soils that are generally only slightly plastic. The soils are not subject to lateral spreading, and subsidence has not previously occurred within the Project Area or surrounding vicinity. Proposed structures would be required by the County to comply with the Fresno County Grading Ordinance, Fresno County Improvement Standards, and the recommendations in the Friant Ranch Infrastructure Master Plan. As designed, the project would not result in on- or off-site soil instability circumstances, and the impact would be **less than significant**.
- ▶ **Impact 3.6.4: Septic Tanks and Alternative Wastewater Disposal.** Proposed development associated with the project would rely on a public sewer system and would not be on a septic system or alternative wastewater disposal system. New development within the Proposed Community Plan Area (which is currently unsewered other than the Millerton Village Mobile Home Park) would rely on septic systems until funding is available to construct a collection system to carry sewage to the treatment plant proposed within the Specific Plan Area. The continued use and/or installation of septic systems within the Friant Community Plan Area would not result in a significant impact as the soils are capable of adequately supporting the use of septic systems, and as designed, the project would result in a **less-than-significant impact**.
- ▶ **Impact 3.5.1: Paleontological Resources and Unique Geological Feature.** Implementation of the project could result in the discovery of paleontological resources during construction. However, there are no known paleontological resources within the existing Friant Community Plan Area and no detailed studies have been prepared. Implementation of mitigation measures identified below would reduce the potential of directly or indirectly destroying an unknown paleontological resource, site, or unique geologic feature during construction. This impact would be **less than significant after mitigation**.

### Friant Community Plan Update and Friant Ranch Specific Plan Policy Requirements

The Friant Ranch EIR does not list any proposed policies of the Friant Community Plan Update or the Friant Ranch Specific Plan that are applicable to geology and soils. The Friant Community Plan Update proposes the following policies, as identified in the Friant Ranch EIR, to preserve and protect paleontological resources consistent with the General Plan:

- ▶ Policy 6.1 Protect and preserve historic and archeological sites in open space easements, where feasible, and document such sites when preservation is not feasible.

## Mitigation Measures

The following mitigation measures were identified in the Friant Ranch EIR:

- ▶ **Mitigation Measure 3.5.1e:** If unknown cultural resources are discovered during Project construction, all work in the area of the find shall cease, and a qualified archaeologist shall be retained by the developer, and approved by the County, to assess the significance of the find, make recommendations on its disposition, and prepare appropriate field documentation, including verification of the completion of required mitigation. If archaeological or paleontological resources are discovered during earth moving activities, all construction activities within 50 feet of the find shall cease until the archaeologist evaluates the significance of the resource. In the absence of a determination, all archaeological and paleontological resources shall be considered significant. If the resource is determined to be significant, the archaeologist, as appropriate, shall prepare a research design for recovery of the resource in consultation with SHPO that satisfies the requirements of Public Resources Code Section 21083.2. The archaeologist shall complete a report of the excavations and findings. Upon approval of the report, the developer shall submit the report to the regional office of the California Historical Resources Information System and Fresno County.
- ▶ **Mitigation Measure 3.5.1f:** Construction personnel shall be informed of the potential for encountering significant archaeological or paleontological resources within the Project Area, and shall be instructed in the identification of artifacts, bone and other potential resources. For any construction within the Project area, all construction personnel shall be informed of the need to stop work on the construction site until a qualified archaeologist has been provided the opportunity to assess the significance of the find and implement appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed that unauthorized collection of cultural resources is prohibited.
- ▶ **Mitigation Measure 3.5.1g:** If unknown cultural resources are discovered during future development in the existing Friant Community Plan Area, including the Depot parcel, all work in the area of the find shall cease, and a qualified archaeologist shall be retained by the developer, and approved by the County, to assess the significance of the find, make recommendations on its disposition, and prepare appropriate field documentation, including verification of the completion of required mitigation. If archaeological or paleontological resources are discovered during earth moving activities, all construction activities within 50 feet of the find shall cease until the archaeologist evaluates the significance of the resource. In the absence of a determination, all archaeological and paleontological resources shall be considered significant. If the resource is determined to be significant, the archaeologist, as appropriate, shall prepare a research design for recovery of the resource in consultation with SHPO that satisfies the requirements of Public Resources Code Section 21083.2. The archaeologist shall complete a report of the excavations and findings. Upon approval of the report, the developer shall submit the report to the regional office of the California Historical Resources Information System and Fresno County.
- ▶ **Mitigation Measure 3.5.1h:** Future construction personnel shall be informed of the potential for encountering significant archaeological or paleontological resources within the existing Friant Community Plan Area, and shall be instructed in the identification of artifacts, bone and other potential resources. For any future construction within the existing Friant Community Plan Area, all construction personnel shall be informed of the need to stop work on the construction site until a qualified archaeologist has been provided the opportunity to assess the significance of the find and implement appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed that unauthorized collection of cultural resources is prohibited.

The Friant Ranch EIR concluded that implementation of these mitigation measures would reduce impacts to paleontological resources to a less-than-significant level.

## CONSISTENCY EVALUATION

- a) As analyzed in the Friant Ranch EIR, there are no substantial seismic hazards within the Project Area or surrounding vicinity. Proposed development associated with the project would comply with the Zone 3 standards of the CUBC and no slopes that are greater than 30 percent would be built upon to reduce the potential of landslides. This impact was concluded to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to seismic hazards.
- b) As analyzed in the Friant Ranch EIR, the potential for soil erosion and loss of topsoil is low because slopes are minimal and soils are not highly erodible. The project would be developed in compliance with the goals, policies, and community design guidelines of the Friant Community Plan Update and Friant Ranch Specific Plan. The Friant Ranch Specific Plan requires minimal grading in areas with slopes greater than 30 percent and in areas where hillside grading is necessary, the Specific Plan requires hillsides to be designed with contoured slopes and/or revegetated with native and water-wise landscaping to reduce erosion and loss of topsoil. This impact was concluded to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to soil erosion and loss of topsoil.
- c) As described in the Friant Ranch EIR, the potential of liquefaction and seismically induced settlement are low within the Project Area because the soils present consist of silt, clay, poorly graded sand, silty sand, gravel and cobble, and are only slightly plastic. Additionally, the project would comply with the Fresno County Grading Ordinance, Fresno County Improvement Standards, and the recommendations in the Friant Ranch Infrastructure Master Plan. This impact was concluded to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to instable soils.
- d) As described in the Friant Ranch EIR, the soils are capable of adequately supporting the use of septic systems. Additionally, proposed development would rely on a public sewer system and would not be on a septic system or alternative wastewater disposal system. New development within the Proposed Community Plan Area would rely upon septic systems until funding is available to construct a collection system to carry sewage to the treatment plant proposed within the Specific Plan Area. This impact was concluded to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to septic tanks and alternative wastewater disposal systems.
- e) As described in the Friant Ranch EIR, no known paleontological resources occur within the Friant Community Plan Area. Ground disturbing activities associated with construction of the project could result in the discovery of paleontological resources. Mitigation measures are identified that require avoidance or long-term protection (if possible), and (where it is not possible) data recovery, construction monitoring, work stoppage in the area of a find, consultation, and environmental awareness training for workers. Because mitigation requires adherence to proper protocols in the event that paleontological resources are discovered, this impact was concluded to be less than significant after mitigation in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the

project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Mitigation Measures 3.5.1e through 3.5.1h would continue to apply to the project and would require appropriate protections for paleontological resources. Therefore, no additional environmental review is needed for the project related to paleontological resources.

## VIII. GREENHOUSE GAS EMISSIONS

Environmental Issue Would the Project	Where were impacts analyzed previously?	Do proposed changes/ new circumstances/ new information result in new significant/ substantially more severe impacts?	Is there substantial new information requiring new analysis or verification?	Do mitigation measures from prior documents resolve significant impacts?
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	DEIR Impacts 3.15.1 and 3.15.2	No	No	Yes but Impact 3.15.1 remains significant and unavoidable
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	DEIR Impacts 3.15.1 and 3.15.2	No	No	Yes but Impact 3.15.1 remains significant and unavoidable

### Summary of EIR Analysis

This topic is addressed in Section 3.15, “Greenhouse Gas Emissions and Global Climate Change,” of the Friant Ranch Draft EIR. The regulatory and physical settings are described in Sections 3.15.1 and 3.15.2, respectively, of the Draft EIR.

### IMPACT ANALYSIS

Impacts from development of the Friant Ranch Project are evaluated in the Friant Ranch Draft EIR (pages 3-385 through 3-401) and are summarized below.

- ▶ **Impact 3.15.1: Development of the project could potentially result in a cumulatively considerable incremental contribution to the significant cumulative impact of global climate change.** The project would have a cumulative impact related to global climate change due to the increase of population and vehicles in the area. Carbon dioxide (CO<sub>2</sub>) emissions from the project would contribute to greenhouse gas (GHG) emissions locally, regionally, and globally. Implementation of mitigation measures would substantially reduce GHG emissions within the project area, but not to a level that is less than significant. Therefore, this impact would be **significant and unavoidable**.
- ▶ **Impact 3.15.2: Climate change could potentially result in an impact on Project water resources.** The project would be designed to conserve water and use reclaimed water for irrigation, where appropriate. Considerable uncertainty remains with respect to the overall impact of global climate change on future water supply in California; therefore, it is unknown to what degree global climate change will affect future Fresno County water supply and availability, as well as water supply and availability for the Project Area. However, based on consideration of the recent regional and local climate change studies, it is reasonably expected that the impacts of global climate change on water supply would be **less than significant**.

### Friant Community Plan Update and Friant Ranch Specific Plan Policy Requirements

The Friant Ranch Specific Plan proposes the following policies, as identified in the Friant Ranch EIR, that are applicable to GHG emissions:

- ▶ Require that residential development within the Medium Density Residential and Medium High Density Residential areas include neighborhood parks and parkways, at a rate of 5 to 8 acres per 1,000 dwelling units.
- ▶ Require that development within the Village Core (Community Commercial) include 5 acres parks, parkways, and town greens.
- ▶ Require a minimum of 245 acres to be preserved as undisturbed permanent open space within the Specific Plan area. (This amount was increased to 460 acres with the Board of Supervisors’ approval of Alternative 3.)

- ▶ Provide a variety of housing types that may include, but not be limited to, single-family detached homes, cluster homes, courtyard homes, alley-loaded homes, townhomes and apartments.

The Friant Community Plan Update proposes the following policies, as identified in the Friant Ranch EIR, that are applicable to GHG emissions:

#### **Land Use Element**

- ▶ Promote walkability within Friant Community Plan Area for access to regional recreation areas through coordination and marketing of the Lost Lake Recreation Area and Millerton Lake.
- ▶ Create pedestrian linkages across Friant Road that will allow uninterrupted pedestrian trail connections between Lost Lake Recreation Area/San Joaquin River Parkway and new development east of Friant Road.
- ▶ For projects, requiring Site Plan Review, encourage development that is pedestrian-friendly with a village-like character.
- ▶ Condition new development projects, as appropriate, to provide streetscaping, sidewalks, and adequate lighting with a rustic/rural character in order to create more pedestrian-friendly areas that connect established residential neighborhoods to commercial areas along Friant Road.
- ▶ Require that new development provide pedestrian linkages to existing neighborhoods, where feasible, to facilitate pedestrian movement between neighborhoods.
- ▶ Encourage the development of a trail system that provides linkages between Lost Lake Recreation Area and the commercial and residential areas within the Friant Community Plan Area.
- ▶ Allow for the development of a wide variety of housing types in Friant including large-lot single family, moderate-lot single family, small-lot single family, apartments, townhomes and condominiums.
- ▶ Through future Specific Plans and zoning ordinances, facilitate moderate increases in density for multi-family units within Medium High Density Residential areas.
- ▶ As new development projects are approved along Friant Road, require the projects to provide landscaping and street trees along the project frontage.
- ▶ Encourage the establishment of open space corridors along drainageways, slopes, in valleys and in other constrained areas, whenever possible.
- ▶ Require new development to create parks and parkways within residential neighborhoods, public, and commercial areas.

#### **Transportation Element**

- ▶ Promote a street and highway system that can accommodate alternative modes of travel.
- ▶ Support efforts to establish multiple forms of transit within the Community of Friant, including utilizing the existing rail right-of-way for trails for bicycles and pedestrians, Neighborhood Electric Vehicle access and a potential future light rail route.
- ▶ Promote the establishment of a town-wide pedestrian walkway and trail network that promotes the safe movement of people throughout the Community of Friant.
- ▶ Encourage the development of multi-use trails throughout the Friant Community Plan Area for bicyclists and pedestrians.

#### **Environmental Resources Management Element**

- ▶ Implement land use patterns and policies that incorporate smart growth practices, including placement of higher densities near transit centers, providing alternative modes of transportation, and encouraging and accommodating pedestrian-friendly environments.
- ▶ Encourage the use of domestic and commercial solar energy uses to conserve fossil fuels and improve air quality.



- ▶ Facilitate the use of green building standards and Leadership in Energy and Environmental Design (LEED) in both private and public projects, where feasible.
- ▶ Promote sustainable building practices that go beyond the requirements of Title 24 of the California Administrative Code, and encourage energy-efficient design elements, as appropriate.
- ▶ Support sustainable building practices that integrate building materials and methods that promote environmental quality, economic vitality, and social benefit through the design, construction, and operation of the built environment, where feasible.
- ▶ Encourage the use of domestic and commercial solar energy in the Friant Community Plan Area in an effort to conserve fossil fuels and improve air quality.

## Mitigation Measures

The following mitigation measures were identified in the Friant Ranch EIR:

- ▶ **Mitigation Measure 3.15.1a:** The applicant shall select and locate trees carefully to protect buildings from energy consuming environmental conditions, and to shade paved areas. Trees selected to shade paved areas should be species that will shade 25% of the paved area within 20 years.
- ▶ **Mitigation Measure 3.15.1b:** The applicant shall develop a tree planting informational packet to help project area residents understand their options for planting trees that can absorb carbon dioxide.
- ▶ **Mitigation Measure 3.15.1c:** Prioritized parking within commercial and retail areas shall be given to electric vehicles, hybrid vehicles, and alternative fuel vehicles.
- ▶ **Mitigation Measure 3.15.1d:** The County shall utilize the following guidelines during review of future project-specific submittals for non-residential development within the Specific Plan area and the Community Plan boundary:
  - Equip HVAC units with a PremAir or similar catalyst system, if reasonably available and economically feasible at the time building permits are issued. Catalyst systems are considered feasible if the additional cost is less than 10% of the base HVAC unit cost; and
  - Install two 110/208 volt power outlets for every two loading docks.
- ▶ **Mitigation Measure 3.15.1e:** Develop walking trails throughout the Friant Ranch Specific Plan Area in accordance with the plan.
- ▶ **Mitigation Measure 3.15.1f:** Implement the following measure as determined appropriate by the County in consultation with the SJVAPCD:
  - Establish paving guidelines that encourage businesses, if feasible, to pave all privately-owned parking areas with a substance with reflective attributes (albedo = 0.30 or better) similar to Portland cement concrete. The use of a paving substance with reflective attributes similar to Portland Cement concrete is considered feasible under this measure if the additional cost is less than 10% of the cost of applying a standard asphalt product.
- ▶ **Mitigation Measure 3.15.1g:** The following measures shall be used singularly or in combination to accomplish an overall reduction of 10 to 20% in residential energy consumption relative to the requirements of the 2008 State of California Title 24:
  - Prior to issuance of an occupancy permit, the applicant shall demonstrate the use of air conditioning systems that are more efficient than Title 24 requirements;
  - In marketing materials associated with any project within the Friant Community Plan Area, the applicant shall encourage the use of high-efficiency heating and other appliances, such as water heaters, cooking equipment, refrigerators, and furnaces;
  - Encourage photovoltaic rooftop energy systems in community buildings and larger commercial buildings;

- Prior to issuance of an occupancy permit, the applicant shall establish tree-planting guidelines that require residents to plant trees to shade buildings primarily on the west and south sides of the buildings. Use of deciduous trees (to allow solar gain during the winter) and direct shading of air conditioning systems shall be included in the guidelines; and
  - As required by the Friant Specific Plan, prohibit any wood-burning fireplaces, woodstoves, or similar wood-burning devices. This prohibition shall be included in any CC&Rs that are established.
- **Mitigation Measure 3.15.1h:** The following measures shall be used to demonstrate sustainable building practices and lessen the impact on Greenhouse Gases.:
- Provide parks and open space throughout the residential developments as required by the Friant Ranch Specific Plan;
  - Prior to issuance of an occupancy permit, all non-residential projects within the Community Plan Area shall demonstrate that bicycle racks will be provided;
  - Prior to issuance of an occupancy permit, all apartment complexes or condominiums without garages within the Community Plan Area shall demonstrate that at least two Class I bicycle storage spaces per unit will be provided;
  - As required by the Friant Community Plan Update and Friant Ranch Specific Plan, residential neighborhoods shall be interconnected, with easy access to commercial and recreational land uses;
  - Prior to issuance of an occupancy permit within the Friant Ranch Specific Plan area, the applicant shall create informational materials informing occupants of:
    - The alternative travel amenities provided, including ridesharing and public transit availability schedules;
    - The Community Plan's pedestrian, bicycle, and equestrian paths to community centers, shopping areas, employment areas, schools, parks, and recreation areas; and
    - The SJVAPCD programs to reduce county-wide emissions.
  - Any new park areas within the Community Plan Area shall include:
    - Bicycle racks at all appropriate locations; and
    - A community notice board and information kiosk with information about community events, ride sharing, and commute alternatives.
  - Provide a community notice board and information kiosk with information about community events, ride-sharing, and commute alternatives.

Implementation of the mitigation measures would reduce impacts related to GHG emissions, but not to a less-than-significant level. Therefore, as discussed in the Friant Ranch EIR, some impacts would remain significant and unavoidable.

## CONSISTENCY EVALUATION

- a, b)** As analyzed in the Friant Ranch EIR, the project would have a cumulative impact related to global climate change due to the increase of population and vehicles in the area. The CO<sub>2</sub> emissions from the project would contribute to GHG emissions locally, regionally, and globally. Even with implementation of proposed Specific Plan policies (listed above), the project would likely result in a substantial amount of GHG emissions. Mitigation measures are identified that require tree planting; prioritized parking for electric, hybrid, and alternative fuel vehicles; increased energy-efficiency; development of walking trails; and decreased energy consumption. Implementation of these mitigation measures would reduce impacts related to GHG emissions, but not to a less-than-significant level. Therefore, as discussed in the Friant Ranch EIR, this impact would remain significant and unavoidable.

As described in the introduction to this checklist, no changes to the project description have occurred since the project was approved in February 2011. As described in the introduction to this checklist, at the conclusion of the CEQA process in 2011, the Board of Supervisors approved Alternative 3 (the so-called "Northeast Development Configuration Alternative"), which is the environmentally superior alternative. As described in the Friant Ranch EIR (page 4-29), greenhouse gases/global climate change impacts associated with Alternative 3 would be less compared with those of the original proposed project because the developed project site would be reduced from 667 acres to 482 acres and the number of residential units would be reduced from 2,996 to 2,500. The impacts to global climate change as a result of Alternative 3 would still be significant and unavoidable; however, the impacts would be less compared with those of the original proposed project. Therefore, there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to GHG impacts.

As analyzed in the Friant Ranch EIR, the project would be designed to conserve water and use reclaimed water for irrigation, where appropriate. Considerable uncertainty remains with respect to the overall impact of global climate change on future water supply in California; therefore, it is unknown to what degree global climate change will affect future Fresno County water supply and availability, as well as water supply and availability for the Project Area. This impact was concluded to be less than significant in the Friant Ranch EIR.

Since the County approved the project (Alternative 3) in 2011, the project applicants have taken steps to improve the reliability of their water supply, and thus its resiliency in the face of climate change. Appendix B2 to the Recirculated Draft EIR is the First Amendment to Option and Long-Term Water Transfer Agreement between LTRID and WWD (Amended Transfer Agreement), which is dated September 21, 2016. The benefits of the Amended Transfer Agreement are discussed in Appendix B to this checklist, a July 15, 2022, technical memorandum prepared by Provost & Pritchard providing an "Update to Previously Compiled Water Supply Assessment for Friant Ranch" (Updated WSA Memorandum). This latter document explains that "[t]he amended Transfer Agreement secures a reliable multi-year surface water supply including 2,000 acre-feet per year with a carryover potential of up to 4,000 acre-feet per year in Millerton Lake. Compared with the initial Transfer Agreement, the amended Transfer Agreement provides greater water supply assurance during dry year periods, including multi-year drought conditions." (Updated WSA Memorandum, pp. 1-2.) In reaching these conclusions, Provost & Pritchard specifically considered the effects of climate change. (*Id.*, pp. 18-22.) As part of their analysis, the authors considered the conclusions set forth in the Sacramento and San Joaquin River Basins Climate Impact Assessment (SSJRBC Impact Assessment). Provost & Pritchard summarized the conclusions of that document by stating that "[c]limate change impacts will likely result in higher runoff events in the San Joaquin River subbasin. This is especially true in the early 21st century period when the high-runoff events are notably greater than projected historical events. Climate change as analyzed in the SSJRBC Impact Assessment scenarios also show a seasonal shift to more runoff in the winter and less in the spring months. This projected shift occurs because higher temperatures during winter cause more precipitation to occur as rainfall, which increases runoff and reduces snowpack." (*Id.* at p. 22.) Despite these changes, however, the project's reliable multi-year surface water supply of 2,000 acre-feet per year with a carryover potential of up to 4,000 acre-feet per year will remain more than adequate in the foreseeable future to meet the annual projected Project demand of 916 acre-feet per year even during a multi-year drought scenario. (*Ibid.*)

As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to climate change and its resulting effects on the project's water resources.

## IX. HAZARDS AND HAZARDOUS MATERIALS

Environmental Issue Would the Project	Where were impacts analyzed previously?	Do proposed changes/ new circumstances/ new information result in new significant/ substantially more severe impacts?	Is there substantial new information requiring new analysis or verification?	Do mitigation measures from prior documents resolve significant impacts?
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	DEIR Impact 3.7.1	No	No	N/A
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	DEIR Impact 3.7.2	No	No	N/A
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	DEIR Impact 3.7.3	No	No	N/A
d) 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, would it create a significant hazard to the public or the environment?	DEIR Impact 3.7.4	No	No	N/A
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	DEIR Impact 3.7.5	No	No	N/A
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	DEIR Impact 3.7.6	No	No	Yes
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	DEIR Impact 3.7.7	No	No	N/A

### Summary of EIR Analysis

This topic is addressed in Section 3.7, "Hazards and Hazardous Materials," of the Friant Ranch Draft EIR. The regulatory and physical settings are described in Sections 3.7.1 and 3.7.2, respectively, of the Draft EIR.

## IMPACT ANALYSIS

Impacts from development of the Friant Ranch Project are evaluated in the Friant Ranch Draft EIR (pages 3-183 through 3-189) and are summarized below.

- ▶ **Impact 3.7.1: Hazardous Materials Transportation, Use, and Disposal.** Implementation of the project could result in more hazardous materials being used, stored, transported to and discarded within the Project Area, which would increase the potential risk associated with hazardous materials and waste. However, the project would be developed in compliance with the goals, policies, and community design guidelines of the Friant Community Plan Update and Friant Ranch Specific Plan, which would limit the impact hazardous materials could have on the population and environment. Additionally, the project would adhere to the California Vehicle Code, the California Accidental Release Prevention (CalARP), and the Business Plan Act. Therefore, this impact would be **less than significant**.
- ▶ **Impact 3.7.2: Hazardous Materials Accidents.** Implementation of the project could result in an increase in the risk of hazardous materials accidents such as spills. However, the project would comply with existing federal, State, and local regulations that control the production, use, disposal, emissions, and transportation of hazardous materials. Therefore, this impact would be **less than significant**.
- ▶ **Impact 3.7.3: Hazardous Materials Around Existing or Proposed Schools.** Implementation of the project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing school; **no impact** would occur.
- ▶ **Impact 3.7.4: Hazardous Materials Site.** No known hazardous material sites or risks of contamination are within the Project Area; **no impact** would occur.
- ▶ **Impact 3.7.5: Private or Public Airport Hazards.** No public airport or private airstrips are within two miles of the Project Area, and no public or private airports, airstrips, or airport-related hazards exist within or near the Project Area. **No impact** would occur.
- ▶ **Impact 3.7.6: Emergency Preparedness.** Without some assurance of additional funds for fire protection and law enforcement in the Project Area, the Friant Ranch Specific Plan could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. However, mitigation measures are identified that require the project proponent to ensure that adequate emergency services would be available prior to project implementation. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.7.7: Wildland Fires.** Wildland fire is a potential threat within the project vicinity. The original proposed Draft Friant Ranch Specific Plan would have provided for 245 acres of undisturbed open space and 30 acres of revegetated slopes to be maintained as natural vegetation. Alternative 3 increased the amount of protected open space to 460 acres. There are also other open space lands east and south of the Friant Ranch Specific Plan Area. The close proximity of these open space areas could affect the Project's potential to expose people or structures to harm from wildland fires. Compliance with existing County standards and policies, and implementation of Project design guidelines and standards and Mitigation Measure 3.7.6a would minimize the exposure of people and structures to loss, injury, or death involving wildland fires. This impact would be **less than significant**.
- ▶ **Impact 3.7.8: Exposure to Hazardous Conditions.** Proximity of the project to the Friant-Kern Canal and potentially abandoned water wells could pose a hazard to future Friant Community Plan area residents. Public access to the Friant-Kern Canal is precluded by installation of appropriate barriers and fencing. Abandoned wells would be sealed as legally required. Installation of appropriate barriers and fencing along the Friant-Kern Canal and compliance with provisions of law pertaining to well abandonment would reduce this impact to a **less-than-significant** level.

### Friant Community Plan Update and Friant Ranch Specific Plan Policy Requirements

The Friant Ranch EIR does not list any proposed policies of the Friant Community Plan Update or the Friant Ranch Specific Plan that are applicable to hazards and hazardous materials.

## Mitigation Measures

The following mitigation measures were identified in the Friant Ranch EIR:

- ▶ **Mitigation Measure 3.7.6a:** Prior to issuance of a building permit for construction within the Friant Ranch Specific Plan Area, a Community Facilities District (CFD) shall be formed to provide funding for additional fire protection services in the Project Area sufficient to satisfy the standards set forth in the Fresno County Health and Safety Element.
- ▶ **Mitigation Measure 3.7.6b:** Prior to issuance of a building permit for construction within the Friant Ranch Specific Plan Area, a CFD will be established to provide the funding necessary to maintain adequate law enforcement staffing and facilities to serve the Friant Ranch Specific Plan Area consistent with the standards set forth in the Fresno County General Plan policy PF-G.2 and PF-G.4. The CFD shall be structured to provide initial capital contribution through a per-unit fee and thereafter impose a special tax assessment within the CFD boundaries to fund ongoing operations and maintenance.

The Friant Ranch EIR concluded that implementation of these mitigation measures would reduce hazards and hazardous materials impacts to a less-than-significant level.

## CONSISTENCY EVALUATION

- a) As analyzed in the Friant Ranch EIR, implementation of the project could result in hazardous materials being used, stored, transported to, and discarded within the Project Area; however, compliance with the goals, policies, and community design guidelines of the Friant Community Plan Update and Friant Ranch Specific Plan would limit the impact hazardous materials could have on the population and environment. This impact was concluded to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to the transportation, use, and disposal of hazardous materials.
- b) The Friant Ranch EIR determined that while project implementation could result in an increase in the risk of hazardous materials accidents such as spills, compliance with existing federal, State, and local regulations that control the production, use, disposal, emissions, and transportation of hazardous materials would reduce impacts related to hazardous materials accidents. This impact was concluded to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to hazardous materials accidents.
- c) The Friant Ranch EIR determined that no impact to schools would occur because no schools are present within 0.25 mile of the Project Area. No new schools have been developed in the Project Area or surrounding vicinity since the initial analysis was prepared for the Friant Ranch EIR, and as described in the introduction to this checklist, no other changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to the hazardous materials around existing or proposed schools.
- d) The Friant Ranch EIR determined that no impact would occur from the presence of hazardous materials sites because none are within the Project Area. No new hazardous materials sites have been identified in the Project Area since the Friant Ranch EIR was prepared (DTSC 2021; SWRCB 2021), and as described in the introduction to this checklist, no other changes to the project description have occurred since the project

(Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to hazardous materials sites.

- e) The Friant Ranch EIR determined that no impact would occur from airport related hazards because no public airport or private airstrips are within 2 miles of the Project Area. No new airports have been developed in the Project Area since the Friant Ranch EIR was prepared, and as described in the introduction to this checklist, no other changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project regarding airport-related hazards.
- f) As analyzed in the Friant Ranch EIR, the Friant Ranch Specific Plan could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. However, mitigation measures would require the formation of a CFD to provide funding for additional fire and police protection services in the Project Area and ensure compliance with the Fresno County Health and Safety Element standards. This impact was determined to be less than significant with mitigation in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there are no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Mitigation Measures 3.7.6a and 3.7.6b would continue to apply to the project and would require formation of a CFD to provide funding for additional fire and police protection services in the Project Area. Therefore, no additional environmental review is needed for the project related to the impairment and interference of an adopted emergency response plan.
- g) As analyzed in the Friant Ranch EIR, wildland fire is a potential threat given the Project Area's proximity to several open space areas. However, the Friant Ranch EIR determined that compliance with existing County standards and policies, Project design guidelines and standards, and Mitigation Measure 3.7.6a would reduce the potential wildland fire impact. Mitigation Measure 3.7.6a would require the establishment of a CFD to provide funding for additional fire protection services to ensure the proposed community would have access to adequate protection in the case of a wildfire. County standards would require review of project proposals to identify potential fire hazards and ensure that the proposed development is constructed in a manner that minimizes the risk from fire hazards and meets all applicable State and County fire standards. This impact was determined to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there are no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to exposing people or structures to a significant risk of loss, injury, or death involving wildland fires.

## X. HYDROLOGY AND WATER QUALITY

Environmental Issue Would the Project:	Where were impacts analyzed previously?	Do proposed changes/ new circumstances/ new information result in new significant/ substantially more severe impacts?	Is there substantial new information requiring new analysis or verification?	Do mitigation measures from prior documents resolve significant impacts?
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	DEIR Impact 3.8.1	No	No	Yes
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	DEIR Impact 3.8.2	No	No	N/A
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	DEIR Impact 3.8.3	No	No	N/A
i) Result in substantial on- or offsite erosion or siltation;	DEIR Impact 3.8.3	No	No	N/A
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	DEIR Impact 3.8.3	No	No	N/A
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	DEIR Impact 3.8.3	No	No	N/A
iv) Impede or redirect flood flows?	DEIR Impact 3.8.3	No	No	N/A
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	DEIR Impact 3.8.5	No	No	N/A
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	DEIR Impact 3.8.1	No	No	Yes

### Summary of EIR Analysis

This topic is addressed in Section 3.8, "Hydrology and Water Quality," of the Friant Ranch Draft EIR. The regulatory and physical settings are described in Sections 3.8.1 and 3.8.2, respectively, of the Draft EIR.



## IMPACT ANALYSIS

Impacts from development of the Friant Ranch Project are evaluated in the Friant Ranch Draft EIR (pages 3-207 through 3-222) and are summarized below.

- ▶ **Impact 3.8.1: Water Quality Standards or Waste Discharge Requirements and Substantial Water Quality Degradation.** The project would not cause or contribute to a violation of applicable water quality standards or substantially degrade existing water quality. Further, the project would comply with existing local, state, and federal regulations, including the specific water quality standards set forth in the Tulare Lake Basin Plan and the Sacramento-San Joaquin Basin Plan; and adhere to the Fresno County General Plan policies, design of the proposed tertiary treatment wastewater facility, LID BMP's for stormwater, as well as the policies described in the proposed Community Plan Update and Specific Plan. Therefore, this impact would be **less than significant**.
- ▶ **Impact 3.8.2: Depletion of Groundwater or Interference with Groundwater Recharge.** The Friant Ranch Specific Plan would use surface water rather than groundwater for its potable water needs and reclaimed wastewater for much of its landscape irrigation. The project would utilize LID stormwater practices and natural drainage to infiltrate, filter, store, evaporate, and detain runoff close to its source. Thus, the project would have a positive effect on groundwater because the reclaimed water use and LID techniques would recharge the local aquifer. The project includes a water transfer with LTRID that would bring surface water supplies to the Friant Community Plan Area sufficient to serve the existing and proposed uses within the Friant Community Plan Area (as proposed by the Friant Community Plan Update). Fresno County WWD #18 adopted Resolution 08-02, which approved and adopted the Water Supply Assessment for WWD #18 stating that the District has a reliable water supply to provide water to the Friant Ranch development. The proposed use of Tule River supplies to recharge the groundwater basin within the LTRID boundaries would also provide a positive benefit to groundwater recharge and would not deplete groundwater supplies. Therefore, the project would have **no impact** to groundwater depletion or recharge.
- ▶ **Impact 3.8.3: Alteration of the Existing Drainage Pattern and Stormwater Drainage Capacity.** Development of the Friant Ranch Specific Plan Area would increase the amount of impervious surface areas in the Project Area, which would in turn increase the runoff volumes and increase the peak flow rates in the Project Area. Compliance with applicable Fresno County General Plan policies, and adherence to the proposed Friant Community Plan Update policies and Specific Plan policies will help reduce the potential impacts to stormwater drainage alteration and capacity. Further, mitigation measures are identified that would require implementation of LID stormwater practices such as retention-recharge basins, which would serve to conserve water and recharge groundwater. Therefore, this impact would be **less than significant with mitigation**.
- ▶ **Impact 3.8.4: Placement of Housing or Other Improvements Within a 100-year Flood Hazard Area.** According to FEMA FIRM number 06019C1030H, dated February 18, 2009, only a portion of the Friant Community Plan Area along the San Joaquin River, west of Friant Road, and the playa pool at the southwest corner of the Specific Plan area, is within the 100-year flood zone (see Figure 3.8-1 in the Friant Ranch Draft EIR); the areas located within the 100-year flood zone would not be developed or altered from their existing state. Additionally, a large vernal pool is located in the southwestern corner of the Friant Ranch Specific Plan area that is listed within the Zone A, 100-year flood boundary (see Figure 3.8-1 in the Friant Ranch Draft EIR); this area is not proposed for development and would be left in its natural state pursuant to Mitigation Measure 3.4.1b (Biological Resources). Therefore, the project would have **no impact** with regard to placing structures in a 100-year flood hazard area.
- ▶ **Impact 3.8.5: Seiche, Tsunami, Mudflow, or Flooding as a Result of Dam Failure.** The Project Area is not located near a body of water that could generate seiche or tsunami effects. Further, site topography would not result in mudflow events. Friant Dam and Millerton Lake are located just north of the project site. According to the Fresno County General Plan Background Report, only the portion of the Project Area along the San Joaquin River, west of Friant Road, would be subject to inundation as a result of the failure of Friant Dam. The majority of this land is currently used for recreation purposes and is not proposed for development by the Project. Therefore, the potential for seiche, tsunami, and mudflow impacts and flooding as a result of dam failure would be **less than significant**.

## Friant Community Plan Update and Friant Ranch Specific Plan Policy Requirements

The Friant Community Plan Update proposes the following policies, as identified in the Friant Ranch EIR, that are applicable to hydrology and water quality:

### Water Quality and Waste Discharge Requirements

- ▶ **Policy 1.8** Require that discretionary projects be consistent with watershed regulations as required by the U.S. Fish and Wildlife Service, Regional Water Quality Control Board, Environmental Protection Agency, and the U.S. Army Corps of Engineers.
- ▶ **Policy 2.3** Minimize odors and other nuisances by requiring that the wastewater treatment facility be designed using the latest available technology.
- ▶ **Policy 2.4** Encourage utilization of wastewater treatment facilities that provide for the reuse of wastewater for uses such as landscape watering, etc.
- ▶ **Policy 3.6** Encourage drainage designs which retain or detain storm water runoff to minimize volume and pollutant concentrations.

### Stormwater

- ▶ **Policy 1.2** Wherever possible, the natural terrain, drainage and vegetation of the community should be preserved with superior examples protected within open spaces, parks, or greenbelts.
- ▶ **Policy 1.4** Encourage use of drainage improvements designed, with native vegetation where possible, to retain or detain storm water run-off, minimizing volume and pollutant concentrations.
- ▶ **Policy 1.5** Minimize the alteration of natural drainage areas. Require development plans to include necessary mitigation to stabilize runoff and silt deposition through utilization of grading and flood-protection ordinances.
- ▶ **Policy 1.6** Where appropriate, require new development to create "bio-swales" for reducing storm water velocities and for transporting and capturing storm water runoff, where feasible, rather than using storm water catch basins and mains.
- ▶ **Policy 1.7** Reduce the spreading of high nitrate fertilizers, herbicides, pesticides, and other chemicals in landscaping that can contaminate water sources.
- ▶ **Policy 1.8** Require that discretionary projects be consistent with watershed regulations as required by the U.S. Fish and Wildlife Service, Regional Water Quality Control Board, Environmental Protection Agency, and the U.S. Army Corps of Engineers.
- ▶ **Policy 3.4** Promote the use of public/private partnerships to upgrade existing buildings, as well as encourage for new buildings energy efficiency, water conservation, and storm water run-off pollution reduction.
- ▶ **Policy 3.6** Encourage drainage designs which retain or detain storm water runoff to minimize volume and pollutant concentrations.

The Friant Ranch Specific Plan proposes the following policies, as identified in the Friant Ranch EIR, that are applicable to hydrology and water quality:

### Water Quality, Drainage, and Waste Discharge Requirements

- ▶ **Policy 5.54** Incorporate, where warranted, landscaping bio-swales integral to the low impact drainage system to provide cleaning and filtration of drainage water before it is discharged from the project.
- ▶ **Policy 7.1** Minimize the impact area and/or utilize sensitive grading techniques when grading on sites located adjacent to natural open space in order to minimize impacts on sensitive natural areas.
- ▶ **Policy 7.2** Utilize techniques including, but not limited to, terracing, varying slope heights, contour grading, rounding tops and bottoms of slopes and screening with landscaping to soften the visual impact of long or high slope banks.

- ▶ **Policy 7.3** Contour slopes in lieu of using retaining walls where space permits.
- ▶ **Policy 7.4** Incorporate retaining walls into other design features such as stairs, ramps and planters, where retaining walls are necessary.
- ▶ **Policy 7.5** Insure positive drainage by coordinating the grading concept with site drainage.
- ▶ **Policy 7.6** Design should maintain the natural drainage pattern, and avoid diversion of flows from existing drainage courses, where possible.

### Stormwater

- ▶ **Policy 5.54** Incorporate, where warranted, landscaping bio-swales integral to the low impact drainage system to provide cleaning and filtration of drainage water before it is discharged from the project.
- ▶ **Policy 5.71** Provide bio-filtration areas and swales in landscaped parking islands and edges of parking lots, where feasible, to capture low-flow runoff in the parking areas and reduce toxin runoff into open space and natural drainages.
- ▶ **Policy 5.102** Pursue opportunities to preserve significant natural landforms and drainage features such as valleys and natural depressions within or next to the site, where possible, and as indicated on the Friant Ranch Land Use Plan.
- ▶ **Policy 5.104** Plan natural drainage areas, where feasible, particularly avoiding environmental features such as wetlands, vernal pools and steep slopes, as indicated on the Friant Ranch Land Use Plan.
- ▶ **Policy 7.5** Insure positive drainage by coordinating the grading concept with site drainage.
- ▶ **Policy 7.6** Design should maintain the natural drainage pattern, and avoid diversion of flows from existing drainage courses, where possible.

### **Mitigation Measures**

The following mitigation measures were identified in the Friant Ranch EIR:

- ▶ **Mitigation Measure 3.8.3a:** Storm drain design for the Friant Ranch Specific Plan portion of the Project shall be in accordance with approved LID management practices, as recommended in the Friant Ranch IMP and its appendices. The suggested management practices include but are not limited to the following:
  1. LID IMPs:
    - a. Bioretention (Rain Gardens) – A practice using landscaped areas on individual lots to hold and infiltrate stormwater.
    - b. Dry Well – Small excavated trenches backfilled with stone, designed to hold and slowly release rooftop runoff.
    - c. Filter/Buffer Strip – Bands of close-growing vegetation, usually grass, planted between pollutant source areas and a downstream receiving water body.
    - d. Swales – Two types of swales may be used. Grass swales provide both quantity (volume) and quality control by facilitating stormwater infiltration. Wet swales use residence time and natural growth to reduce peak discharge and provide water quality treatment before discharge to a downstream location.
    - e. Infiltration Trench – An excavated trench that has been backfilled with stone to form a subsurface basin. Stormwater runoff is diverted into the trench and is stored until it can be infiltrated into the soil.
    - f. Pervious Concrete – A special structural concrete without fine aggregates. This creates 15 to 30 percent voids, allowing water to pass through to a gravel layer and the native soil underneath while maintaining the structural strength of standard concrete pavement. Pervious concrete also provides demonstrable water quality treatment to the waters passing through its structure.

2. Inlet and Outlet Structures: Inlet and Outlet Structures shall be a type and configuration rated to accept the SDMP design flow at the inlet and outlet locations shown on the SDMP.
3. Pipelines: Storm drain pipeline design shall conform to the Storm Drain Master Plan (SDMP). Pipeline soffits shall be designed a minimum of one (1) foot below the hydraulic grade line (HGL) or to the soffit control elevation shown in the hydraulic calculations. The design of the storm drain pipeline below the HGL insures full pipe flow and reduces the chance of water seal breaks in the pipe and other hydraulic inefficiencies during pipeline use. Design of pipeline below the soffit control elevation insures proper pipeline performance in sections of the pipe where flow is in the open channel condition due to steep grade construction.
4. Culverts and Open Channels: Culverts and open channels shall be designed to the standards of the Federal Highway Administration Hydraulic Design of Highway Culverts (HDS-5, September 2001 or current) and the Fresno County Design Standards. The culverts and channels shall be designed to convey the critical storm event for the Friant Ranch project.
5. Detention & Retention Basins: Detention and Retention basin design calculations and minimum basin geometries are provided in Appendix A of the IMP (see Appendix N [of the Friant Ranch Draft EIR]). The basin geometry for each watershed differs depending on many factors, including the contributing drainage area and the design flow volume. Retention basins are designed to maintain the predevelopment runoff volume by storing the peak storm runoff above a base flow; retention basins in this case have also been sized to provide the storage volume necessary to give the detention time required for water quality control. Detention basin storage is designed to maintain the predevelopment peak runoff rate while capturing all runoff above that amount. Conceptual basin locations are shown in the SDMP. These locations have been selected to work with the existing ground topography and the overall master-planned drainage concept. Exact basin locations shall be determined by the developer, after precise site layouts are determined. The basins shall be permitted to shift, so long as the function provided for in the SDMP is maintained, or appropriate modifications are made to the SDMP as discussed above. Prior to issuance of a grading permit for the Friant Ranch Specific Plan, the Fresno County Engineering Department shall review the project detention and retention basin designs for conformance with the basin calculations and conformance with the basin design guidelines provided in the Friant Ranch IMP.

The Friant Ranch EIR concluded that implementation of these mitigation measures would reduce hydrology and water quality impacts to a less-than-significant level.

## CONSISTENCY EVALUATION

- a) As evaluated in the Friant Ranch EIR, the project would not cause or contribute to a violation of applicable water quality standards or substantially degrade existing water quality. Further, the project would comply with existing local, state, and federal regulations, including the specific water quality standards set forth in the Tulare Lake Basin Plan and the Sacramento-San Joaquin Basin Plan; and adhere to the Fresno County General Plan policies, design of the proposed tertiary treatment wastewater facility, LID BMPs for stormwater, as well as the policies described in the proposed Community Plan Update and Specific Plan. This impact was concluded to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011. Since project approval, the Central Valley Regional Water Quality Control Board (RWQCB) has adopted amendments to the Water Quality Control Plan (Basin Plan) for the Tulare Lake Basin as well as the Sacramento River Basin and the San Joaquin River Basin, most recently in May 2018 (Central Valley RWQCB 2018a, 2018b). The project would comply with the water quality standards set forth in these Basin Plans, including any future amendments. Therefore, there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to water quality or waste discharge requirements.

- b) As evaluated in the Friant Ranch EIR, the Friant Ranch Specific Plan would use surface water rather than groundwater for its potable water needs and reclaimed wastewater for much of its landscape irrigation. The project would utilize LID stormwater practices and natural drainage to infiltrate, filter, store, evaporate, and detain runoff close to its source. Thus, the project would have a positive effect on groundwater because the reclaimed water use and LID techniques would recharge the local aquifer. The project includes a water transfer with LTRID that would bring surface water supplies to the Friant Community Plan Area sufficient to serve the existing and proposed uses within the Friant Community Plan Area (as proposed by the Friant Community Plan Update). Fresno County WWD #18 adopted Resolution 08-02, which approved and adopted the WSA for WWD #18 stating that the District has a reliable water supply to provide water to the Friant Ranch development. The proposed use of Tule River supplies to recharge the groundwater basin within the LTRID boundaries would also provide a positive benefit to groundwater recharge and would not deplete groundwater supplies. Therefore, the Friant Ranch EIR concluded that there would be no impact. As described in the introduction to this checklist, no changes to the project description have occurred since the project was approved in February 2011. The WSA that was prepared for the Friant Ranch Project and adopted in 2008 evaluated the original proposed project. As described in the introduction to this checklist, at the conclusion of the CEQA process in 2011, the Board of Supervisors approved Alternative 3 (the so-called "Northeast Development Configuration Alternative"), which is the environmentally superior alternative. Compared with the originally proposed project, Alternative 3 reduces the amount of developed acreage (from 942 acres to 460 acres) and reduces the number of residential units proposed by nearly 500 units, thereby reducing the project's water demand by 38 percent. Provost & Pritchard prepared an updated WSA memorandum in 2022 to update the water conditions that have occurred since adoption of the 2008 WSA, including review of the available water supplies, revision of estimated project demands, and determination of the adequacy of the available water supplies to meet the project's demand (Provost & Pritchard 2022); this memorandum is included as Appendix B of this checklist. The Updated WSA memorandum affirms that, although WWD 18 plans to use separate infrastructure to serve groundwater supplies to Mira Bella (outside the Friant Community), WWD 18 does not serve groundwater supplies for uses within the Friant Community and that the project would not rely on groundwater sources. The Updated WSA memorandum concludes that the available surface water supply of 2,000 acre-feet per year is more than adequate to meet the annual projected project demand of 916 acre-feet per year (Provost & Pritchard 2022). In addition, the amended Transfer Agreement secures a multi-year surface water supply due to the carryover potential of up to 4,000 acre-feet per year. The Updated WSA memorandum concludes that this additional water supply reliability is sufficient to meet project demand during a multi-year drought scenario (Provost & Pritchard 2022). Therefore, there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to groundwater depletion or recharge.
- c) As evaluated in the Friant Ranch EIR, development of the Friant Ranch Specific Plan Area would increase the amount of impervious surface areas in the Project Area, which would in turn increase the runoff volumes and increase the peak flow rates in the Project Area. Compliance with applicable Fresno County General Plan policies, and adherence to the proposed Friant Community Plan Update policies and Specific Plan policies will help reduce the potential impacts to stormwater drainage alteration and capacity. Further, mitigation measures would require implementation of LID stormwater practices such as retention-recharge basins, which would serve to conserve water and recharge groundwater. Therefore, this impact was concluded to be less than significant with mitigation in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Mitigation Measure 3.8.3a would continue to apply to the project and would require implementation of LID stormwater practices such as retention-recharge basins, which would serve to conserve water and recharge groundwater. Therefore, no additional environmental review is needed for the project related to stormwater drainage.

- d)** As evaluated in the Friant Ranch EIR, the Project Area is not located near a body of water that could generate seiche or tsunami effects. Further, site topography would not result in mudflow events. Friant Dam and Millerton Lake are located just north of the project site. According to the Fresno County General Plan Background Report, only the portion of the Project Area along the San Joaquin River, west of Friant Road, would be subject to inundation as a result of the failure of Friant Dam. The majority of this land is currently used for recreation purposes and is not proposed for development by the Project. This impact was concluded to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to potential seiche, tsunami, and mudflow impacts and flooding as a result of dam failure.
- e)** See discussion a), above.

## XI. LAND USE AND PLANNING

Environmental Issue Would the Project	Where were impacts analyzed previously?	Do proposed changes/new circumstances/ new information result in new significant/ substantially more severe impacts?	Is there substantial new information requiring new analysis or verification?	Do mitigation measures from prior documents resolve significant impacts?
a) Physically divide an established community?	DEIR Impact 3.9.1	No	No	N/A
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	DEIR Impact 3.9.2	No	No	N/A

### Summary of EIR Analysis

This topic is addressed in Section 3.9, “Land Use and Planning,” of the Friant Ranch Draft EIR. The regulatory and physical settings for land use and planning are described in Sections 3.9.1 and 3.9.2, respectively, of the Draft EIR.

### IMPACT ANALYSIS

Impacts from development of the Friant Ranch Project are evaluated in the Friant Ranch Draft EIR (pages 3-228 through 3-237) and are summarized below.

- ▶ **Impact 3.9.1: Physically Divide the Friant Community.** The Friant Ranch Specific Plan emphasizes connecting new growth associated with the proposed development to the existing community and the area’s recreational amenities through trails and pedestrian linkages. The Project involves buildout of the existing Friant Community Plan Area and the Friant Ranch Specific Plan development would commence from the areas abutting the existing community of Friant, including a planned Village Center to bring commercial uses to the Friant Redevelopment Area. Development of the project would occur within and immediately adjacent to the existing community and would not result in the physical division of the Friant community. Therefore, the impact would be **less than significant**.
- ▶ **Impact 3.9.2: Potential Conflicts Between the Project and Applicable Land Use Plans, Policies, and Regulations.** The Friant Community Plan Update, Friant Redevelopment Plan, and Friant Ranch Specific Plan were drafted to ensure consistency with Fresno County’s General Plan, Fresno County’s Zoning Ordinance, and regional plans and other documents including the San Joaquin River Parkway Master Plan. Several amendments to the Fresno County General Plan and Zoning Division are proposed to accommodate the intended uses within the Friant Ranch Specific Plan Area for compliance with the land use plans and policies within both documents. The project also includes an amendment to the Redevelopment Plan to extend its enactment another 20 years to facilitate the Redevelopment Agency’s collection of redevelopment revenues resulting from new commercial uses planned within the Project. Approval of the project would include the amendments to the Friant Ranch Specific Plan Area. Therefore, if approved, the project (Alternative 3) would be consistent with applicable land use plans, policies, and regulations, and would have a **less-than-significant impact**.
- ▶ **Impact 3.9.3: Potential Conflicts with a Habitat Conservation Plan or Natural Community Conservation Plan.** There are no local, regional, or State Habitat Conservation Plans or Natural Community Conservation Plans that include the project site. Thus, the project (Alternative 3) would not conflict with such plans. There would be **no impact**.
- ▶ **Impact 3.9.4: Land Use Conflicts Could Occur Within and Adjacent to the Project Area Between Current Agricultural Uses and Proposed Development.** Because development will occur over a number of years, it is anticipated that some owners of land within the Project Area would choose to retain their land in agriculture

(primarily grazing land) while neighboring parcels may choose to develop. In addition, properties surrounding the Project Area could remain in agriculture. This has the potential to place incompatible land uses in proximity to one another; however, because surrounding agricultural uses are primarily grazing, the potential for significant conflicts would be minimal. Implementation of the goals, objectives, and policies found in the Community Plan Update and Specific Plan would result in a **less-than-significant impact** related to potential land use conflicts between agricultural and non-agricultural uses.

### **Friant Community Plan Update and Friant Ranch Specific Plan Policy Requirements**

The Friant Ranch EIR does not list any proposed policies of the Friant Community Plan Update or the Friant Ranch Specific Plan that are applicable to land use and planning.

### **Mitigation Measures**

The Friant Ranch EIR does not identify any mitigation measures that are applicable to land use and planning.

## **CONSISTENCY EVALUATION**

- a) The Friant Ranch EIR determined that the project would not physically divide the existing Friant community because proposed buildout of the existing Friant Community Plan Area and the Friant Ranch Specific Plan development would commence from the areas abutting the existing community of Friant. This impact was concluded to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to the physical division of an existing community.
- b) The Friant Ranch EIR determined that the proposed amendments to the Fresno County General Plan and Zoning Division would ensure the project's compliance with the Fresno County's General Plan, Fresno County's Zoning Ordinance, and regional plans and other documents including the San Joaquin River Parkway Master Plan. This impact was concluded to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to conflicts with applicable land use plans, policies, and regulations.



## XII. MINERAL RESOURCES

Environmental Issue Would the Project:	Where were impacts analyzed previously?	Do proposed changes/new circumstances/ new information result in new significant/ substantially more severe impacts?	Is there substantial new information requiring new analysis or verification?	Do mitigation measures from prior documents resolve significant impacts?
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	DEIR Impact 3.6.5	No	No	N/A
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	DEIR Impact 3.6.5	No	No	N/A

### Summary of EIR Analysis

This topic is addressed in Section 3.6, “Geology, Soils, and Mineral Resources,” of the Friant Ranch Draft EIR. The regulatory and physical settings for mineral resources are described in Sections 3.6.1 and 3.6.2, respectively, of the Draft EIR.

### IMPACT ANALYSIS

Impacts from development of the Friant Ranch Project are evaluated in the Friant Ranch Draft EIR (pages 3-176 and 3-177) and are summarized below.

- ▶ **Impact 3.6.5: Loss of Mineral Resources or Resource Recovery Site.** The Project Area includes two mineral resource zones (MRZ), including land designated MRZ-1 and MRZ-2. These two MRZs have been mined and depleted of all accessible sand and gravel mineral reserves by mining development since the last MRZ designation change in 1999. The project would be consistent with General Plan policies related to the preservation of mineral resources to ensure that the project would not result in the loss of a known mineral or resource recovery site. As designed, the project (Alternative 3) would not result in the loss of mineral resources or resource recovery sites, and there would be **no impact**.

### Friant Community Plan Update and Friant Ranch Specific Plan Policy Requirements

The Friant Ranch EIR does not list any proposed policies of the Friant Community Plan Update or the Friant Ranch Specific Plan that are applicable to mineral resources.

### Mitigation Measures

The Friant Ranch EIR does not identify any mitigation measures that are applicable to mineral resources.

### CONSISTENCY EVALUATION

- a) As described in the Friant Ranch EIR, the Project Area includes land designated MRZ-1 and MRZ-2; however, the two MRZs have been mined and depleted of all accessible sand and gravel mineral reserves by mining development since the last MRZ designation change in 1999. The project would be consistent with General Plan policies related to the preservation of mineral resources. Accordingly, the Friant Ranch EIR concluded that there would be no impact. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to the loss of mineral resource or recovery sites.

### XIII. NOISE

Environmental Issue Would the Project:	Where were impacts analyzed previously?	Do proposed changes/new circumstances/ new information result in new significant/ substantially more severe impacts?	Is there substantial new information requiring new analysis or verification?	Do mitigation measures from prior documents resolve significant impacts?
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?	DEIR Impacts 3.10.1 and 3.10.2	No	No	Yes
b) Generation of excessive groundborne vibration or groundborne noise levels?	DEIR Impacts 3.10.1 and 3.10.2	No	No	Yes
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	DEIR Impact 3.10.3	No	No	N/A

### Summary of EIR Analysis

This topic is addressed in Section 3.10, “Noise,” of the Friant Ranch Draft EIR. The regulatory and physical settings for noise are described in Sections 3.10.1 and 3.10.2, respectively, of the Draft EIR.

### IMPACT ANALYSIS

Impacts from development of the Friant Ranch Project are evaluated in the Friant Ranch Draft EIR (pages 3-244 through 3-250) and are summarized below.

- ▶ **Impact 3.10.1: Exposure to Excessive Noise Levels or Vibration.** The project would not produce excessive groundborne vibration or groundborne noise levels. No pile driving or surface blasting is proposed. Additionally, the proposed land uses immediately adjacent to Friant Road include commercial, parkways, and open spaces, which are not considered to be noise-sensitive and would buffer the proposed noise-sensitive uses, which are mostly single-family residences. The project would comply with the Fresno County General Plan policies to reduce the traffic noise levels and may include design elements to minimize noise (policies HS-G.1 and HS-G.5); new roadways would be built to the normally acceptable noise levels in the Land Use Compatibility for Community Noise Environments table (policies HS-G.2 and HS-G.7); and the County would evaluate future development projects in the existing Friant Community Plan Area for compatibility with the general plan (Policy HS-G.8). However, noise impacts associated with project traffic would be potentially significant even with consistency with the general plan. Implementation of mitigation measures identified below would result in a **less-than-significant impact after mitigation** on the remaining Friant Community Plan Area (outside of Friant Ranch Specific Plan and Depot Parcel).

The only effective means to mitigate the Specific Plan’s sound impacts to existing residences along Friant Road and Willow Avenue would be to construct sound walls/barriers, install sound insulation within existing structures,

or demolish/relocate existing structures along these roadways. However, sound walls/barriers would necessitate relocation or demolition of existing structures. There are no feasible measures to mitigate off-site traffic noise impacts to existing homes along Friant Road and Willow Avenue associated with the Friant Ranch Specific Plan Area. This impact would remain **significant and unavoidable**.

- ▶ **Impact 3.10.2: Construction Noise.** Noise sensitive uses located adjacent to sites where new development would take place could be exposed to temporary, intermittent noise levels of 70 to 90 dBA that occur as a result of typical construction activities. Implementation of mitigation measures identified below would reduce noise impacts from construction to a **less-than-significant level after mitigation**.
- ▶ **Impact 3.10.3: Excessive Noise From a Public Airport or Private Airstrip.** No public airports or private airstrips are located in the project vicinity or within two miles of the Project Area. Therefore, the project would not expose people residing or working in the Project Area to excessive noise levels associated with a public airport or private airstrip; **no impact** would occur.

### Friant Community Plan Update and Friant Ranch Specific Plan Policy Requirements

The Friant Ranch EIR does not list any proposed policies of the Friant Community Plan Update or the Friant Ranch Specific Plan that are applicable to noise.

### Mitigation Measures

The following mitigation measures were identified in the Friant Ranch EIR:

- ▶ **Mitigation Measure 3.10.1a:**
  1. Prior to issuance of any grading permit for new public and private development proposals within the Friant Community Plan Area, the County shall review the proposal to determine conformance with the policies of the Fresno County General Plan and the Friant Community Plan.
  2. Where the development of any future project within the Friant Community Plan Area (other than the Friant Ranch Specific Plan Area and Depot Parcel) may result in noise sensitive land uses being exposed to existing or projected future noise levels exceeding the levels specified by the policies of the General Plan and Community Plan, the County shall require that an acoustical analysis be submitted as part of the entitlement application that designates that adequate noise mitigation is included in the project design to comply with County standards.
  3. Prior to issuance of a grading permit for proposed development within the Friant Community Plan Area (other than the Friant Ranch Specific Plan Area and Depot Parcel), site-specific acoustical analyses shall be conducted to determine setbacks and any other feasible mitigation measures (e.g. berms, site design, location of structures, noise walls/barriers) required to reduce traffic noise to levels that meet County design standards and comply with the Fresno County Noise Ordinance.
- ▶ **Mitigation Measure 3.10.2a:** Construction projects and any other noise generators shall be regulated by the standards identified in Chapter 8.40 of the Fresno County Ordinance Code.
- ▶ **Mitigation Measure 3.10.2b:** Effective mufflers shall be fitted to gas- and diesel-powered equipment to reduce noise levels as much as practicable.
- ▶ **Mitigation Measure 3.10.2c:** All construction activities shall be limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Friday, and 7:00 a.m. to 5:00 p.m., Saturday and Sunday.

Implementation of the mitigation measures would reduce noise impacts, but not to a less-than-significant level. Therefore, as discussed in the Friant Ranch EIR, off-site traffic noise would remain a significant and unavoidable impact.

## CONSISTENCY EVALUATION

- a-b)** As analyzed in the Friant Ranch EIR, the proposed land uses immediately adjacent to Friant Road (commercial, parkways, and open spaces) are not considered to be noise-sensitive and the project would not produce excessive groundborne vibration or groundborne noise levels. The project would comply with the Fresno County General Plan policies to reduce the traffic noise levels and mitigation is identified that requires the new development within the Friant Community Plan Area to submit an acoustical analysis that incorporates appropriate noise mitigation into the project design and determines the appropriate setbacks to reduce traffic noise levels that meet County design standards and comply with the Fresno County Noise Ordinance. This impact was concluded to be less than significant after mitigation on the remaining Friant Community Plan Area (outside of Friant Ranch Specific Plan and Depot Parcel) in the Friant Ranch EIR. Because there are no feasible measures to mitigate off-site traffic noise impacts to existing homes along Friant Road and Willow Avenue associated with the Friant Ranch Specific Plan Area, this impact was concluded to be significant and unavoidable in the Friant Ranch EIR.

As described in the introduction to this checklist, no changes to the project description have occurred since the project was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Mitigation Measure 3.10.1a, which would continue to apply to the project, would reduce traffic noise in the Friant Community Plan Area (outside of Friant Ranch Specific Plan and Depot Parcel); however, off-site traffic noise impacts to existing homes along Friant Road and Willow Avenue would remain significant and unavoidable, as identified in the Friant Ranch EIR. Therefore, no additional environmental review is needed for the project related to exposure to excessive noise levels or vibration.

Noise sensitive uses close to where the new development is proposed could be exposed to temporary, intermittent noise levels. Implementation of mitigation would require construction to comply with the requirements of Chapter 8.40 of the Fresno County Ordinance Code, which would prohibit construction from occurring before 6 a.m. or after 9 p.m. on any day except Saturday or Sunday, or before 7 a.m. or after 5 p.m. on Saturday and Sunday. This impact was concluded to be less than significant after mitigation in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Mitigation Measures 3.10.2a through 3.10.2c, which would continue to apply to the project, would reduce construction noise. Therefore, no additional environmental review is needed for the project related to construction noise.

- c)** As analyzed in the Friant Ranch EIR, no public or private airstrips or airports are within two miles of the Project Area. Therefore, the project would not expose people residing or working in the Project Area to excessive noise levels associated with a public airport or private airstrip. This impact was concluded to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to excessive noise from a public airport or private airstrip.

## XIV. POPULATION AND HOUSING

Environmental Issue Would the Project:	Where were impacts analyzed previously?	Do proposed changes/ new circumstances/ new information result in new significant/ substantially more severe impacts?	Is there substantial new information requiring new analysis or verification?	Do mitigation measures from prior documents resolve significant impacts?
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	DEIR Impact 3.11.1	No	No	N/A
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	DEIR Impact 3.11.2	No	No	N/A

### Summary of EIR Analysis

This topic is addressed in Section 3.11, "Population and Housing," of the Friant Ranch Draft EIR. The regulatory and physical settings for population and housing are described in Sections 3.11.1 and 3.11.2, respectively, of the Draft EIR.

### IMPACT ANALYSIS

Impacts from development of the Friant Ranch Project are evaluated in the Friant Ranch Draft EIR (pages 3-254 through 3-257) and are summarized below.

- ▶ **Impact 3.11.1: Induce Substantial Population Growth.** The originally proposed project would have resulted in the construction of 2,996 new residential units within the Friant Ranch Specific Plan Area and development of vacant properties in the Existing Friant Community Plan Area. Alternative 3, however, only proposed a total of 2,500 residential units. Under either scenario, the anticipated amount of residential development would induce substantial population and housing growth. The project would considerably accelerate projected population growth within the Friant Community Plan Area, although not at a rate that would be expected to result in any significant adverse impact related to unplanned growth. The project is consistent with, and promotes, all relevant General Plan land use planning policies and would not have any adverse impact relating to unplanned growth. This impact would be **less than significant**.
- ▶ **Impact 3.11.2: Housing and Population Displacement.** Implementation of the project, including development of vacant parcels in the Friant Community Plan Area and potential development/redevelopment of areas within the Friant Redevelopment Area, would not displace substantial numbers of existing housing or people. A majority of development under the project would occur in the Friant Ranch Specific Plan Area and include active adult single family homes, multi-family and live/work homes. Therefore, **no impact** would occur related to housing and population displacement.

### Friant Community Plan Update and Friant Ranch Specific Plan Policy Requirements

The Friant Ranch EIR does not list any proposed policies of the Friant Community Plan Update or the Friant Ranch Specific Plan that are applicable to population and housing.

### Mitigation Measures

The Friant Ranch EIR does not list any proposed mitigation measures that are applicable to population and housing.

## CONSISTENCY EVALUATION

- a) As analyzed in the Friant Ranch EIR, both the originally proposed project and Alternative 3 would result in the construction of new houses and development of vacant properties, resulting in substantial population growth within the Friant Community Plan Area. The originally proposed project and Alternative 3 would considerably accelerate projected population growth within the Friant Community Plan Area, although not at a rate that would be expected to result in any significant adverse impact related to unplanned growth. The originally proposed project and Alternative 3 are consistent with, and promote, all relevant General Plan land use planning policies and would not have any adverse impact relating to unplanned growth. This impact was determined to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to population growth.
- b) The Friant Ranch EIR determined that the project would not displace substantial numbers of existing housing or people given the proposed development of vacant parcels in the Friant Community Plan Area and potential development/redevelopment of areas within the Friant Redevelopment Area. The project was determined to have no impact on housing and population displacement. As described in the introduction to this checklist, no changes to the project description have occurred since the project was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to housing and population displacement.

## XV. PUBLIC SERVICES

Environmental Issue Would the project:	Where were impacts analyzed previously?	Do proposed changes/new circumstances/ new information result in new significant/ substantially more severe impacts?	Is there substantial new information requiring new analysis or verification?	Do mitigation measures from prior documents resolve significant impacts?
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	DEIR Impact 3.12.1	No	No	Yes
Police protection?	DEIR Impact 3.12.2	No	No	Yes
Schools?	DEIR Impact 3.12.3	No	No	N/A
Parks?	DEIR Impact 3.12.4	No	No	N/A
Other public facilities?	Not Evaluated	No	No	N/A

### Summary of EIR Analysis

This topic is addressed in Section 3.12, “Public Services and Recreation,” of the Friant Ranch Draft EIR. The regulatory and physical settings for public services are described in Sections 3.12.1 and 3.12.2, respectively, of the Draft EIR.

### IMPACT ANALYSIS

Impacts from development of the Friant Ranch Project are evaluated in the Friant Ranch Draft EIR (pages 3-264 through 3-270) and are summarized below.

- ▶ **Impact 3.12.1: Increased Demand for Fire Protection Services and Personnel.** At build-out, the originally proposed project would have developed 2,996 housing units and 250,000 square feet of retail, office, medical, social gathering, light rail, and mixed-use space, thereby increasing the demand for fire protection services. Alternative 3, in contrast, proposes only 2,500 housing units. The Draft Friant Community Plan Update includes Goal 6 along with Policies 6.1 and 6.2 which require developers to ensure that adequate fire protection services are provided for new development and the County to ensure that adequate fire protection is provided to existing Friant Community residents. The Draft Friant Ranch Specific Plan would be reviewed to guarantee that fair share costs adequately fund additional facilities or personnel needed to maintain the fire emergency response time and Insurance Services Office (ISO) ratings established in the Fresno County General Plan. Mitigation Measure 3.12.1, identified below, would reduce impacts on fire protection services and personnel by requiring additional funding to establish a CFD; the additional funding would ensure that acceptable fire protection services and response times for fire protection are maintained. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.12.2: Increased Demand for Law Enforcement Services.** Implementation of Alternative 3 project would increase the demand for law enforcement services due to the development of 2,500 housing units and 250,000 square feet of retail, office, medical, social gathering, light rail, and mixed-use space. Compliance with Goal 6 and

Policies 6.1 and 6.12 of the Draft Friant Community Plan Update would require the developer to ensure that adequate police protection services are provided for new development and the County to ensure that adequate police protection is provided to existing Friant Community residents. Mitigation Measure 3.12.2, identified below, would reduce impacts on police protection services by requiring additional funding to establish a CFD; the additional funding would ensure that acceptable service ratios and response times for law enforcement are maintained. This impact would be **less than significant after mitigation**.

- ▶ **Impact 3.12.3: Increased Demand on Public Schools.** The originally proposed project would have added 107 students in the Friant Community Plan Area given that the proposed housing is designed for active adults (age 55+). The 230 non-age qualifying multifamily homes in Friant Ranch could result in an additional 152 students at build-out (for a total of 259 students). With Alternative 3, which proposes only 180 non-age qualifying units, these student generation numbers would be somewhat diminished. Consistent with policies PF-I.3, PF-I.5, and PF-I.7, the Friant Ranch Specific Plan Area does not include any school sites because it was determined that an age-restricted community would not generate enough students to require a school site in the Specific Plan Area. Additionally, development would be subject to the Clovis Unified School District [CUSD] school fees in accordance with Government Code 65995.1. Adherence to the Fresno County General Plan policies, and the payment of CUSD school impact fees would ensure that adequate school facilities and funding are available and that the impact would be **less than significant**.
- ▶ **Impact 3.12.4: Increased Demand on Parks and Recreation.** Implementation of the originally proposed project would have increased the demand on parks and recreation due to the development of 2,996 housing units and 250,000 square feet of retail, office, medical, social gathering, light rail, and mixed-use space. Alternative 3, in contrast, proposes only 2,500 housing units. Alternative 3 would develop 16.1 acres into two active adult recreation centers; 460 acres into undisturbed open space; and 22.4 acres of revegetated open space slopes. (Draft EIR, Table 4.4, p. 4-27.) The project would comply with Policy OS-H.2 of the Fresno County General Plan, which requires a ratio of 5 to 8 acres of County-owned improved parkland per 1,000 residents. In addition to the park and recreation land that would be developed by the project are the following existing parks that would be accessible to residents: Lost Lake Park, the adjacent Millerton Lake State Recreation Area, and the nearby San Joaquin River Parkway. The ratio of parkland to existing and projected future residents associated with development of the project would exceed the County's goal of 5 to 8 acres per one thousand residents. Therefore, the project would have a **less-than-significant impact** related to parks and recreation.

### Friant Community Plan Update and Friant Ranch Specific Plan Policy Requirements

The Friant Ranch EIR does not list any proposed policies of the Friant Ranch Specific Plan that are applicable to public services. The Friant Community Plan Update proposes the following policies, as identified in the Friant Ranch EIR, to ensure adequate fire protection is maintained in the project area:

**GOAL 6:** Support law enforcement, emergency response, and fire protection that respond to the needs of Friant.

- ▶ **Policy 6.1:** Ensure that new development does not create a burden on adequate levels of law enforcement services, emergency response services, and fire protection services.
- ▶ **Policy 6.2:** The County shall require that adequate police and fire protection be provided to all existing Friant Community residents.

### Mitigation Measures

The following mitigation measures were identified in the Friant Ranch EIR:

- ▶ **Mitigation Measure 3.12.1:** Prior to issuance of a building permit for construction within the Friant Ranch Specific Plan Area, a CFD will be established to provide the funding necessary to maintain adequate staffing and facilities to serve the Friant Ranch Specific Plan Area consistent with the standards set forth in the Fresno County General Plan policy PF-H.2, PF-H.5 and PFH.8. The CFD shall be structured to provide initial capital contribution through a per-unit fee and thereafter impose a special tax assessment within the CFD boundaries to fund ongoing operations and maintenance.



- ▶ **Mitigation Measure 3.12.2:** Prior to issuance of a building permit for construction within the Friant Ranch Specific Plan Area, a CFD will be established to provide the funding necessary to maintain adequate staffing and facilities to serve the Friant Ranch Specific Plan Area consistent with the standards set forth in the Fresno County General Plan policy PF-G.2 and PF-G.4. The CFD shall be structured to provide initial capital contribution through a per-unit fee and thereafter impose a special tax assessment within the CFD boundaries to fund ongoing operations and maintenance.

The Friant Ranch EIR concluded that implementation of these mitigation measures would reduce the impact on public services to a less-than-significant level.

## CONSISTENCY EVALUATION

- a) As analyzed in the Friant Ranch EIR, the project would increase the demand for fire protection services through the development of new housing and retail, office, medical, social gathering, light rail, and mixed-use space. Compliance with Goal 6 along with Policies 6.1 and 6.2 of the Draft Friant Community Plan Update would ensure that adequate fire protection services are provided for new development. Additionally, Mitigation Measure 3.12.1 would require the development of a CFD to provide the funding necessary to maintain adequate fire protection staffing and facilities to serve the Friant Ranch Specific Plan Area. Compliance with the Draft Friant Community Plan Update and Mitigation Measure 3.12.1 would ensure that adequate fire protection services are maintained, and the impact was concluded to be less than significant with mitigation in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Mitigation Measure 3.12.1, which would continue to apply to the Project, would ensure that adequate fire protection services are maintained. Therefore, no additional environmental review is needed for the project related to fire protection services.
- b) The Friant Ranch EIR determined that the project would increase the demand for police protection services. Compliance with Goal 6 along with Policies 6.1 and 6.2 of the Draft Friant Community Plan Update, which apply to police protection services along with fire protection service, would help ensure that adequate police protection services are provided for new development. Additionally, Mitigation Measure 3.12.2 would require the development of a CFD to provide the funding necessary to maintain adequate police protection staffing and facilities to serve the Friant Ranch Specific Plan Area. Compliance with the Draft Friant Community Plan Update and Mitigation Measure 3.12.2 would ensure that adequate police protection services are maintained, and the impact was concluded to be less than significant with mitigation in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Mitigation Measure 3.12.2, which would continue to apply to the Project, would ensure that adequate police protection services are maintained. Therefore, no additional environmental review is needed for the project related to police protection services.
- c) The Friant Ranch EIR determined that the originally proposed project would generate up to 259 students, and that adherence to the Fresno County General Plan policies and the payment of CUSD school impact fees would ensure that adequate school facilities and funding are available. The impact on school facilities was concluded to be less than significant in the Friant Ranch EIR. The same is true of Alternative 3, which would generate fewer students. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to public schools.

- d)** The Friant Ranch EIR determined that while implementation of the project would increase the demand on parks, the proposed recreational facilities and open space associated with the project along with the existing parks accessible to residents would maintain the County's goal of 5 to 8 acres per one thousand residents. The impact on parks was concluded to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to parks.
- e)** The Friant Ranch EIR did not analyze the Project's potential to impact other public facilities. However, as described above, the project would increase the demand for fire and police protection services, public schools, and parks and recreation facilities. These impacts were concluded to be less than significant with mitigation in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Mitigation Measures 3.12.1 and 3.12.2, which would continue to apply to the Project, would ensure that adequate fire and police protection services are maintained. Therefore, no additional environmental review is needed for the project related to other public facilities.

## XVI. RECREATION

Environmental Issue Would the Project	Where were impacts analyzed previously?	Do proposed changes/ new circumstances/ new information result in new significant/ substantially more severe impacts?	Is there substantial new information requiring new analysis or verification?	Do mitigation measures from prior documents resolve significant impacts?
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	DEIR Impact 3.12.4	No	No	N/A
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	Not Evaluated	No	No	N/A

### Summary of EIR Analysis

This topic is addressed in Section 3.12, “Public Services and Recreation,” of the Friant Ranch Draft EIR. The regulatory and physical settings for recreation are described in Sections 3.12.1 and 3.12.2, respectively, of the Draft EIR.

### IMPACT ANALYSIS

Impacts from development of the Friant Ranch Project are evaluated in the Friant Ranch Draft EIR (pages 3-264 through 3-370 and are summarized below.

- Impact 3.12.4: Increased Demand on Parks and Recreation.** While implementation of the project (Alternative 3) would increase the demand on parks and recreation, the project would also develop 16.1 acres into two active adult recreation centers; 460 acres into undisturbed open space; and 22.4 acres devoted to revegetated open space slopes. (Draft EIR, Table 4.4, p. 4-27.) The following existing recreational facilities are also available for use in the vicinity of the Project Area: Lost Lake Park, the adjacent Millerton Lake State Recreation Area, and the nearby San Joaquin River Parkway. The ratio of 5 to 8 acres of County-owned improved parkland per 1,000 residents, required per Policy OS-H.2 of the Fresno County General Plan, would be maintained with project implementation. Given that the project would develop additional recreational facilities and the Fresno County General Plan required ratio of 5 to 8 acres of parkland per 1,000 residents would be maintained, the project would not result in the accelerated physical deterioration of any one recreational facility. The project would have a **less-than-significant** impact related to parks.

### Friant Community Plan Update and Friant Ranch Specific Plan Policy Requirements

The Friant Ranch EIR does not list any proposed policies of the Friant Community Plan Update or the Friant Ranch Specific Plan that are applicable to recreation.

### Mitigation Measures

The Friant Ranch EIR does not identify any proposed mitigation measures that are applicable to recreation.

### CONSISTENCY EVALUATION

- a) The Friant Ranch EIR determined that the project’s proposed recreational facilities and parks along with the existing parks and recreational facilities in the vicinity of the Project Area would ensure that the Fresno County General Plan’s required ratio of 5 to 8 acres of parkland per 1,000 residents would be maintained.

This impact was concluded to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to potential impacts from the physical deterioration of existing recreational facilities.

- b) The Friant Ranch EIR did not analyze the project's potential of resulting in an adverse physical effect on the environment from the construction or expansion of recreational facilities. Several recreational facilities are proposed including two active adult recreation centers, undisturbed open space, and revegetated open space slopes. Construction and operation of parks and recreation facilities could result in physical impacts on the environment, including construction noise, generation of fugitive dust, and increased traffic. The physical impacts on the environment associated with providing recreation facilities in the project area are addressed throughout the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to potential impacts of proposed parks on the environment.

## XVII. TRANSPORTATION AND TRAFFIC

Senate Bill 743, passed in 2013, required the Governor’s Office of Planning and Research to develop new CEQA Guidelines that address traffic metrics under CEQA. As stated in the legislation (and Section 21099[b][2] of CEQA), upon adoption of the new CEQA guidelines, “automobile delay, as described solely by level of service (LOS) or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the CEQA guidelines, if any.”

The Office of Administrative Law approved the updated CEQA Guidelines on December 28, 2018, and the changes are reflected in new CEQA Guidelines (Section 15064.3). State CEQA Guidelines Section 15064.3 was added December 28, 2018, to address the determination of significance for transportation impacts. Pursuant to the new CEQA Guidelines, vehicle miles traveled (VMT) will replace congestion as the metric for determining transportation impacts. The CEQA Guidelines state that “lead agencies may elect to be governed by these provisions of this section immediately. Beginning July 1, 2020, the provisions of this section shall apply statewide.” As of December 28, 2018, “automobile delay, as described solely by level of service [LOS] or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any.” (Pub. Resources Code, § 21099, subd. (b)(2); see also *Citizens for Positive Growth & Preservation v. City of Sacramento* (2019) 43 Cal.App.5th 609, 625-626.)

The Friant Ranch EIR was certified in 2011. The Draft EIR had been issued in October 2009. As described above, the updated CEQA Guidelines were not adopted until December 28, 2018, subsequent to certification of the Friant Ranch EIR in 2011. Section 15007 of the CEQA Guidelines addresses amendments to the CEQA Guidelines and states: “If a document meets the content requirements in effect when the document is sent out for public review, the document shall not need to be revised to conform to any new content requirements in Guideline amendments taking effect before the document is finally approved.” (CEQA Guidelines Section 15007[c]) Stated another way, because the EIR was circulated for public review (and completed) long before this change in the CEQA Guidelines, the new provisions regarding VMT do not apply to this Project. The October 2009 Draft EIR was subject to the CEQA Guidelines requirements in place at that time, and nothing in the California Supreme Court’s decision in *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502 (*Friant Ranch I*) called into question the adequacy of the transportation impact analysis in that document. Nor did the Court of Appeal indicate any need to revisit any EIR sections that had either been upheld or had gone unchallenged in *Sierra Club v. County of Fresno* (2020) 57 Cal.App.5th 979 (*Friant Ranch II*). Indeed, as noted near the beginning of this checklist, the court stated in that decision that “the sufficiency and CEQA compliance of most components of the EIR have been litigated and resolved. Based on the principle set forth in *Lone Valley* [i.e., *Lone Valley Land, Air, & Water Defense Alliance, LLC v. County of Amador* (2019) 33 Cal.App.5th 165], new challenges to the parts of the EIR that have been upheld are not allowed in proceedings on remand.” (57 Cal.App.5th at p. 990.) Importantly, the transportation analysis in the certified 2011 Final EIR was attacked by the City of Fresno in Case No. 11CECG00706, one of the three lawsuits attacking the Final EIR, and this issue was ultimately resolved in the County’s favor. For these reasons, the shift from automobile delay to VMT as the primary metric used to analyze transportation impacts under CEQA, as dictated by CEQA Guidelines Section 15064.3, does not constitute either “significant new information” as defined in CEQA Guidelines section 15088.5 (recirculation) or “new information” as defined in CEQA Guidelines Section 15162 (subsequent review). And even if might constitute “significant new information” or “new information” under those definitions, CEQA Guidelines Section 15007, subdivision (c), specifically directs that the document “shall not need to be revised” to reflect this information.

Environmental Issue	Where were impacts analyzed previously?	Do proposed changes/new circumstances/ new information result in new significant/ substantially more severe impacts?	Is there substantial new information requiring new analysis or verification?	Do mitigation measures from prior documents resolve significant impacts?
Would the Project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	DEIR Impact 3.13-12	No	No	N/A

Environmental Issue Would the Project:	Where were impacts analyzed previously?	Do proposed changes/new circumstances/ new information result in new significant/ substantially more severe impacts?	Is there substantial new information requiring new analysis or verification?	Do mitigation measures from prior documents resolve significant impacts?
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Not evaluated	No	No	N/A
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	DEIR Impact 3.13-9	No	No	N/A
d) Result in inadequate emergency access?	DEIR Impact 3.13-10	No	No	N/A

## Summary of EIR Analysis

This topic is addressed in Section 3.13, “Transportation/Traffic,” of the Friant Ranch Draft EIR. The regulatory and physical settings are described in Sections 3.13.1 and 3.13.2, respectively, of the Draft EIR.

## IMPACT ANALYSIS

Impacts from development of the Friant Ranch Project are evaluated in the Friant Ranch Draft EIR (pages 3-288 through 3-331). Notably, all of these impacts relate to “level of service,” which is no longer a permissible factor in assessing the significance of traffic impacts under CEQA. (Pub. Resources Code, § 21099, subd. (b)(2).) Even so, the LOS-related impacts are summarized below.

### Impact 3.13: Significant Increase in Traffic Levels and Exceedance of Traffic LOS Thresholds.

- ▶ **Impact 3.13-1 (TR-20):** The project would cause the level of service to fall below the minimum acceptable level of service at the intersection of Friant Road and the Site Access north of Lost Lake Road. However, mitigation measures are identified that require installation of traffic signals when they are warranted. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.13-2 (TR-6):** The project would cause the level of service to fall below the minimum acceptable level of service at the intersection of Friant Road and Lost Lake Road. However, mitigation measures are identified that require installation of traffic signals when they are warranted. This impact would be **less than significant after mitigation**.

### Impact 3.13-3: The Project will contribute to the following deficiencies to Caltrans intersections:

- ▶ **Impact 3.13-3a (TR-1):** The project would exacerbate anticipated delays and a cumulative LOS that will fall below the minimum acceptable LOS in the 2030 condition without the project at the intersection of SR 41 and Road 145 under the 2030 cumulative condition without the project. The project’s contribution to the anticipated cumulative condition would be cumulatively considerable. Mitigation is identified that requires the applicant to provide funding for improvements that, when completed, would enable Caltrans intersections to operate at an acceptable LOS. However, because Caltrans is responsible for the timing and nature of improvements, the County cannot ensure that the improvements will be fully funded sufficient to facilitate construction prior to the Project’s contribution to the impact. Therefore, this impact would be **significant and unavoidable**.
- ▶ **Impact 3.13-3b (TR-2):** The project would exacerbate existing delays and an existing LOS already below the minimum acceptable LOS at the intersection of SR 41 and Avenue 12, and is expected to exacerbate a cumulative LOS that will fall below the acceptable LOS in the anticipated 2030 cumulative condition without the project. The Project’s contribution to the anticipated cumulative condition would be cumulatively considerable. Mitigation is

identified that requires the applicant to provide funding for improvements that, when completed, would enable Caltrans intersections to operate at an acceptable LOS. However, because Caltrans is responsible for the timing and nature of improvements, the County cannot ensure that the improvements will be fully funded sufficient to facilitate construction prior to the project's contribution to the impact. Therefore, this impact would be **significant and unavoidable**.

- ▶ **Impact 3.13-3c (TR-3):** The project would exacerbate an existing LOS already below the minimum acceptable LOS at the intersection of SR 41 and Avenue 15, and is expected to exacerbate a cumulative LOS that will fall below the acceptable LOS in the anticipated 2030 cumulative condition without the project. The project's contribution to the anticipated cumulative condition would be cumulatively considerable. Mitigation is identified that requires the applicant to provide funding for improvements that, when completed, would enable Caltrans intersections to operate at an acceptable LOS. However, because Caltrans is responsible for the timing and nature of improvements, the County cannot ensure that the improvements will be fully funded sufficient to facilitate construction prior to the project's contribution to the impact. Therefore, this impact would be **significant and unavoidable**.
- ▶ **Impact 3.13-3d (TR-11):** The project would exacerbate a cumulative LOS anticipated to fall below the minimum acceptable LOS in the 2030 cumulative condition without the project at the intersection of Friant Road and the SR 41 northbound off ramp. The project's contribution to the anticipated cumulative condition would be cumulatively considerable. Mitigation is identified that requires the applicant to provide funding for improvements that, when completed, would enable Caltrans intersections to operate at an acceptable LOS. However, because Caltrans is responsible for the timing and nature of improvements, the County cannot ensure that the improvements will be fully funded sufficient to facilitate construction prior to the project's contribution to the impact. Therefore, this impact would be **significant and unavoidable**.
- ▶ **Impact 3.13-3e (TR-12):** The project would exacerbate anticipated delays and unacceptable LOS in the cumulative 2030 No project condition at the intersection of Friant Road and SR 41 southbound off ramp. The project's contribution to the anticipated cumulative condition would be cumulatively considerable. The project would have an individually and cumulatively significant impact on this intersection. Mitigation is identified that requires the applicant to provide funding for improvements that, when completed, would enable Caltrans intersections to operate at an acceptable LOS. However, because Caltrans is responsible for the timing and nature of improvements, the County cannot ensure that the improvements will be fully funded sufficient to facilitate construction prior to the project's contribution to the impact. Therefore, this impact would be **significant and unavoidable**.

**Impact 3.13-4: The Project will contribute to the following deficiencies to Madera County intersections and roadways:**

- ▶ **Impact 3.13-4a (TR-4):** The project would exacerbate a cumulative LOS that will fall below the minimum acceptable LOS in the anticipated 2030 No Project condition at the intersection of Road 145 and Road 206. The Project's contribution to the anticipated cumulative condition would be cumulatively considerable. Mitigation is identified that requires the applicant to provide funding for improvements that, when completed, would enable roadways and intersections within Madera County to operate at an acceptable LOS. However, because Madera County is responsible for the timing and nature of improvements, Fresno County cannot ensure that the improvements will be fully funded sufficient to facilitate construction prior to the Project's contribution to the impact. Therefore, this impact would be **significant and unavoidable**.
- ▶ **Impact 3.13.4b (TR-34):** The project would exacerbate a cumulative LOS that will fall below the minimum acceptable LOS in the anticipated 2030 No Project condition on the Madera County segment of Road 206 west of Friant Road. The Project's contribution to the anticipated cumulative condition would be cumulatively considerable. Mitigation is identified that requires the applicant to provide funding for improvements that, when completed, would enable roadways and intersections within Madera County to operate at an acceptable LOS. However, because Madera County is responsible for the timing and nature of improvements, Fresno County cannot ensure that the improvements will be fully funded sufficient to facilitate construction prior to the Project's contribution to the impact. Therefore, this impact would be **significant and unavoidable**.

**Impact 3.13-5: The Project will contribute to the following deficiencies to Fresno County intersections and roadways:**

- ▶ **Impact 3.13-5a (TR-5):** The project would contribute to an unacceptable LOS under the existing plus Project condition and exacerbate a cumulative LOS that will fall below the minimum acceptable LOS at the intersection of Friant Road and North Fork Road (Road 206) under the 2030 no Project condition. The project's contribution to the anticipated cumulative condition would be cumulatively considerable. This impact would be individually and cumulatively **significant**.
- ▶ **Impact 3.13-5b (TR-6):** The project would exacerbate a cumulative LOS that will fall below the minimum acceptable LOS at the intersection of Friant Road and Lost Lake Road under the 2030 no Project condition. The Project's contribution to the anticipated cumulative condition would be cumulatively considerable. However, mitigation measure 3.13-1a requires the applicant to construct the requisite improvement. Construction of the intersection will achieve a LOS B with the cumulative condition plus Project and thus reduce the Project's contribution to less than cumulatively considerable. This impact would be **less than significant**.
- ▶ **Impact 3.13-5c (TR-7):** The Project would contribute to an unacceptable LOS under the existing plus Project condition and exacerbate a cumulative LOS that will fall below the minimum acceptable LOS at the intersection of Friant Road and Willow Avenue under the 2030 no Project condition. The Project's contribution to the anticipated cumulative condition would be cumulatively considerable. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.13-5d (TR-13):** The project would exacerbate a cumulative LOS that will fall below the minimum acceptable LOS at the intersection of Millerton Road and Winchell Cove Road under the 2030 no Project condition. The Project's contribution to the anticipated cumulative condition would be cumulatively considerable. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.13-5e (TR-14):** The project will exacerbate a cumulative LOS that will fall below the minimum acceptable LOS at the intersection of Millerton Road and Brighton Crest Drive under the 2030 no Project condition. The Project's contribution to the anticipated cumulative condition would be cumulatively considerable. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.13-5f (TR-15):** The project would exacerbate a cumulative LOS that will fall below the minimum acceptable LOS at the intersection of Millerton Road and Sky Harbour Road under the 2030 no Project condition. The Project's contribution to the anticipated cumulative condition would be cumulatively considerable. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.13-5g (TR-16):** The project would exacerbate a cumulative LOS that will fall below the minimum acceptable LOS at the intersection of Millerton Road and Table Mountain Road under the 2030 no Project condition. The Project's contribution to the anticipated cumulative condition would be cumulatively considerable. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.13-5h (TR-17):** The project would exacerbate a cumulative LOS that will fall below the minimum acceptable LOS at the intersection of Millerton Road and Auberry Road under the 2030 no Project condition. The Project's contribution to the anticipated cumulative condition would be cumulatively considerable. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.13-5i (TR-18):** The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable LOS at the intersection of Copper Avenue and Auberry Road under the 2030 no Project condition. The Project's contribution to the anticipated cumulative condition would be cumulatively considerable. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.13-5j (TR-21):** The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable LOS at the intersection of Willow and Copper Avenues under the 2030 no Project condition. The Project's contribution to the anticipated cumulative condition would be cumulatively considerable. This impact would be **less than significant after mitigation**.



- ▶ **Impact 3.13-5k (TR-27):** The Project will contribute to an unacceptable LOS under the existing plus Project condition and exacerbate a cumulative LOS that will fall below the minimum acceptable LOS under the 2030 no Project condition at the following County of Fresno segments of Friant Road:
  - Between North Fork Road (Road 206) and Parker Avenue;
  - Between Parker and Granite Avenues;
  - Between Granite and Root Avenues; and
  - Between Root Avenue and Lost Lake Road.

The project's contribution to the anticipated cumulative condition would be cumulatively considerable. This impact would be **less than significant after mitigation**.

- ▶ **Impact 3.13-5l (TR-30):** The project would exacerbate a cumulative LOS that will fall below the minimum acceptable LOS under the 2030 no Project condition on Willow Avenue between Friant Road and Silaxo Avenue. The Project's contribution to the anticipated cumulative condition would be cumulatively considerable. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.13-5m (TR-31):** The project would exacerbate a cumulative LOS that will fall below the minimum acceptable LOS under the 2030 no Project condition on Willow Avenue between Silaxo Avenue and Copper Avenue. The Project's contribution to the anticipated cumulative condition would be cumulatively considerable. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.13-5n (TR-33):** The project would exacerbate a cumulative LOS that will fall below the minimum acceptable LOS under the 2030 no Project condition on Millerton Road at the following locations:
  - Between North Fork Road (Road 206) and Winchell Cove Road;
  - Between Winchell Cove Road and Brighton Crest Drive;
  - Between Brighton Crest Drive and Sky Harbour Road;
  - Between Sky Harbour Road and Table Mountain Road;
  - Between Table Mountain Road and Auberry Road.

The Project's contribution to the anticipated cumulative condition would be cumulatively considerable. This impact would be **less than significant after mitigation**.

- ▶ **Impact 3.13-5o (TR-34):** The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable LOS in the anticipated 2030 No Project condition on the Fresno County segment of Road 206, including the bridge, west of Friant Road. The Project's contribution to the anticipated cumulative condition would be cumulatively considerable. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.13-5p (TR-35):** The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable level of service in the anticipated 2030 No Project condition at the intersection of Friant Road and Parker Avenue. However, traffic signal warrants on Parker Avenue are not satisfied at this unsignalized intersection. As explained on page 3-282 of this EIR, traffic impacts are considered "adverse but not significant" if the LOS standard at an unsignalized intersection is exceeded, but the projected traffic volume does not satisfy traffic signal warrants. As such, the project's contribution to the anticipated cumulative condition would be **less than significant**.
- ▶ **Impact 3.13-5q (TR-36):** The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable level of service in the anticipated 2030 No Project condition at the intersection of Friant Road and Granite Avenue. However, traffic signal warrants on Granite Avenue are not satisfied at this unsignalized intersection. As explained on page 3-282 of this EIR, traffic impacts are considered "adverse but not significant" if the LOS standard at an unsignalized intersection is exceeded, but the projected traffic volume does not satisfy traffic signal warrants. As such, the project's contribution to the anticipated cumulative condition would be cumulatively considerable. This impact would be **less than significant**.

- ▶ **Impact 3.13-5r (TR-37):** The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable level of service in the anticipated 2030 No Project condition at the intersection of Friant Road and Root Avenue. However, traffic signal warrants on Root Avenue are not satisfied at this unsignalized intersection. As explained on page 3-282 of this EIR, traffic impacts are considered “adverse but not significant” if the LOS standard at an unsignalized intersection is exceeded, but the projected traffic volume does not satisfy traffic signal warrants. As such, the project’s contribution to the anticipated cumulative condition would be cumulatively considerable. This impact would be **less than significant**.

**Impact 3.13-6: The Project shall contribute to the following deficiencies to City of Fresno roadways and intersections:**

- ▶ **Impact 3.13-6a (TR-8):** The project would contribute to an unacceptable LOS under the existing plus Project condition and exacerbate a cumulative LOS that shall fall below the minimum acceptable LOS under the 2030 no Project condition at the intersection of Friant Road and Shepherd Avenue. The Project’s contribution to the anticipated cumulative condition would be cumulatively considerable. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.13-6a (TR-8):** The project would contribute to an unacceptable LOS under the existing plus Project condition and exacerbate a cumulative LOS that shall fall below the minimum acceptable LOS under the 2030 no Project condition at the intersection of Friant Road and Shepherd Avenue. The Project’s contribution to the anticipated cumulative condition would be cumulatively considerable. There is no feasible mitigation. Therefore, this impact would be **significant and unavoidable**.
- ▶ **Impact 3.13-6c (TR-10):** The project would exacerbate delays and a cumulative LOS that shall fall below the minimum acceptable LOS under the 2030 no Project condition at the intersection of Friant Road and Fresno Street. The Project’s contribution to the anticipated cumulative condition would be cumulatively considerable. There is no feasible mitigation. Therefore, this impact would be **significant and unavoidable**.
- ▶ **Impact 3.13-6d (TR-19):** The project would exacerbate an existing LOS already below the minimum acceptable LOS at the intersection of Audobon Drive and Nees Avenue, and is expected to exacerbate delays and a cumulative LOS that shall fall below the acceptable LOS even without the Project. The Project’s contribution to the anticipated cumulative condition would be cumulatively considerable. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.13-6e (TR-28):** The project would contribute to an unacceptable LOS on the City of Fresno segment of Friant Road between Champlain Avenue and Ft. Washington Road under the 2030 cumulative condition (2030 with Project). The Project’s contribution to the anticipated cumulative condition would be cumulatively considerable. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.13-6f (TR-29):** The project would contribute to an existing and cumulative LOS already below the minimum acceptable LOS on the following City of Fresno segments of Friant Road:
  - Between Shepherd Avenue and Audubon Drive.
  - Between Audubon Drive and Fresno Street; and
  - Between Fresno Street and SR 41.

There is no feasible mitigation. Therefore, this impact would be **significant and unavoidable**.

**Impact 3.13-7: The Project shall contribute to the following deficiencies to intersections and roadways within the shared jurisdiction of City of Clovis and City of Fresno:**

- ▶ **Impact 3.13-7a (TR-22):** The project would exacerbate existing and anticipated future delays and shall contribute to a cumulative level of service below the minimum acceptable level of service at the intersection of Shallow Avenue and Nees Avenue in the 2030 plus project condition. The Project’s contribution to the anticipated 2030 cumulative condition would be cumulatively considerable. There is no feasible mitigation. Therefore, this impact would be **significant and unavoidable**.

- ▶ **Impact 3.13-7b (TR-23):** The project would exacerbate anticipated delays and contribute to a cumulative level of service that shall fall below the minimum acceptable level of service at the intersection of Shallow Avenue and Herndon Avenue in the 2030 plus project condition. The Project's contribution to the anticipated cumulative condition would be cumulatively considerable. There is no feasible mitigation. Therefore, this impact would be **significant and unavoidable**.
- ▶ **Impact 3.13-7c (TR-24):** The project would exacerbate anticipated delays and a cumulative level of service that shall fall below the minimum acceptable level of service at the intersection of Shallow Avenue and Sierra Avenue in the 2030 condition without the Project. The Project's contribution to the anticipated cumulative condition would be cumulatively considerable. There is no feasible mitigation. Therefore, this impact would be **significant and unavoidable**.
- ▶ **Impact 3.13-7d (TR-25):** The project would exacerbate existing delays and would exacerbate anticipated delays and a cumulative level of service below the minimum acceptable level of service at the intersection of Shallow Avenue and Bullard Avenue under the 2030 condition without the project. The project's contribution to the anticipated cumulative condition would be cumulatively considerable. This would result in an individually and cumulatively significant impact. There is no feasible mitigation. Therefore, this impact would be **significant and unavoidable**.
- ▶ **Impact 3.13-7e (TR-26):** The project would exacerbate existing delays at the intersection of Shallow Avenue and Barstow Avenue. The project would also exacerbate anticipated delays and a cumulative level of service that shall fall below the minimum acceptable level of service at the intersection of Shallow Avenue and Barstow Avenue in the 2030 condition without the project. The project's contribution to the anticipated cumulative condition would be cumulatively considerable. This impact would be **less than significant after mitigation**.
- ▶ **Impact 3.13-7f (TR-32):** The project would exacerbate a cumulative LOS that falls below the minimum acceptable level of service under the 2030 condition without the project on Shallow Avenue at the following locations:
  - Between Alluvial and Herndon Avenues;
  - Between Herndon and Sierra Avenues;
  - Between Sierra and Bullard Avenues; and
  - Between Bullard and Barstow Avenues.

There is no feasible mitigation. Therefore, this impact would be **significant and unavoidable**.

- ▶ **Impact 3.13-8: Change Air Traffic Patterns.** The Community of Friant is not located within the traffic pattern of a public airport. The project would therefore not affect airport traffic levels or result in substantial safety risks to a public airport facility. Therefore, there would be **no impact**.
- ▶ **Impact 3.13-9: Increase Hazards Due to a Design Feature.** Compliance with the policies of the Fresno County General Plan, the County's Roadway Design Standards, the policies proposed in the Draft Friant Community Plan, and adherence to the Transportation Element of the Friant Ranch Specific Plan are sufficient to ensure that the impact would be **less than significant**.
- ▶ **Impact 3.13-10: Result in Inadequate Emergency Access.** The Project would be consistent with Fresno County General Plan policies related to emergency access because it would provide for two access points from Friant Road and a third entry at the Village Center. The improvement standards adopted by Fresno County provide adequate street width and requirements for secondary access to ensure that future development in the Friant area makes adequate provision for emergency vehicle access. Therefore, the project would not result in inadequate emergency access and there would be **no impact**.
- ▶ **Impact 3.13-11: Result in Inadequate Parking Capacity.** Compliance with the Fresno County Zoning Ordinance would ensure that new development provides adequate parking in the existing Friant Community Plan Area and Friant Ranch Specific Plan Area. Compliance with Policy 5.47 of the Specific Plan would ensure that adequate

parking is available in the Friant Ranch Specific Plan Area. Therefore, the project would not result in inadequate parking capacity and there would be **no impact**.

- ▶ **Impact 3.13-12: Conflict with Adopted Polices Supporting Alternative Transportation.** The Project would not conflict with adopted policies, plans, or programs supporting alternative transportation. Rather, the Draft Friant Community Plan and Friant Ranch Specific Plan have been designed to encourage a variety of alternative transportation modes within the Project Area, are consistent with Fresno County General Plan policies supporting alternative transportation and include policies supporting bicycle and pedestrian circulation, transit, and the use of Neighborhood Electric Vehicles. There would be **no impact**.

### Friant Community Plan Update and Friant Ranch Specific Plan Policy Requirements

The Draft Friant Community Plan includes the following policies, as identified in the Friant Ranch EIR, to be consistent with the Fresno County General Plan policies related to transportation and circulation:

- ▶ **Policy 1.1:** Plan for a street and highway system that moves people and goods in an orderly, safe and efficient manner.
- ▶ **Policy 1.2:** Encourage the development of the County's system of streets and highways in a manner that is cost effective.
- ▶ **Policy 1.3:** Promote safe and convenient access to commercial development along Friant Road without undue conflicts to through traffic.
- ▶ **Policy 1.4:** Promote a street and highway system that can accommodate alternative modes of travel.
- ▶ **Policy 1.5:** Promote safe and convenient access within the residential portions of the community including use of lighting and crosswalks.
- ▶ **Policy 1.6:** Identify key locations for safe pedestrian access across Friant Road and install crosswalks, signage, lighting, traffic signals, and/or pedestrian signals, as warranted.
- ▶ **Policy 2.1:** Support efforts to establish multiple forms of transit within the Community of Friant, including utilizing the existing rail right-of-way for trails for bicycles and pedestrians, Neighborhood Electric Vehicle access and a potential future light rail route.
- ▶ **Policy 2.2:** Promote the establishment of a town-wide pedestrian walkway and trail network that promotes the safe movement of people throughout the Community of Friant.
- ▶ **Policy 2.3:** Encourage the development of multi-use trails throughout the Friant Community Plan Area for bicyclists and pedestrians.
- ▶ **Policy 3.1:** Encourage the provision of pedestrian and bicycle linkages to Lost Lake Recreation Area and along the San Joaquin River.
- ▶ **Policy 3.2:** Support efforts to implement the San Joaquin River Parkway Master Plan.

While the Friant Ranch Specific Plan does not include goals and policies specifically relating to traffic and circulation, it does include a Circulation Plan; street types and classifications; the accommodation of neighborhood electric vehicles (NEVs) by providing special eight-foot travel lanes on primary roadways; and pedestrian circulation through a multitude of trails. A multi-modal transportation easement up to 20 feet in width is planned within an unused railroad easement that will include a multi-purpose trail and also reserve space for potential future transit stops.

### Mitigation Measures

The following mitigation measures were identified in the Friant Ranch EIR:

- ▶ **Mitigation Measure 3.13-1 (TR-20):** The Project shall construct traffic signals at the intersection of Friant Road and the Site Access intersection north of Lost Lake Road prior to construction of the 201st residential unit and prior to the construction of any commercial/office aspects of the project if an engineering study indicates that the signals are warranted at that time. The applicant shall utilize the services of a traffic engineer to determine if traffic

signals are warranted based on CMUTCD traffic signal warrants. If traffic signals are not warranted, then traffic signals shall not be installed and an engineering study shall be performed at the discretion of the Director prior to each subsequent interval of 200 dwelling units and prior to each phase of commercial construction. The Project shall install traffic signals at the intersection when they are warranted at the discretion of the Director.

- ▶ **Mitigation Measure 3.13-2 (TR-6):** The Project shall construct traffic signals at the intersection of Friant Road and Lost Lake Road prior to construction of the 201st residential unit and prior to the construction of any commercial/office aspects of the Project if an engineering study indicates that signals are warranted at that time. The applicant shall utilize the services of a traffic engineer to determine if traffic signals are warranted based on CMUTCD traffic signal warrants. If traffic signals are not warranted, then traffic signals shall not be installed and an engineering study shall be performed at the discretion of the Director prior to each subsequent interval of 200 dwelling units and prior to each phase of commercial construction. The Project shall install traffic signals at the intersection when they are warranted at the discretion of the Director.
- ▶ **Mitigation Measure 3.13-3:** Prior to issuance of a building permit, the applicant shall contribute to its pro rata share of the cost of future off-site traffic improvements to Caltrans intersections through payment of a per trip fee to Caltrans. If Caltrans has not established a per trip fee prior to issuance of a building permit, the applicant shall contribute a fair share fee to the County for the identified improvements based on the then-current estimated traffic volume attributable to the Project. If the Measure C Regional Transportation Mitigation Fee program establishes a fair share fee for an intersection(s) identified above, the applicant may satisfy this mitigation requirement through payment of said fee. For those improvements to Caltrans roadways that fall within Madera County, which are covered by the Madera County fee program, the applicant may satisfy this mitigation requirement through an agreement with Madera County for participation in the Madera County fee program. The traffic improvements and current Caltrans fees or estimated percentage of the 2030 cumulative traffic volume are as follows:
  - ▶ **Mitigation Measure 3.13-3a (TR-1):** The intersection of SR 41 and Road 145 should be converted to an interchange by the year 2030. Caltrans has not established a set fee for this intersection at this time. For those improvements to Caltrans roadways that fall within Madera County, which are covered by the Madera County fee program, the applicant may satisfy this mitigation requirement through an agreement with Madera County for participation in the Madera County fee program. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Tables 3.13-19 [in the Draft EIR]) is 3.2%.
  - ▶ **Mitigation Measure 3.13-3b (TR-2):** The intersection of SR 41 and Avenue 12 should be converted to an interchange by the year 2030. The results of the existing-plus-Project conditions analyses and the 2030 no-Project conditions analyses indicate that the Project alone does not create the need for the identified improvement, but the need is created primarily by regional growth. It is unreasonable to expect the Project applicant to construct an improvement necessitated by the regional growth condition and to which the Project contributes a proportionately small total peak hour traffic volume. The Project can mitigate its fair share of the impact by paying a fair share of the cost of construction. For those improvements to Caltrans roadways that fall within Madera County, which are covered by the Madera County fee program, the applicant may satisfy this mitigation requirement through an agreement with Madera County for participation in the Madera County fee program. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22 [in the Draft EIR]) is 0.5%.
  - ▶ **Mitigation Measure 3.13-3c (TR-3):** The intersection of SR 41 and Avenue 15 should be converted to an interchange by the year 2030. The results of the existing-plus-Project conditions analyses and the 2030 no-Project conditions analyses indicate that the Project alone does not create the need for the identified improvement, but the need is created primarily by regional growth. It is unreasonable to expect the Project applicant to construct an improvement necessitated by the regional growth condition and to which the Project contributes a mitigate its fair share of the impact by paying a fair share of the cost of construction. For those improvements to Caltrans roadways that fall within Madera County, which are covered by the Madera County fee program, the applicant may satisfy this mitigation requirement through an agreement with Madera County for

participation in the Madera County fee program. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22 [in the Draft EIR]) is 0.8%.

- ▶ **Mitigation Measure 3.13-3d (TR-11):** The intersection of Friant Road and the State Route 41 northbound offramp is expected to operate at LOS C with the addition of a fifth westbound through lane. It is contemplated that a future Measure C Regional Transportation Mitigation Fee program may include mitigation for this intersection. Caltrans typically collects per-trip fees for this interchange as follows:

- Widen Friant Road under SR 41 with four additional lanes, \$900 per trip;
- SR 41 northbound on ramp from eastbound Friant Road: additional ramp lane and auxiliary lane, \$757 per trip; and
- SR 41 northbound on ramp from westbound Friant Road: additional ramp lane and auxiliary lane, \$1,300 per trip.

**Mitigation Measure 3.13-3e (TR-12):** The intersection of Friant Road and the State Route 41 southbound offramp is expected to operate at LOS C with the addition of a second southbound left-turn lane and a second southbound right-turn lane. It is contemplated that a future Measure C Regional Transportation Mitigation Fee program may include mitigation for this intersection. Caltrans typically collects per-trip fees for this interchange as follows:

- Widen Friant Road under SR 41 with four additional lanes, \$900 per trip;
- SR 41 southbound on ramp from westbound Friant Road: additional ramp lane and auxiliary lane, \$1,200 per trip;
- SR 41 southbound on ramp from eastbound Friant Road: additional ramp lane and auxiliary lane, \$1,200 per trip; and
- SR 41 southbound off ramp to Friant Road: additional ramp lane and auxiliary lane, \$834 per trip.

**Mitigation Measure 3.13-4:** Prior to issuance of a building permit, the applicant shall contribute its pro rata share of the cost of future off-site traffic improvements necessary to accommodate the 2030 cumulative condition through payment of a fair share fee to Fresno County and/or Madera County as appropriate. The traffic improvements and, where an improvement is identified, the estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Tables 3.13-22 and 3.13-23 [in the Draft EIR]) are as follows:

- ▶ **Mitigation Measure 3.13.4a (TR-4):** The intersection of Road 145 and Road 206 will require signalization with two northbound left-turn lanes. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22 [in the Draft EIR]) is 7.2%.
- ▶ **Mitigation Measure 3.13.4b (TR-34):** The Madera County segment of Road 206, including the bridge, west of Friant Road should be widened to four lanes. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-23 [in the Draft EIR]) is 17.1%

**Mitigation Measure 3.13-5:** Prior to issuance of a building permit, the applicant shall contribute its pro rata share of the cost of future off-site traffic improvements through payment of a fair share fee to Fresno County. The traffic improvements and, where an improvement is identified, the estimate percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Tables 3.13-22 and 3.13-23 [in the Draft EIR]) are as follows:

- ▶ **Mitigation Measure 3.13-5a (TR-5):** The intersection of Friant Road and North Fork Road (Road 206) should be signalized to achieve an acceptable level of service (LOS C). The ultimate lane configurations required are as follows:
  - Northbound: two left-turn lanes and two through lanes with a shared right turn
  - Southbound: one left-turn lane, two through lanes, and one right-turn lane
  - Eastbound: two left-turn lanes, one through lane, and two right-turn lanes

- Westbound: one left-turn lane and one shared through/right-turn lane

The results of the existing-plus-Project conditions analyses and the 2030 no-Project conditions analyses indicate that the Project alone does not create the need for the identified improvement, but the need is created primarily by regional growth. It is unreasonable to expect the Project applicant to construct an improvement necessitated by the regional growth condition and to which the Project contributes a proportionately small traffic volume. The Project can mitigate its fair share of the impact by paying a fair share of the cost of construction. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22 [in the Draft EIR]) is 17.2%. This signalization will also provide an opportunity to satisfy the Friant Community Plan Policy 1.6 which states, "Identify key locations for safe pedestrian access across Friant Road and install crosswalks, signage, lighting, traffic signals, and/or pedestrian signals, as warranted."

- ▶ **Mitigation Measure 3.13-5b (TR-6):** No additional mitigation required. See Mitigation Measure 3.13-1.
- ▶ **Mitigation Measure 3.13-5c (TR-7):** Signalization of the intersection of Friant Road and Willow Avenue to achieve an acceptable level of service (LOS B). The ultimate lane configurations required are as follows:
  - Northbound: one left-turn lane (protected), two through lanes, and one right-turn lane
  - Southbound: two left-turn lanes (protected), two through lanes with a shared right turn
  - Eastbound: one shared lane (permissive)
  - Westbound: one shared left-turn/through lane (permissive) and one right-turn lane

The results of the existing-plus-Project conditions analyses and the 2030 no-Project conditions analyses indicate that the Project alone does not create the need for the identified improvement, but the need is created primarily by regional growth. It is unreasonable to expect the Project applicant to construct an improvement necessitated by the regional growth condition and to which the Project contributes a proportionately small traffic volume. The Project can mitigate its fair share of the impact by paying a fair share of the cost of construction. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22 [in the Draft EIR]) is 29.6%.

- ▶ **Mitigation Measure 3.13-5d (TR-13):** Signalization of Millerton Road and Winchell Cove Road and widening of Millerton Road to four lanes at this intersection is needed to achieve appropriate levels of service to accommodate the 2030 cumulative condition plus the Project. Mitigation Measure 3.13-5n requires payment of a fair share fee for the widening of Millerton Road between North Fork Road (Road 206) and Sky Harbour Road. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22 [in the Draft EIR]) is 3.3%. The Measure C Tier 2 Rural project plans to widen Millerton Road to four lanes between North Fork Road (Road 206) and Sky Harbour Road. However, the Tier 2 projects are not yet funded.
- ▶ **Mitigation Measure 3.13-5e (TR-14):** The intersection of Millerton Road and Brighton Crest Drive should be signalized and Millerton Road should be widened to four lanes to accommodate the 2030 cumulative condition plus Project. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22 [in the Draft EIR]) is 3.7%. The Measure C Tier 2 Rural project plans to widen Millerton Road to four lanes between North Fork Road (Road 206) and Sky Harbour Road. However, the Tier 2 projects are not yet funded.
- ▶ **Mitigation Measure 3.13-5f (TR-15):** The intersection of Millerton Road and Sky Harbour Road should be signalized and Millerton Road should be widened to four lanes to provide an acceptable level of service (LOS A) under the 2030 cumulative condition. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22 [in the Draft EIR]) is 2.9%. The Measure C Tier 2 Rural project plans to widen Millerton Road to four lanes between North Fork Road (Road 206) and Sky Harbour Road. However, the Tier 2 projects are not yet funded.

- ▶ **Mitigation Measure 3.13-5g (TR-16):** The intersection of Millerton Road and Table Mountain Road should be signalized and Millerton Road should be widened to four lanes. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22 [in the Draft EIR]) is 2.1%.
- ▶ **Mitigation Measure 3.13-5h (TR-17):** The intersection of Millerton Road and Auberry Road should be signalized. The intersection will likely require either two northbound left turn lanes on Millerton Road or an extended single left-turn lane to accommodate queues up to approximately 600 feet in length in the ultimate condition. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22 [in the Draft EIR]) is 1.8%.
- ▶ **Mitigation Measure 3.13-5i (TR-18):** The intersection of Copper Avenue and Auberry Road should be signalized to provide an acceptable level of service (LOS B) under the 2030 cumulative condition. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22 [in the Draft EIR]) is 0.7%. The ultimate lane configurations required are as follows:
  - Southbound: one left-turn lane and one right-turn lane
  - Eastbound: two left-turn lanes and two through lanes
  - Westbound: two through lanes with a shared right turn.
- ▶ **Mitigation Measure 3.13-5j (TR-21):** The intersection of Willow and Copper Avenues should be signalized to provide an acceptable level of service (LOS D) under the 2030 condition. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22 [in the Draft EIR]) is 10.6%. The additional lanes on Willow Avenue are included in the Measure C Tier 1 Urban project to widen Willow Avenue to six lanes between Copper Avenue and Barstow Avenue.
- ▶ **Mitigation Measure 3.13-5k (TR-27):** None feasible. Friant Road between North Fork Road (Road 206) and Lost Lake Road requires six lanes to achieve an acceptable LOS (LOS C or better). Widening this segment of Friant Road to six lanes is not feasible due to the physical constraints of the adjacent land uses and the Fresno County General Plan policy that prohibits six lane rural roadways. Although the Measure C Tier 1 Rural project widening Friant Road to four lanes between Copper Avenue and Millerton will partially mitigate this impact, the impact will remain significant and unavoidable.
- ▶ **Mitigation Measure 3.13-5l (TR-30):** Willow Avenue should be widened to four lanes between Friant Road and Silaxo Avenue to provide an acceptable level of service (LOS B) under the 2030 cumulative condition. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-23 [in the Draft EIR]) is 18.9%.
- ▶ **Mitigation Measure 3.13-5m (TR-31):** Willow Avenue should be widened to four lanes between Silaxo Avenue and Copper Avenue to provide an acceptable level of service (LOS B or better) under the 2030 cumulative condition. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-23 [in the Draft EIR]) is 18.9%.
- ▶ **Mitigation Measure 3.13-5n (TR-33):** Millerton Road should be widened to four lanes between Road 206 and Sky Harbour Road to provide LOS C or better. The Measure C Tier 2 Rural project to widen Millerton Road to four lanes between North Fork Road (Road 206) and Sky Harbour Road would mitigate a portion of the impact. However, the Tier 2 projects are not yet funded. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-23 [in the Draft EIR]) for the segment from Road 206 to Winchell Cove is 4.8%. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-23 [in the Draft EIR]) for the segment from Winchell Cove to Brighton Crest is 4.0%. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-23 [in the Draft EIR]) for the segment from Brighton Crest to Sky Harbour is 3.2%. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-23 [in the Draft EIR]) for the segment from Sky Harbour to Table Mountain is 2.4%. The estimated percentage of the 2030 cumulative traffic



volume attributable to the Project (as shown in Table 3.13-23 [in the Draft EIR]) for the segment from Table Mountain to Auberry is 2.0%.

- ▶ **Mitigation Measure 3.13-5o (TR-34):** Road 206, including the bridge, west of Friant Road for the Fresno County segment should be widened to four lanes to provide an acceptable level of service (LOS C or better) under the 2030 cumulative condition. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-23 [in the Draft EIR]) is 17.1%.
- ▶ **Mitigation Measure 3.13-5p (TR-35):** None feasible. Peak-hour traffic signal warrants for Parker Avenue are not expected to be satisfied at the intersection. The County may consider constructing a median to prevent left turns from Parker Avenue; however, current plans are to construct a full-access intersection. Since traffic signal warrants on Parker Avenue are not satisfied and it is desirable to maintain access at the intersection, there are no feasible mitigations and the impact will remain adverse but not significant.
- ▶ **Mitigation Measure 3.13-5q (TR-36):** None feasible. Peak-hour traffic signal warrants are not expected to be satisfied at the intersection on Granite Avenue. The County may consider constructing a median to prevent left turns from Granite Avenue; however, current plans are to construct a full-access intersection. Since traffic signal warrants are not satisfied on Granite Avenue and it is desirable to maintain access at the intersection, there are no feasible mitigations and the impact will remain adverse but not significant.
- ▶ **Mitigation Measure 3.13-5r (TR-37):** None feasible. Peak-hour traffic signal warrants on Root Avenue are not expected to be satisfied at the intersection. The County may consider constructing a median to prevent left turns from Root Avenue; however, current plans are to construct a full-access intersection. Since traffic signal warrants on Root Avenue are not satisfied and it is desirable to maintain access at the intersection, there are no feasible mitigations and the impact will remain adverse but not significant.
- ▶ **Mitigation Measure 3.13-6:** Prior to issuance of a building permit, the applicant shall contribute its pro rata share of the cost of future off-site traffic improvements through payment of a fair share fee to Fresno County. The traffic improvements and the estimate percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Tables 3.13-22 and 3.13-23 [in the Draft EIR]) are as follows:
  - ▶ **Mitigation Measure 3.13-6a (TR-8):** The intersection of Friant Road and Shepherd Avenue should be provided with a second northbound right-turn lane in addition to the funded third westbound left-turn lane and third southbound through lane to achieve an acceptable level of service (LOS C). The results of the existing-plus-Project conditions analyses and the 2030 no-Project conditions analyses indicate that the Project alone does not create the need for the identified improvement, but the need is created primarily by regional growth. It is unreasonable to expect the Project applicant to construct an improvement necessitated by the regional growth condition and to which the Project contributes a proportionately small traffic volume. The Project can mitigate its fair share of the impact by paying a fair share of the cost of construction. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Tables 3.13-22 [in the Draft EIR]) is 6.3%.
  - ▶ **Mitigation Measure 3.13-6b (TR-9):** None feasible. The intersection of Friant Road and Audubon Drive is constructed to the largest reasonable configuration and no further intersection improvements are feasible. The City of Fresno General Plan identifies the ultimate need for 12 lanes on Friant Road between SR 41 and Shepherd Avenue and accepts LOS F with six lanes since additional widening is not considered to be feasible. This impact is significant and unavoidable.
  - ▶ **Mitigation Measure 3.13-6c (TR-10):** None feasible. The intersection of Friant Road and Fresno Street is constructed to the largest reasonable configuration and no further intersection improvements are feasible. The City of Fresno General Plan identifies the ultimate need for 12 lanes on Friant Road between SR 41 and Shepherd Avenue and accepts LOS F with six lanes since additional widening is not considered to be feasible. This impact is significant and unavoidable.
  - ▶ **Mitigation Measure 3.13-6d (TR-19):** The intersection of Nees Avenue and Audubon Drive should be signalized with two eastbound left-turn lanes to provide an acceptable level of service (LOS D) under the existing and the 2030 cumulative condition. The results of the existing-plus-Project conditions analyses and the 2030 no-Project

conditions analyses indicate that the Project alone does not create the need for improvements at this intersection, but the need is created primarily by regional growth. It is unreasonable to expect the Project applicant to construct this major improvement necessitated by the regional growth condition and to which the Project contributes a proportionately small traffic volume. The Project can mitigate its fair share of the impact by paying a fair share of the cost of construction. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Tables 3.13-22 [in the Draft EIR]) is 2.0%. The intersection is funded by the City of Fresno Traffic Signal Mitigation Impact Fee.

- ▶ **Mitigation Measure 3.13-6e (TR-28):** Friant Road between Champlain Avenue and Ft. Washington Road will require six lanes to provide an acceptable level of service (LOS D or better) under the 2030 cumulative condition. The City of Fresno has planned for this improvement in its capital improvement program and its current citywide traffic fee program. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-23 [in the Draft EIR]) is 14.7%.
- ▶ **Mitigation Measure 3.13-6f (TR-29):** None feasible. The City of Fresno General Plan identifies the need for 12 lanes on Friant Road between SR 41 and Shepherd Avenue to accommodate the anticipated cumulative conditions due to regional growth and accepts LOS F with six lanes since additional widening is not feasible due to physical constraints associated with the adjacent land uses. This condition, as already contemplated and accepted in the City of Fresno General Plan, is significant and unavoidable.
- ▶ **Mitigation Measure 3.13-7:** Prior to issuance of a building permit, the applicant shall contribute its pro rata share of the cost of future off-site traffic improvements through payment of a fair share fee to Fresno County. The traffic improvements and, where an improvement is identified, the estimate percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Tables 3.13-22 and 3.13-23 [in the Draft EIR]) are as follows:
  - ▶ **Mitigation Measure 3.13-7a (TR-22):** None feasible. The intersection of Willow Avenue and Nees Avenue is planned to be constructed to the largest reasonable configuration and no further intersection improvements are feasible. This impact is significant and unavoidable.
  - ▶ **Mitigation Measure 3.13-7b (TR-23):** None feasible. The intersection of Willow Avenue and Herndon Avenue is planned to be constructed to the largest reasonable configuration and no further intersection improvements are feasible. The City of Fresno General Plan identifies the ultimate need for 12 lanes on Herndon Avenue and accepts LOS F with six lanes since additional widening is not feasible. This impact is significant and unavoidable.
  - ▶ **Mitigation Measure 3.13-7c (TR-24):** None feasible. The intersection of Willow Avenue and Sierra Avenue is planned to be constructed to the largest reasonable configuration and no further intersection improvements are feasible. Therefore, this impact is significant and unavoidable.
  - ▶ **Mitigation Measure 3.13-7d (TR-25):** None feasible. The intersection of Willow Avenue and Bullard Avenue is planned to be constructed to the largest reasonable configuration and no further intersection improvements are feasible. Therefore, this impact is significant and unavoidable.
  - ▶ **Mitigation Measure 3.13-7e (TR-26):** The intersection of Willow Avenue and Barstow Avenue should be widened to the following lane configurations to provide an acceptable level of service (LOS D) in the 2030 cumulative condition.
    - Northbound: two left-turn lanes, three through lanes, one right-turn lane
    - Southbound: two left-turn lanes, three through lanes, one right-turn lane
    - Eastbound: one left-turn lane, two through lanes, and two right-turn lanes
    - Westbound: one left-turn lane and two through lanes with a shared right turn.

The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22 [in the Draft EIR]) is 1.0%.

Implementation of the mitigation measures would reduce impacts related to transportation and circulation, but not to a less-than-significant level. Therefore, as discussed in the Friant Ranch EIR, several of these impacts would remain significant and unavoidable.

## CONSISTENCY EVALUATION

- a) As analyzed in the Friant Ranch EIR, the project would not conflict with adopted policies, plans, or programs supporting alternative transportation. Rather, the Draft Friant Community Plan and Friant Ranch Specific Plan have been designed to encourage a variety of alternative transportation modes within the Project Area; are consistent with Fresno County General Plan policies supporting alternative transportation; and include policies supporting bicycle and pedestrian circulation, transit, and the use of Neighborhood Electric Vehicles. The Friant Ranch EIR concluded that there would be no impact. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to consistency with adopted policies, plans, or programs supporting alternative transportation. To the extent that the relevant policies, plans, and programs addressing concerns relating to level of service (LOS), such concerns no longer implicate CEQA. The County will enforce the mandatory provisions of these policies, plans, and programs under its general police power independent of CEQA.
- b) See discussion of the updated CEQA Guidelines related to VMT, above.
- c) As analyzed in the Friant Ranch EIR, the project would comply with the policies of the Fresno County General Plan, the County's Roadway Design Standards, and the policies proposed in the Draft Friant Community Plan to minimize or avoid design hazards; and would adhere to the Transportation Element of the Friant Ranch Specific Plan. This impact was concluded to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to hazards due to design features.
- d) As analyzed in the Friant Ranch EIR, the project would be consistent with Fresno County General Plan policies related to emergency access because it would provide for two access points from Friant Road and a third entry at the Village Center. The improvement standards adopted by Fresno County provide adequate street width and requirements for secondary access to ensure that future development in the Friant area makes adequate provision for emergency vehicle access. Therefore, the project would not result in inadequate emergency access. The Friant Ranch EIR concluded that there would be no impact. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to emergency access.

## XVIII. TRIBAL CULTURAL RESOURCES

Assembly Bill (AB) 52, signed by the California governor in September of 2014, establishes a new class of resources under CEQA: "tribal cultural resources." It requires that lead agencies undertaking CEQA review must, upon written request of a California Native American tribe, begin consultation after the lead agency determines that the application for the project is complete, before a notice of preparation (NOP) of an EIR or notice of intent to adopt a negative declaration or mitigated negative declaration is issued. AB 52 also requires revision to CEQA Appendix G, the environmental checklist. This revision has created a new category for tribal cultural resources (TCRs).

The Friant Ranch EIR does not address TCRs because it was not required to do so. The NOP for the Friant Ranch EIR was issued in October 2007 (State Clearinghouse No. 2007101016), and AB 52 went into effect on July 1, 2015. Because the NOP was released before AB 52 went into effect, the Friant Ranch EIR was not required to address TCRs. See the discussion above (Section XVII) regarding the reasons why the County need not address the issue of vehicle miles traveled in the Recirculated Draft EIR, as these same reasons apply to the issue of tribal cultural resources.

## XIX. UTILITIES AND SERVICE SYSTEMS

Environmental Issue Would the Project	Where were impacts analyzed previously?	Do proposed changes/ new circumstances/ new information result in new significant/ substantially more severe impacts?	Is there substantial new information requiring new analysis or verification?	Do mitigation measures from prior documents resolve significant impacts?
a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	DEIR Impacts 3.14.2, 3.14.3, 3.14.4, and 3.14.7	No	No	Yes
b) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	DEIR Impact 3.14.1	No	No	Yes
c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	DEIR Impact 3.14.3	No	No	Yes
d) 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?	DEIR Impact 3.14.5	No	No	N/A
e) Fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	DEIR Impact 3.14.6	No	No	Yes

### Summary of EIR Analysis

This topic is addressed in Section 3.14, "Utilities and Service Systems," of the Friant Ranch Draft EIR. The regulatory and physical settings for utilities and service systems are described in Sections 3.14.1 and 3.14.2, respectively, of the Draft EIR.

### IMPACT ANALYSIS

Impacts from development of the Friant Ranch Project are evaluated in the Friant Ranch Draft EIR (pages 3-349 through 3-377) and are summarized below.

- ▶ **Impact 3.14.1: Water Supply.** A Water Supply Assessment (WSA) prepared for the originally proposed project concluded that sufficient water supplies are available to serve the proposed development, in addition to existing and expected future uses within the existing Friant Community Plan Area over a 20-year planning horizon in normal, dry, and multiple-dry water years. In addition, Mitigation Measure 3.14.1, detailed below would require

any new development within the Friant Ranch Community Plan Area to obtain a water transfer agreement approved by the U.S. Bureau of Reclamation (USBR), Fresno County Waterworks District No. 18 (WWD 18), and/or the Lower Tule River Irrigation District (LTRID) as appropriate. Implementation of Mitigation Measure 3.14.1 would ensure that the project would have a **less-than-significant impact with mitigation** related to water supply.

- ▶ **Impact 3.14.2: Water Facilities.** Water for the project would be sourced from Millerton Lake and treated at the WWD 18 Water Treatment Plant (WTP). WWD 18 would use an existing, unused 24-inch diameter pipeline owned by the Bureau of Reclamation to supply water to the project. The Friant Ranch Specific Plan development would participate in the expansion of existing WWD 18 facilities, in a staged fashion, as demand dictates. In addition to expansion of the treatment plant, the Friant Ranch Specific Plan development would also participate with WWD 18 to construct the pipeline, connections, tanks and pumps required to deliver sufficient capacity from Friant Dam to the treatment plant, and on to the Specific Plan development. The project would have an adequate system of water conveyance and storage and will not result in a significant impact to existing water conveyance and storage facilities. With incorporation of mitigation measures included in Chapters 3.1, 3.2, 3.3, 3.4, 3.5 and 3.6 of the Friant Ranch Draft EIR to off-set impacts resulting from construction of infrastructure systems associated with buildout of the Friant Community Plan area, inclusive of the Friant Ranch Specific Plan, the impact resulting from construction and operation of water treatment, conveyance, and storage facilities would be **less than significant**.
- ▶ **Impact 3.14.3: Inadequate Wastewater Capacity and Facilities.** The project includes the development of a new wastewater treatment plant (WWTP) to accommodate the new growth within the Friant Community Plan area, including the Friant Ranch Specific Plan. The WWTP would provide capacity to accommodate the future and existing uses within the adjacent community of Friant, which has a projected peak flow at full buildout of 165,000 gallons per day. An effluent disposal pipeline from the WWTP to the Specific Plan area would be built to return reclaimed effluent to the project for use in irrigation of landscaping and open spaces. The capacity from the WWTP and the disposal pipeline would accommodate future provision of service to the developing area within the Project Area. In addition, implementation of Mitigation Measures 3.14.3a through 3.14.3g would ensure that the project (Alternative 3) would have a **less-than-significant impact with mitigation**.

The WWTP would ensure that the project meets the wastewater treatment capacity requirements of the Regional Water Quality Control Board (RWQCB) and incorporate an aerated biological process known as a Membrane Bio-reactor to achieve tertiary-quality effluent, meeting State Water Quality Standards (Title 22) for unrestricted use. The project would also ban the use of residential water softeners to enhance WWD 18's ability to meet the electroconductivity discharge limits imposed by the RWQCB, and all lands used for effluent reclamation would require a permit from the RWQCB and the Department of Public Health prior to commencement of reclamation activities. The wastewater infrastructure improvements would be in compliance with the requirements of the RWQCB and the impact would be **less than significant**.

- ▶ **Impact 3.14.4: Stormwater Drainage Capacity and Facilities.** The Friant Community Plan and the Friant Ranch Specific Plan would be designed using Low Impact Development (LID) principles. A combination conventional/bio-filtration drainage system would be constructed and implemented. Rain would run from inlets into natural swales on the property that would collect in small sedimentation basins lined with plants and other materials to filter the water. This new system framework would incorporate conventional curb/ gutter street design with bio-filtration swales and drop inlets into a string of community filtration/sedimentation basins. This system would be supplemented by a surface collection system, including inlets and a below ground storm sewer conveyance system. The Friant Ranch Specific Plan includes policies related to stormwater management as detailed below which would promote impact minimization techniques such as reduction of impervious surfaces; provide for strategic runoff timing by lowering flow using the landscape; and use integrated management practices to reduce and cleanse runoff. The incorporation of LID principles into the project design and the implementation of the Friant Ranch Specific Plan policies related to stormwater management would ensure that the project (Alternative 3) would have a **less-than-significant impact** on stormwater drainage capacity and facilities.
- ▶ **Impact 3.14.5: Landfill Capacity.** The American Avenue Landfill is owned by Fresno County and would receive most of the project site's solid waste. Following the closure of the American Avenue Landfill in 2031, the Friant Community Plan area would most likely be served by a new landfill that would be developed in accordance with

all applicable laws and regulations in effect at the time. Disposal of biosolids generated by the WWTP in Friant Ranch would comply with regulations contained in EPA 40 CFR 503. Given that a new landfill would be developed following the closure of the American Avenue Landfill and biosolids would be disposed of in accordance with EPA 40 CFR 503, the project (Alternative 3) would have a **less-than-significant impact** on landfill capacity.

- ▶ **Impact 3.14.6: Compliance with Federal, State, and Local Solid Waste Regulations.** The American Avenue Landfill is regulated by the Fresno County Environmental Health Department in compliance with federal, state, and local regulations. Because the project proponent(s)/developer(s) would comply with federal, state, and local statutes and regulations related to solid waste and recycling, this impact would be **less than significant**.
- ▶ **Impact 3.14.7: Development of the Community Plan Area Will Increase the Demand for Electricity and Natural Gas and Will Result in the Need to Construct New Infrastructure to Serve the Community Plan Area.** Residential units within the Community Plan and Friant Ranch Specific Plan would be built in compliance with the Title 24 energy efficiency standards. However, extensions of existing electrical and natural gas facilities by PG&E would still be needed to support the demands of project development. PG&E has indicated that it has and/or can develop the necessary capacity to serve the Community Plan area with both electricity and natural gas, which would result in short-term construction impacts. Implementation of Mitigation Measure 3.14.7a and 3.14.7b would reduce the impact associated with utility installation to a **less-than-significant with mitigation**.

### Friant Community Plan Update and Friant Ranch Specific Plan Policy Requirements

The Draft Friant Community Plan includes the following policies, as identified in the Friant Ranch EIR, to ensure adequate utilities and service systems are present within the Friant Community Plan Area:

- ▶ **Policy 4.9** Require that necessary infrastructure (e.g., roads, sewer, water, drainage, telephone, cable television, etc.) be installed and in place prior to occupancy of dwelling units in Friant Ranch.
- ▶ **Policy 5.52** Use native and non-invasive plant materials to transition into undisturbed open space areas. Landscaping shall blend in with the existing wetlands and natural drainages.
- ▶ **Policy 5.54** Incorporate, where warranted, landscaping bio-swales integral to the Low Impact drainage system to provide cleaning and filtration of drainage water before it is discharged from the Project.
- ▶ **Policy 5.71** Provide bio-filtration areas and swales in landscaped parking islands and edges of parking lots, where feasible, to capture low-flow runoff in the parking areas and reduce toxin runoff into open space and natural drainages.
- ▶ **Policy 5.74** Encourage the use of pervious concrete pavement, where appropriate, to reduce or eliminate runoff from paved areas.
- ▶ **Policy 5.104** Plan natural drainage areas, where feasible, particularly avoiding environmental features such as wetlands, vernal pools and steep slopes, as indicated on the Friant Ranch Land Use Plan.
- ▶ **Policy 5.108** Incorporate vegetative groundcover that absorbs rainwater and reduces runoff into the landscape design. Permeable surfaces should be used wherever possible to reduce paving.

### Mitigation Measures

The following mitigation measures were identified in the Friant Ranch EIR:

- ▶ **Mitigation Measure 3.14.1:** Prior to recordation of any final subdivision map within the Friant Community Plan area, inclusive of the Friant Ranch Specific Plan, a water transfer agreement to serve the proposed development shall be approved by the USBR, WWD 18 and/or the LTRID as appropriate.
- ▶ **Mitigation Measure 3.14.3a:** All new development in the Friant Community Plan area, inclusive of the Friant Ranch Specific Plan, shall comply with Fresno County General Plan policy PF-D.2, which requires that any new community sewer and wastewater treatment facilities serving residential subdivisions be owned and maintained by a County Service Area or other public entity approved by the County, such as Waterworks District No. 18.

- ▶ **Mitigation Measure 3.14.3b:** Adequately sized on-site collection facilities, including lift stations, shall be installed for each subdivision in the Specific Plan area concurrent with road construction for individual subdivisions. A “backbone” conveyance system sufficient to serve each subdivision shall be installed prior to issuance of building permits for that subdivision.
- ▶ **Mitigation Measure 3.14.3c:** Wastewater collection, treatment and disposal of the Friant Ranch Specific Plan Area shall adhere to Section VI of the Friant Ranch Infrastructure Master Plan. The applicant and/or WWD 18 must demonstrate adherence to Section VI of the Friant Ranch Infrastructure Master Plan prior to issuance of an occupancy permit for development within the Friant Ranch Specific Plan Area.
- ▶ **Mitigation Measure 3.14.3d:** Commitments from the wastewater treatment provider to receive anticipated flows from the Friant Ranch Specific Plan Area and Millerton Lake Village Mobile Home Park at the WWTP shall be secured by Fresno County prior to County approval of improvement plans for wastewater collection and transmission infrastructure.
- ▶ **Mitigation Measure 3.14.3e:** Prior to issuance of building permits for each increment of new development within the Project Area, the County shall confirm that all necessary permits (e.g., NPDES) are in place for the WWTP to discharge additional treated effluent in the amounts associated with new development. This shall include a determination that development timing will not impede other development for which entitlements have been issued.
- ▶ **Mitigation Measure 3.14.3f:** Prior to approval of improvement plants and wastewater collection and infrastructure, the applicant must demonstrate to the County that on- and off-site sewer pipelines will have watertight joints and be in accordance with design standards adopted by Fresno County in order to minimize the potential for accidental discharge.
- ▶ **Mitigation Measure 3.14.3g:** The design plans for the WWTP shall incorporate appropriate and cost-effective odor and noise reduction measures as described in the Infrastructure Master Plan, to the satisfaction of the Fresno County Planning and Public Works Departments prior to issuance of the conditional use permit for the WWTP.
- ▶ **Mitigation Measure 3.14.6a:** Contractors shall be required to provide on-site separation of construction debris to assure a minimum 50% diversion of this material from the landfill.
- ▶ **Mitigation Measure 3.14.6b:** A source-separated green waste program shall be implemented within the Project area, subject to review and approval by the Fresno County Department of Public Works and Planning, Resources Division.
- ▶ **Mitigation Measure 3.14.7a:** The Specific Plan applicants and subsequent developers within the Community Plan area shall work closely with PG&E or other utility provider to ensure that development of electrical and natural or propane gas infrastructure with the capacity to service the proposed development is located and provided concurrently with roadway construction and in accordance with PUC regulations. The applicant(s) shall grant all necessary easements for installation of electrical and natural/propane gas facilities, including utility easements along existing and future on-site arterial roads. Coordination with PG&E and/or alternative providers shall occur, and any required agreements shall be established prior to recordation of a final subdivision map.
- ▶ **Mitigation Measure 3.14.7b:** Implement Mitigation Measure 3.3.2 as set forth in Section 3.3 of the Friant Ranch EIR.

The Friant Ranch EIR concluded that implementation of these mitigation measures would reduce the impact on utility and service systems to a less-than-significant level.

## CONSISTENCY EVALUATION

- a) As analyzed in the Friant Ranch EIR, the project would have an adequate system of water conveyance and storage and would not result in a significant impact to existing water conveyance and storage facilities. With implementation of the mitigation measures included in Chapters 3.1, 3.2, 3.3, 3.4, 3.5 and 3.6 of the Friant Ranch Draft EIR to off-set impacts resulting from construction of infrastructure systems, the impact on water



facilities was determined to be less than significant. As described in the introduction to this checklist, no changes to the project description have occurred since the project was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to water facilities.

The Friant Ranch EIR determined that the incorporation of LID principles into the project design and the implementation of the Friant Ranch Specific Plan policies related to stormwater management would ensure that the project would have a less-than-significant impact on stormwater drainage capacity and facilities. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to stormwater management.

As determined in the Friant Ranch EIR, the project would require extending existing electrical and natural gas facilities to support the demands of project development. Mitigation Measure 3.14.7a and 3.14.7b would be implemented to reduce the impact of utility installation. This impact was concluded to be less than significant after mitigation in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Mitigation Measures 3.14.7a and 3.14.7b would continue to apply to the project (Alternative 3) and would ensure that adequate electricity and natural gas services are provided to meet project demands. Therefore, no additional environmental review is needed for the project related to increased electricity and natural gas demand.

- b) The Friant Ranch EIR concluded that sufficient water supplies are available to serve the proposed development, and Mitigation Measure 3.14.1 would require any new development to obtain a water transfer agreement, reducing the impact on water supply to a less-than-significant level after mitigation. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011.

The WSA that was prepared for the Friant Ranch Project and adopted in 2008 evaluated the original proposed project. As described in the introduction to this checklist, at the conclusion of the CEQA process in 2011, the Board of Supervisors approved Alternative 3 (the so-called "Northeast Development Configuration Alternative"), which is the environmentally superior alternative. Compared with the originally proposed project, Alternative 3 reduces the amount of developed acreage (from 942 acres to 460 acres) and reduces the number of residential units proposed by nearly 500 units, thereby reducing the project's water demand by 38 percent. Provost & Pritchard prepared an updated WSA memorandum in 2022 to update the water conditions that have occurred since adoption of the 2008 WSA, including review of the available water supplies, revision of estimated project demands, and determination of the adequacy of the available water supplies to meet the project's demand (Provost & Pritchard 2022); this memorandum is included as Appendix B of this checklist. The Updated WSA explains that an initial Transfer Agreement was executed in 2011, resulting in a secure water supply of 2,000 acre-feet per year. An amended Transfer Agreement was executed in 2016. The amended Transfer Agreement secures a reliable multi-year surface water supply including, 2,000 acre-feet per year with a carryover potential of up to 4,000 acre-feet per year in Millerton Lake. The Updated WSA concludes that the available surface water supply of 2,000 acre-feet per year is more than adequate to meet the annual projected project demand of 916 acre-feet per year (Provost & Pritchard 2022). In addition, the amended Transfer Agreement secures a multi-year surface water supply due to the carryover potential of up to 4,000 acre-feet per year. The Updated WSA concludes that this additional water supply reliability is sufficient to meet project demand during a multi-year drought scenario (Provost & Pritchard 2022).

Mitigation Measure 3.14.1 would continue to apply to the project and would require a water transfer agreement to serve the proposed development. As described above, an initial Transfer Agreement was

executed in 2011, resulting in a secure water supply of 2,000 acre-feet per year. An amended Transfer Agreement was executed in 2016, resulting in a reliable multi-year surface water supply including, 2,000 acre-feet per year with a carryover potential of up to 4,000 acre-feet per year in Millerton Lake. Therefore, there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to water supply.

- c) The Friant Ranch EIR concluded that the proposed WWTP would provide the wastewater treatment capacity needed to accommodate the future and existing uses within the adjacent community of Friant. In addition to the development of the WWTP, Mitigation Measures 3.14.3a through 3.14.3g would ensure that the project would have a less-than-significant impact after mitigation on wastewater treatment capacity because a new WWTP would be required to be constructed to serve the project. This impact was concluded to be less than significant after mitigation in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. As noted in the introduction to this checklist, Conditional Use Permit 3415, which allowed the construction of a tertiary-level wastewater treatment facility at 16356 N. Friant Road to serve the Friant Ranch Project and the greater Friant community, was approved by the County in 2014, but has not been permitted or constructed as of January 2023. The WWTP would ensure that the project meets the wastewater treatment capacity requirements of the RWQCB and incorporates an aerated biological process known as a Membrane Bioreactor to achieve tertiary-quality effluent, meeting State Water Quality Standards (Title 22) for unrestricted use. Mitigation Measures 3.14.3a through 3.14.3g would continue to apply to the project and would require specific actions to limit impacts to wastewater treatment capacity by, among other measures, constructing a new WWTP to serve the project. Therefore, no additional environmental review is needed for the project (Alternative 3) related to waste water treatment capacity.

The Friant Ranch EIR also determined that because the proposed wastewater infrastructure improvements would be in compliance with the requirements of the RWQCB, the impact on water facilities would be less than significant. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to compliance with the policies of the RWQCB.

- d) As determined in the Friant Ranch EIR, the majority of the project's solid waste would be disposed of at the American Avenue Landfill. The American Avenue Landfill has a maximum permitted capacity of 32,700,000 cubic yards and a remaining capacity of 29,358,535 cubic yards, with an estimated closure date of August 31, 2031. The maximum permitted throughput is 2,200 tons per day (CalRecycle n.d.). Following the closure of the American Avenue Landfill in 2031, the Friant Ranch EIR noted that the Friant Community Plan area would most likely be served by a new landfill, and the disposal of biosolids generated by the WWTP in Friant Ranch would comply with regulations contained in EPA 40 CFR 503. The impact on solid waste facilities was determined to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project was approved in February 2011. According to the Fresno County Department of Public Works and Planning, the current (as of January 2023) anticipated closure date for the American Avenue Landfill is October 16, 2037 (Flores-Becker, pers. comm., 2023). Further, the County anticipates that this closure date will be extended because the County plans to expand the existing footprint of the landfill. Expansion of the landfill will require environmental review under CEQA, which will be initiated in the next 12 months. Because the landfill has sufficient permitted capacity to serve the project until October 16, 2037 and the County plans to expand the landfill footprint, and thus, capacity thereafter, there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project (Alternative 3) related to solid waste facilities.

- e) The Friant Ranch EIR determined that the project would have a less-than-significant impact related to conflicts with federal, state, and local solid waste regulations because the existing American Avenue Landfill along with the future landfill developed to serve the project would be regulated by the Fresno County Environmental Health Department in compliance with federal, state, and local regulations. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Mitigation Measures 3.14.6a and 3.14.6b would continue to apply to the project and would require on-site separation of construction debris and implementation of a source-separated green waste program. Therefore, no additional environmental review is needed for the project related to compliance with federal, state, and local solid waste regulations.

## XX. WILDFIRE

Wildfire was not addressed in the Friant Ranch EIR as a separate environmental issue area because such a wildfire analysis was not required at that time. Changes to Appendix G of the State CEQA Guidelines were adopted in December 2018 and wildfire was added as a new resource to be evaluated in CEQA documents. The following analysis describes the potential impacts of the project related to wildfire and wildfire-related risks.

Environmental Issue	Where were impacts analyzed previously?	Do proposed changes/new circumstances/ new information result in new significant/ substantially more severe impacts?	Is there substantial new information requiring new analysis or verification?	Do mitigation measures from prior documents resolve significant impacts?
<p>Is the project located in or near state responsibility areas or lands classified as high fire hazard severity zones?</p> <p>If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:</p>				
<p>a) Substantially impair an adopted emergency response plan or emergency evacuation plan?</p>	DEIR Impact 3.7.6	No	No	Yes
<p>b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?</p>	DEIR Impact 3.7.7	No	No	N/A
<p>c) Require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?</p>	Not evaluated	No	No	N/A
<p>d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?</p>	DEIR Impact 3.7.7	No	No	Yes

## Summary of EIR Analysis

This topic is addressed in Section 3.7, “Hazards and Hazardous Materials,” of the Friant Ranch Draft EIR. The regulatory and physical settings are described in Sections 3.7.1 and 3.7.2, respectively, of the Draft EIR.

## IMPACT ANALYSIS

Impacts from development of the Friant Ranch Project are evaluated in the Friant Ranch Draft EIR (pages 3-187 through 3-189) and are summarized below.

- ▶ **Impact 3.7.6: Emergency Preparedness.** Fresno County Office of Emergency Services (OES) coordinates the development and maintenance of the Fresno County Operational Area Master Emergency Services Plan. This

plan serves as a guide for the County's response to emergencies/disasters in the unincorporated areas of the County. Without some assurance of additional funds for fire protection and law enforcement in the Project Area, the Friant Ranch Specific Plan could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. However, mitigation measures are identified that require establishment of a Community Facilities District to provide funding for additional fire protection services in the Project Area sufficient to satisfy the standards set forth in the Fresno County Health and Safety Element. This impact would be **less than significant after mitigation**.

- ▶ **Impact 3.7.7: Wildland Fires.** Wildland fire is a potential threat within the project vicinity. Further, the close proximity of open space areas could affect the project's potential to expose people or structures to harm from wildland fires. Adherence to existing County standards and policies and Project design guidelines and standards, and implementation of Mitigation Measure 3.7.6a would minimize the exposure of people and structures to loss, injury, or death involving wildland fires. This impact would be **less than significant**.

### Friant Community Plan Update and Friant Ranch Specific Plan Policy Requirements

The Friant Ranch EIR does not list any proposed policies of the Friant Community Plan Update or the Friant Ranch Specific Plan that are applicable to emergency preparedness or wildfire.

### Mitigation Measures

The following mitigation measures were identified in the Friant Ranch EIR:

- ▶ **Mitigation Measure 3.7.6a:** Prior to issuance of a building permit for construction within the Friant Ranch Specific Plan Area, a Community Facilities District shall be formed to provide funding for additional fire protection services in the Project Area sufficient to satisfy the standards set forth in the Fresno County Health and Safety Element.
- ▶ **Mitigation Measure 3.7.6b:** Prior to issuance of a building permit for construction within the Friant Ranch Specific Plan Area, a CFD will be established to provide the funding necessary to maintain adequate law enforcement staffing and facilities to serve the Friant Ranch Specific Plan Area consistent with the standards set forth in the Fresno County General Plan policy PF-G.2 and PF-G.4. The CFD shall be structured to provide initial capital contribution through a per-unit fee and thereafter impose a special tax assessment within the CFD boundaries to fund ongoing operations and maintenance.

The Friant Ranch EIR concluded that implementation of these mitigation measures would reduce emergency preparedness impacts to a less-than-significant level.

## CONSISTENCY EVALUATION

The project (Alternative 3) is located in a state responsibility area (SRA) in a moderate fire hazard severity zone (FHSZ) based on mapping by the California Department of Forestry and Fire Protection (CAL FIRE 2022).

- a) As described in the Friant Ranch EIR, the Fresno County OES coordinates the development and maintenance of the Fresno County Operational Area Master Emergency Services Plan. This plan serves as a guide for the County's response to emergencies/disasters in the unincorporated areas of the County. Without some assurance of additional funds for fire protection and law enforcement in the Project Area, the Friant Ranch Specific Plan could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. However, mitigation measures are identified that require establishment of a Community Facilities District to provide funding for additional fire protection services in the Project Area sufficient to satisfy the standards set forth in the Fresno County Health and Safety Element. This impact was concluded to be less than significant after mitigation in the Friant Ranch EIR.

As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe

impacts. Mitigation Measures 3.7.6a and 3.7.6b would continue to apply to the project and would require establishment of a Community Facilities District to provide funding for additional fire protection services in the Project Area sufficient to satisfy the standards set forth in the Fresno County Health and Safety Element.

All Friant Ranch policy requirements pertaining to emergency preparedness would remain applicable. In addition, all development within the project area is subject to review and approval by Fresno County. Therefore, no additional environmental review is needed for the project related to emergency preparedness.

- b-d)** As described in the Friant Ranch EIR, wildland fire is a potential threat within the project vicinity. Further, the close proximity of open space areas could affect the project's potential to expose people or structures to harm from wildland fires. Adherence to existing County standards and policies and Project design guidelines and standards, and implementation of Mitigation Measure 3.7.6a would minimize the exposure of people and structures to loss, injury, or death involving wildland fires. This impact was concluded to be less than significant in the Friant Ranch EIR. As described in the introduction to this checklist, no changes to the project description have occurred since the project (Alternative 3) was approved in February 2011 and there have been no changed circumstances that would change the conclusions of the Friant Ranch EIR or result in new or substantially more severe impacts. Therefore, no additional environmental review is needed for the project related to wildfire hazards.

## 2 REFERENCES

- California Department of Fish and Wildlife. 2019 (April). *California Natural Community Conservation Plans*. Available: <https://wildlife.ca.gov/Conservation/Planning/NCCP>. Accessed February 2022.
- . 2022. California Natural Diversity Database, Rarefind 5. Commercial Version dated April 1, 2022. An online subscription database application for the use of the California Department of Fish and Wildlife's Natural Diversity Database. California Natural Heritage Division, California Department of Fish and Wildlife, Sacramento, CA. Accessed June 7, 2022.
- California Department of Forestry and Fire Protection. 2022 (November 21). Fire Hazard Severity Zones in State Responsibility Area. Available: <https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildfire-preparedness/fire-hazard-severity-zones/>. Accessed December 19, 2022.
- California Department of Resources Recycling and Recovery. n.d. *SWIS Facility/Site Activity Details American Avenue Disposal Site (10-AA-0009)*. Available: <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4535?siteID=352>. Accessed September 29, 2021.
- California Department of Toxic Substances Control. 2021. *EnviroStor*. Available: <https://www.envirostor.dtsc.ca.gov/public/>. Accessed February 1, 2022.
- CAL FIRE. See California Department of Forestry and Fire Protection.
- CalRecycle. See California Department of Resources Recycling and Recovery.
- Central Valley Regional Water Quality Control Board. 2018a. *Water Quality Control Plan for the Tulare Lake Basin, Third Edition*. Revised May 2018 (with Approved Amendments). Available: [https://www.waterboards.ca.gov/centralvalley/water\\_issues/basin\\_plans/tlbp\\_201805.pdf](https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/tlbp_201805.pdf). Accessed June 2022.
- . 2018b. *The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region, Sacramento River Basin and the San Joaquin River Basin, Fifth Edition*. Revised May 2018 (with Approved Amendments). Available: [https://www.waterboards.ca.gov/centralvalley/water\\_issues/basin\\_plans/sacsjr\\_201805.pdf](https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf). Accessed June 2022.
- CDFW. See California Department of Fish and Wildlife.
- Central Valley RWQCB. See Central Valley Regional Water Quality Control Board.
- CNDDB. See California Natural Diversity Database.
- DTSC. See California Department of Toxic Substances Control.
- Flores-Becker, Amina. Resources Division Manager. Fresno County Department of Public Works and Planning, Resources Division, Fresno, CA. January 10, 2023—email to David Randall of Fresno County regarding anticipated closure date of the American Avenue Landfill and the County's plans for landfill expansion.
- Fresno County. 2022. *General Plan Review and Zoning Ordinance Update*. Available: <https://www.co.fresno.ca.us/departments/public-works-planning/divisions-of-public-works-and-planning/development-services-division/general-plan-review-zoning-ordinance-update>. Accessed February 2022.
- Live Oak Associates. 2009. *Final Biological Evaluation Report and Supplement for the Friant Ranch Specific Plan, Fresno County, California*. Prepared for Friant Ranch, A Limited Partnership, Fresno, CA.
- Provost & Pritchard Consulting Group. 2022 (July 15). *Update to the Previously Compiled Water Supply Assessment for Friant Ranch*. Prepared for Friant Ranch, Limited Partnership.
- State Water Resources Control Board. 2021. *GeoTraker*. Available: <https://geotracker.waterboards.ca.gov/>. Accessed February 1, 2022.

SWRCB. See State Water Resources Control Board.

Williams, P. H., R. W. Thorp, L. L. Richardson, and S. R. Colla. 2014. *Bumble Bees of North America*. Princeton, NJ: Princeton University Press.

Xerces Society. 2018. A Petition to the State of California Fish and Game Commission to List the Crotch Bumble Bee (*Bombus crotchii*), Franklin's Bumble Bee (*Bombus franklini*), Suckley Cuckoo Bumble Bee (*Bombus suckleyi*), and Western Bumble Bee (*Bombus occidentalis occidentalis*) as Endangered Under the California Endangered Species Act. Available: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=161902&inline>. Accessed April 14, 2022.



# Appendix A

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## Special-Status Species

To assess whether there are any changed circumstances for biological resources, Ascent biologists conducted a review of special-status species results presented in the *Final Biological Evaluation Report and Supplement for the Friant Ranch Specific Plan* by Live Oak Associates (Live Oak Associates 2009) and a current search of the California Natural Diversity Database (CNDDDB); the results are included in the below tables. The original CNDDDB query used a 3-mile search from the project site. The 2022 CNDDDB search used the current industry standard and California Department of Fish and Wildlife's (CDFW) recommended 9-quadrant search for the CNDDDB and California Native Plant Society (CNPS) electronic database queries. Given this larger search area, additional species were identified in the 2022 results as compared with the original results. Additionally, since the initial site surveys in 1998, 2006, and 2007, some species have changed names, status have changed, and new observations have been added. The updated special-status species tables included in Appendix A to this Environmental Checklist include a column indicating whether the species was analyzed in the Friant Ranch EIR and, if it was not analyzed previously, a brief discussion is provided regarding whether there is suitable habitat present.

### Special-Status Plants Known to Occur in the Project Region and their Potential to Occur in the Project Site

Name	Federal Status <sup>1</sup>	State Status <sup>1</sup>	CRPR <sup>1</sup>	Habitat	Analyzed in 2009 DEIR? <sup>2</sup>
Hoover's calycadenia <i>Calycadenia hooveri</i>	–	–	1B.3	Cismontane woodland, valley and foothill grassland. On exposed, rocky, barren soil. 230–853 feet in elevation. Blooms July–September. Annual.	Yes
Tree-anemone <i>Carpenteria californica</i>	–	ST	1B.2	Cismontane woodland, chaparral. A very localized endemic found on well-drained granitic soils, mostly in north-facing ravines and drainages. 1099–4413 feet in elevation. Blooms (April), May–July. Perennial.	Yes
Succulent owl's-clover <i>Castilleja campestris</i> var. <i>succulenta</i>	FT	SE	1B.2	Vernal pools, wetland. Moist places, often in acidic soils. 66–2313 feet in elevation. Blooms (March), April–May. Annual.	Yes
California jewelflower <i>Caulanthus californicus</i>	FE	SE	1B.1	Chenopod scrub, valley and foothill grassland, pinyon and juniper woodland. Sandy soils. 213–6102 feet in elevation. Blooms February–May. Annual.	Yes
Hoover's cryptantha <i>Cryptantha hooveri</i>	–	–	1A	Valley and foothill grassland, inland dunes. In coarse sand. 30–492 feet in elevation. Blooms April–May. Annual.	No. Although elevation and grassland habitat suitable to this species are present, the nearest observation is 5.5 miles north, and this plant is presumed extinct. Even so, this species will be considered in the Environmental Checklist for the Friant Ranch Community Plan Update and Friant Ranch Specific Plan Project.
Dwarf downingia <i>Downingia pusilla</i>	–	–	2B.2	Valley and foothill grassland, vernal pools. 5 – 1,460 feet in elevation. Blooms March–May.	Yes
Spiny-sealed button-celery <i>Eryngium spinosepalum</i>	–	–	1B.2	Wetland. Vernal pools, valley and foothill grassland. Some sites on clay soil of granitic origin; vernal pools, within grassland. 262–837 feet in elevation. Blooms April–June. Annual/Perennial.	Yes

Name	Federal Status <sup>1</sup>	State Status <sup>1</sup>	CRPR <sup>1</sup>	Habitat	Analyzed in 2009 DEIR? <sup>2</sup>
Kings River monkeyflower <i>Erythranthe acutidens</i>	–	–	3	Cismontane woodland, lower montane coniferous forest. Moist places. 1001–4003 feet in elevation. Blooms April–July. Annual.	Yes (under <i>Mimulus acutides</i> )
Boggs Lake hedge-hyssop <i>Gratiola heterosepala</i>	–	SE	1B.2	Wetland. Marshes and swamps (freshwater), vernal pools. Clay soils; usually in vernal pools, sometimes on lake margins. 33–7792 feet in elevation. Blooms April–August. Annual.	Yes
California satintail <i>Imperata brevifolia</i>	–	–	2B.1	Wetland. Coastal scrub, chaparral, riparian scrub, mojavean desert scrub, meadows and seeps (alkali), riparian scrub. Mesic sites, alkali seeps, riparian areas. 10–4905 feet in elevation. Blooms September–May. Geophyte.	Yes
Forked hare-leaf <i>Lagophylla dichotoma</i>	–	–	1B.1	Cismontane woodland, valley and foothill grassland. Sometimes clay. 623–1099 feet in elevation. Blooms April–May. Annual.	No. Although the project site is within the elevational range of species and grassland habitat is present, the nearest observation is 14.9 miles but within the typical 9-quad CNPS search. It is likely that this species would have been observed during all the floristic surveys previously conducted at the site. Even so, this species will be considered in the Environmental Checklist for the Friant Ranch Community Plan Update and Friant Ranch Specific Plan Project.
Madera leptosiphon <i>Leptosiphon serrulatus</i>	–	–	1B.2	Cismontane woodland, lower montane coniferous forest. Dry slopes; often on decomposed granite in woodland. 984–4265 feet in elevation. Blooms April–May. Annual.	Yes
Orange lupine <i>Lupinus citrinus</i> var. <i>citrinus</i>	–	–	1B.2	Chaparral, cismontane woodland, lower montane coniferous forest. Rocky, decomposed granitic outcrops, usually open areas, on flat to rolling terrain. 1969–5577 feet in elevation. Blooms April–July. Annual.	Yes
Pincushion navarretia <i>Navarretia myersii</i> ssp. <i>myersii</i>	–	–	1B.1	Vernal pools, wetland. Clay soils within non-native grassland. 148–328 feet in elevation. Blooms April–May. Annual.	No. The project site is within elevational range and vernal pools are present at project site. There are new observation from Madera Co from 2016, so this species would have not shown up on 2009 analysis. This species will therefore be considered in the Environmental Checklist for the Friant Ranch Community Plan Update and Friant Ranch Specific Plan Project.

Name	Federal Status <sup>1</sup>	State Status <sup>1</sup>	CRPR <sup>1</sup>	Habitat	Analyzed in 2009 DEIR? <sup>2</sup>
San Joaquin Valley Orcutt grass <i>Orcuttia inaequalis</i>	FT	SE	1B.1	Vernal pools, wetland. 33–2477 feet in elevation. Blooms April–September. Annual.	Yes
Hairy Orcutt grass <i>Orcuttia pilosa</i>	FE	SE	1B.1	Vernal pools, wetland. 148–656 feet in elevation. Blooms May–September. Annual.	Yes
Arizona pholistoma <i>Pholistoma auritum</i> var. <i>arizonicum</i>	–	–	2B.3	Mojavean desert scrub. 902–2740 feet in elevation. Blooms March. Annual.	No, as habitat likely is not present on the project site, which is outside the species' elevational range. CNPS has an occurrence within Millerton Lake East. This species need not be considered further.
Hartweg's golden sunburst <i>Pseudobahia bahiifolia</i>	FE	SE	1B.1	Valley and foothill grassland, cismontane woodland. Clay soils, often acidic. Predominantly on the northern slopes of knolls, but also along shady creeks or near vernal pools. 197–558 feet in elevation. Blooms March–April. Annual.	Yes
San Joaquin adobe sunburst <i>Pseudobahia peirsonii</i>	FT	SE	1B.1	Valley and foothill grassland, cismontane woodland. Grassy valley floors and rolling foothills in heavy clay soil. 377–2608 feet in elevation. Blooms February–April. Annual.	Yes
Sanford's arrowhead <i>Sagittaria sanfordii</i>	–	–	1B.2	Wetland. Marshes and swamps. In standing or slow-moving freshwater ponds, marshes, and ditches. 0–2133 feet in elevation. Blooms May–October (November). Geophyte.	Yes
Greene's tuctoria <i>Tuctoria greenei</i>	FE	SR	1B.1	Vernal pools, wetland. Vernal pools in open grasslands. 82–4347 feet in elevation. Blooms May–July (September). Annual.	Yes

Notes: CRPR = California Rare Plant Rank; CNDDDB = California Natural Diversity Database

## <sup>1&2</sup> Legal Status Definitions

Federal:

FE Endangered (legally protected)

FT Threatened (legally protected)

State:

SE Endangered (legally protected)

CE Candidate Endangered

California Rare Plant Ranks:

1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA)

2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA)

Threat Ranks:

0.1 Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)

0.2 Moderately threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat)

0.3 Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

## <sup>2</sup> Potential for Occurrence Definitions

Not expected to occur: Species is unlikely to be present within the project area due to poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.

May occur: Suitable habitat is available within the project area; however, there are little to no other indicators that the species might be present.

Likely to occur: All of the species life history requirements can be met by habitat present on the site, and populations/occurrences are known to occur in the immediate vicinity.

Sources: CNDDDB 2022; CNPS 2022; USFWS 2022.

### Special-Status Wildlife Known to Occur in the Project Region and their Potential to Occur on the Project Site

Name	Federal Status <sup>1</sup>	State Status <sup>1</sup>	Habitat	Analyzed in 2009 DEIR? <sup>2</sup>
<b>Invertebrates</b>				
Crotch bumble bee <i>Bombus crotchii</i>	–	CE,	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	No. This species was listed as CE in 2018. Although that determination was challenged in court, the challenge was recently rejected in <i>Almond Alliance of California v. Fish and Game Commission</i> (May 31, 2022) 79 Cal.App.5th 337. This species will therefore be considered in the Environmental Checklist for the Friant Ranch Community Plan Update and Friant Ranch Specific Plan Project.
Conservancy fairy shrimp <i>Branchinecta conservatio</i>	FE	–	Valley and foothill grassland, vernal pool, wetland. Endemic to the grasslands of the northern two-thirds of the Central Valley; found in large, turbid pools. Inhabit astatic pools located in swales formed by old, braided alluvium; filled by winter/spring rains, last until June.	Yes
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT	–	Valley and foothill grassland, vernal pool, wetland. Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	Yes
Monarch - California overwintering population <i>Danaus plexippus</i> pop. 1	FC	–	Closed-cone coniferous forest. Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	No. Winter roosts likely are not present on the project site based on latest info from Xerces, which indicates that they typically overwinter within 1.5 miles from the coast. This species need not be considered further.
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT	–	Riparian scrub. Occurs only in the Central Valley of California, in association with blue elderberry ( <i>Sambucus nigra</i> ssp. <i>caerulea</i> ). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	Yes
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	FE	–	Valley and foothill grassland, vernal pool, wetland. Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.	Yes

Name	Federal Status <sup>1</sup>	State Status <sup>1</sup>	Habitat	Analyzed in 2009 DEIR? <sup>2</sup>
<b>Fish</b>				
Delta smelt <i>Hypomesus transpacificus</i>	FT	SE	Aquatic, estuary. Sacramento-San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay. Seldom found at salinities > 10 ppt. Most often at salinities < 2ppt.	No. The project site is outside of current know distribution of species, which is limited to the Sacramento-San Joaquin Delta. This species need not be considered further.
Hardhead <i>Mylopharodon conocephalus</i>	-	SSC	Klamath/North coast flowing waters, Sacramento/San Joaquin flowing waters. Low to mid-elevation streams in the Sacramento-San Joaquin drainage. Also present in the Russian River. Clear, deep pools with sand-gravel-boulder bottoms and slow water velocity. Not found where exotic centrarchids predominate.	Yes
Kern Brook lamprey	-	SSC	San Joaquin River system and Kern River. Gravel-bottomed areas for spawning and muddy-bottomed areas where ammocoetes can burrow and feed.	Yes, but not on 2022 CNDDDB results. This species need not be considered further.
Central Valley steelhead	FT	-	Sacramento/San Joaquin flowing waters. Populations in the Sacramento and San Joaquin rivers and their tributaries.	Yes, but not on 2022 CNDDDB results. This species need not be considered further.
Chinook salmon spring-run	FT	ST	Adult numbers depend on pool depth and volume, amount of cover, and proximity to gravel. Water temps >27 C are lethal to adults. Federal listing refers to populations spawning in Sacramento River and tributaries.	Yes, but not on 2022 CNDDDB results. This species need not be considered further.
Chinook salmon fall-run	-	SSC	Sacramento/San Joaquin flowing waters. Populations spawning in the Sacramento and San Joaquin rivers and their tributaries.	Yes, but not on 2022 CNDDDB results. This species need not be considered further.
<b>Amphibians</b>				
California tiger salamander <i>Ambystoma californiense</i>	FT	ST	Cismontane woodland, meadow and seep, riparian woodland, valley and foothill grassland, vernal pool, and wetlands. Central Valley DPS federally listed as threatened. Santa Barbara and Sonoma counties DPS federally listed as endangered. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	Yes
Foothill yellow-legged frog <i>Rana boylei</i>	-	SE	Aquatic, chaparral, cismontane woodland, coastal scrub, Klamath/north coast flowing waters, lower montane coniferous forest, meadow and seep, riparian forest, riparian woodland, and Sacramento/San Joaquin flowing waters. Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg-laying. Need at least 15 weeks to attain metamorphosis. Endangered: Southern Sierra, Central Coast, South Coast. Threatened: Feather River, Northern Sierra. North Coast: Not Listed.	No. This species was recent listed as State Endangered, but could have been analyzed as SSC in 2009. They are known from SJ River upstream of Millerton Lake, but likely not present in and below Millerton Lake due to presence of warm

Name	Federal Status <sup>1</sup>	State Status <sup>1</sup>	Habitat	Analyzed in 2009 DEIR? <sup>2</sup>
				water fish such as, largemouth bass, smallmouth bass that prey on tadpole and juveniles. This species need not be considered further.
California red-legged frog <i>Rana draytonii</i>	FT	SSC	Aquatic, artificial flowing waters, artificial standing waters, freshwater marsh, marsh & swamp, riparian forest, riparian scrub, riparian woodland, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, south coast flowing waters. Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Yes
Western spadefoot <i>Spea hammondi</i>	–	SSC	Cismontane woodland, coastal scrub, valley and foothill grassland, vernal pool, and wetlands. Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Yes
<b>Reptiles</b>				
Western pond turtle <i>Actinemys marmorata</i>	–	SSC	Aquatic, artificial flowing waters, Klamath/north coast flowing waters, Klamath/north coast standing waters, marsh and swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing and standing waters. A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6,000 feet elevation. Need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Yes
Northern California legless lizard <i>Anniella pulchra</i>	–	SSC	Chaparral. Coastal dunes. Coastal scrub. Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	No. The project may be at the northeastern limit of the species range. Because this species may be present, survey and monitoring will be required. This species will therefore be considered in the Environmental Checklist for the Friant Ranch Community Plan Update and Friant Ranch Specific Plan Project.
California glossy snake <i>Arizona elegans occidentalis</i>	–	SSC	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular Ranges south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	No. Because the project site is outside of the current known range, this species need not be considered further.



Name	Federal Status <sup>1</sup>	State Status <sup>1</sup>	Habitat	Analyzed in 2009 DEIR? <sup>2</sup>
Blunt-nosed leopard lizard <i>Gambelia sila</i>	FE	SE; FP	Chenopod scrub. Resident of sparsely vegetated alkali and desert scrub habitats, in areas of low topographic relief. Seeks cover in mammal burrows, under shrubs or structures such as fence posts; they do not excavate their own burrows.	Yes
Coast horned lizard <i>Phrynosoma blainvillii</i>	–	SSC	Chaparral, cismontane woodland, coastal bluff scrub, coastal scrub, desert wash, pinyon and juniper woodlands, riparian scrub, riparian woodland, valley and foothill grassland. Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	No. The 2009 Final Draft of the Biological Evaluation included <i>P. coronatum</i> in Appendix B Terrestrial Vertebrate Species that May Occur on the Site. In July 2009, a study recognized 5 phylogeographic groups in the Coast Horned Lizard complex, which include 3 ecologically divergent and morphologically diagnosable species: <i>Phrynosoma coronatum</i> , <i>Phrynosoma cerroense</i> , and <i>Phrynosoma blainvillii</i> (Leaché et al 2009). The project site is within the range of the species and habitat models shows area as being moderately suitable, but if it were present, it would have been observed during surveys conducted at the project site. Even so, this species will be considered in the Environmental Checklist for the Friant Ranch Community Plan Update and Friant Ranch Specific Plan Project.
Giant gartersnake <i>Thamnophis gigas</i>	FT	ST	Marsh and swamp, riparian scrub, wetland. Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals and irrigation ditches. This is the most aquatic of the garter snakes in California.	Yes
<b>Birds</b>				
Tricolored blackbird <i>Agelaius tricolor</i>	–	ST	Freshwater marsh, marsh and swamp, swamp, wetland. Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to	Yes, although the EIR did not require

Name	Federal Status <sup>1</sup>	State Status <sup>1</sup>	Habitat	Analyzed in 2009 DEIR? <sup>2</sup>
			California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	preconstruction surveys for nesting tricolored blackbirds. To address the need for preconstruction surveys, this species will be considered in the Environmental Checklist for the Friant Ranch Community Plan Update and Friant Ranch Specific Plan Project.
Golden eagle <i>Aquila chrysaetos</i>	-	FP	Broadleaved upland forest, cismontane woodland, coastal prairie, Great Basin grassland, Great Basin scrub, lower montane coniferous forest, pinyon and juniper woodlands, upper montane coniferous forest, and valley and foothill grassland. Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Yes
Burrowing owl <i>Athene cunicularia</i>	-	SSC	Coastal prairie, coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, and valley and foothill grassland. Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Yes
Swainson's hawk <i>Buteo swainsoni</i>	-	ST	Great Basin grassland, riparian forest, riparian woodland, valley and foothill grassland. Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Yes
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	FT	SE	Riparian forest. Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Yes
Least Bell's vireo <i>Vireo bellii pusillus</i>	FE	SE	Riparian forest, riparian scrub, riparian woodland. Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2,000 feet. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	No. Historical records from Fresno indicate that the species is now extirpated in the area. But USGS new modeled habitat shows the San Joaquin River riparian area within project site as being suitable for the species (Preston et al 2021). The occurrence along the San Joaquin River from eBird is of a Bell's vireo winter migrant in 2006 (eBird

Name	Federal Status <sup>1</sup>	State Status <sup>1</sup>	Habitat	Analyzed in 2009 DEIR? <sup>2</sup>
				2022). This this species will be considered in the Environmental Checklist for the Friant Ranch Community Plan Update and Friant Ranch Specific Plan Project.
<b>Mammals</b>				
Pallid bat <i>Antrozous pallidus</i>	–	SSC	Inhabits deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Very sensitive to disturbance of hibernation roost sites, which must protect bats from high temperatures, including buildings, caves, or cracks in rocks.	Yes
Fresno kangaroo rat <i>Dipodomys nitratoides exilis</i>	FE	SE	Chenopod scrub. Alkali sink-open grassland habitats in western Fresno County. Bare alkaline clay-based soils subject to seasonal inundation, with more friable soil mounds around shrubs and grasses.	Yes
Spotted bat <i>Euderma maculatum</i>	–	SSC	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Feeds over water and along washes. Feeds almost entirely on moths. Needs rock crevices in cliffs or caves for roosting.	Yes
Western mastiff bat <i>Eumops perotis californicus</i>	–	SSC	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	Yes
Fisher - Southern Sierra Nevada ESU <i>Pekania pennanti</i> pop. 2	FE	ST	Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest.	No. The project site does not appear to include suitable habitat. Further search shows this species as not being present within the quadrant search of CNDDDB though it is included from USFWS list results. This species need not be considered further.
San Joaquin kit fox <i>Vulpes macrotis mutica</i>	FE	ST	Chenopod scrub, valley and foothill grassland. Annual grasslands or grassy open stages with scattered shrubby vegetation. Need loose-textured sandy soils for burrowing, and suitable prey base.	Yes
American badger <i>Taxidea taxus</i>	–	SSC	Alkali marsh, alkali playa, alpine, alpine dwarf scrub, bog a fen, brackish marsh, broadleaved upland forest, chaparral, chenopod scrub, cismontane woodland, closed-cone coniferous forest, coastal bluff scrub, coastal dunes, coastal prairie. Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Yes

General references: Unless otherwise noted all habitat and distribution data provided by CNDDDB.

Note: CNDDDB = California Natural Diversity Database

#### <sup>1</sup> Legal Status Definitions

## Federal:

FE Endangered (legally protected)

FT Threatened (legally protected)

## State:

SE Endangered (legally protected)

CE Candidate Endangered (legally protected)

ST Threatened (legally protected)

FP Fully protected (legally protected)

SSC Species of special concern (no formal protection other than CEQA consideration)

CEQA Species considered special status under CEQA's locally rare statute

**<sup>2</sup> Potential for Occurrence Definitions**

Not expected to occur: Species is unlikely to be present in the plan area due to poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.

May occur: Suitable habitat is available in the plan area; however, there are little to no other indicators that the species might be present.

Likely to occur: All of the species life history requirements can be met by habitat present on the site, and populations/occurrences are known to occur in the immediate vicinity.

Present. Species observed within the study area.

Sources: CNDDDB 2022; USFWS 2022.

## REFERENCES

- California Department of Fish and Wildlife. 2022a. California Natural Diversity Database, Rarefind 5. Commercial Version dated April 1, 2022. An online subscription database application for the use of the California Department of Fish and Wildlife's Natural Diversity Database. California Natural Heritage Division, California Department of Fish and Wildlife, Sacramento, CA. Accessed June 7, 2022.
- . 2022b. California Natural Diversity Database, Rarefind 5. Commercial Version dated April 1, 2022. Coast Horned Lizard Habitat Model for NSNF Connectivity. California Natural Heritage Division, California Department of Fish and Wildlife, Sacramento, CA. Accessed May 11, 2022.
- California Native Plant Society, Rare Plant Program. 2022. Inventory of Rare and Endangered Plants (online edition, v9-01 1.5). California Native Plant Society, Sacramento, CA. Available: <http://www.rareplants.cnps.org>. Accessed April 21, 2022.
- CDFW. See California Department of Fish and Wildlife.
- CNPS. See California Native Plant Society.
- eBird. 2022. eBird: An online database of bird distribution and abundance [web application]. *eBird*, Ithaca, New York. Available: <http://www.ebird.org>. Accessed May 10, 2022.
- Leaché, Adam D., Michelle S. Kooa, Carol L. Spencera, Theodore J. Papenfussa, Robert N. Fisherb and Jimmy A. McGuirea. (2009) July 28. Quantifying ecological, morphological, and genetic variation to delimit species in the coast horned lizard species complex (*Phrynosoma*). *Proceedings of the National Academy of Sciences*. Available: <https://www.pnas.org/doi/full/10.1073/pnas.0906380106>. Accessed May 11, 2022.
- Live Oak Associates. 2009. *Final Biological Evaluation Report and Supplement for the Friant Ranch Specific Plan, Fresno County, California*. Prepared for Friant Ranch, A Limited Partnership, Fresno, CA.
- Preston, K.L., Kus, B.E., and Perkins, E., 2021, Modeling Least Bell's Vireo habitat suitability in current and historic ranges in California: U.S. Geological Survey Open-File Report 2020–1151, 44 p., <https://doi.org/10.3133/ofr20201151>.
- US Fish and Wildlife Service. 2022. Information for Planning and Conservation. Available: <http://ecos.fws.gov/ipac/>. Accessed April 22, 2022.
- USFWS. See US Fish and Wildlife Service.

# **Appendix B**

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Update to Previously Compiled Water  
Supply Assessment for Friant Ranch

# Memorandum

To: Friant Ranch, Limited Partnership C/o Dennis Bacopulos

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From: Brian Ehlers, PE, and Sara Harper, PE CFM

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Subject: Update to Previously Compiled Water Supply Assessment for Friant Ranch

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Date: July 15, 2022

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The purpose of this memorandum is to update the water supply conditions that have occurred since adoption of the 2008 Water Supply Assessment (2008 WSA) for the Friant Ranch Specific Plan Project (Friant Ranch or Project). The 2008 WSA is included in this memorandum as **Attachment 1**. The memorandum prepared under this scope is for use by agencies tasked with review and approval of the planned development and provides documentation of the various recent actions that have either directly or indirectly impacted the calculations identified in the 2008 WSA.

It is not the intention of this memorandum to provide a comprehensive water supply assessment, but rather to summarize the pertinent updated information. Of specific interest is the identification and review of the available water supplies, revision of estimated project demands, and the determination of the adequacy of the available water supplies to meet the mixed-used development demands.

## Executive Summary

The Project, including the 2008 WSA were initially submitted to and approved by the County of Fresno (County) in 2011. Since then, the Project has experienced legal challenges and the Project proponents have continued to pursue a secure water supply while defending against these legal challenges, working with Fresno County to address legal flaws in the Project Environmental Impact Report (EIR) as found by the California Supreme Court, and seeking reapproval of the Project. (*Sierra Club et al. v. County of Fresno et al.*, 2018).

The Project as previously approved by the County, and as currently being proposed, is reduced in size compared with the proposed project analyzed in the 2008 WSA. The Project includes 2,500 residential units, consisting of 2,187 age-restricted (55 years of age and older) single-family units, 83 age-restricted (55 years of age and older) multi-family units, and 180 non-age restricted multi-family units. The Project also includes a Village Center on approximately 36.6 acres, comprising 250,000 square feet of retail and commercial uses, along with 50 non-age restricted residential units. Of the total Project area, 482 acres are reserved to open space, with a net of 460 acres to be developed. The Project's estimated water demand is 916 acre-feet per year (163 gallons per day, per person). This represents a 38% reduction in total water demand as compared to the 2008 WSA estimate of 1,471 acre-feet per year (231 gallons per day, per person).

An initial Transfer Agreement was executed in 2011 resulting in a secure water supply of 2,000 acre-feet per year. An amended Transfer Agreement (**Attachment 2**) was executed in 2016. The amended Transfer Agreement secures a reliable multi-year surface water supply including

2,000 acre-feet per year with a carryover potential of up to 4,000 acre-feet per year in Millerton Lake. Compared with the initial Transfer Agreement, the amended Transfer Agreement provides greater water supply assurance during dry year periods, including multi-year drought conditions.

The available surface water supply of 2,000 acre-feet per year is more than adequate to meet the annual projected Project demand of 916 acre-feet per year. In addition, the amended Transfer Agreement secures a multi-year surface water supply due to the carryover potential of up to 4,000 acre-feet per year. This additional water supply reliability is sufficient to meet Project demand during a multi-year drought scenario. This conclusion is based on the demands of the Project as it is currently envisioned and on the reliable water supply per the amended Water Transfer Agreement executed in 2016.

## Background

A Water Supply Assessment was completed in 2008 (2008 WSA) evaluating the ability of Fresno County Waterworks District No. 18 (WWD 18) to meet water supply demands associated with the mixed-use Friant Ranch development, in accordance with the requirements of Section 10910, et seq, of the California Water Code. The Project description evaluated in 2008 consisted of a 942-acre Project area located adjacent to the existing community of Friant (depicted by the Fresno County Friant Community Plan boundaries, referred to herein as the “Friant Community,” in northeastern Fresno County, California) as shown in **Figure 1**.

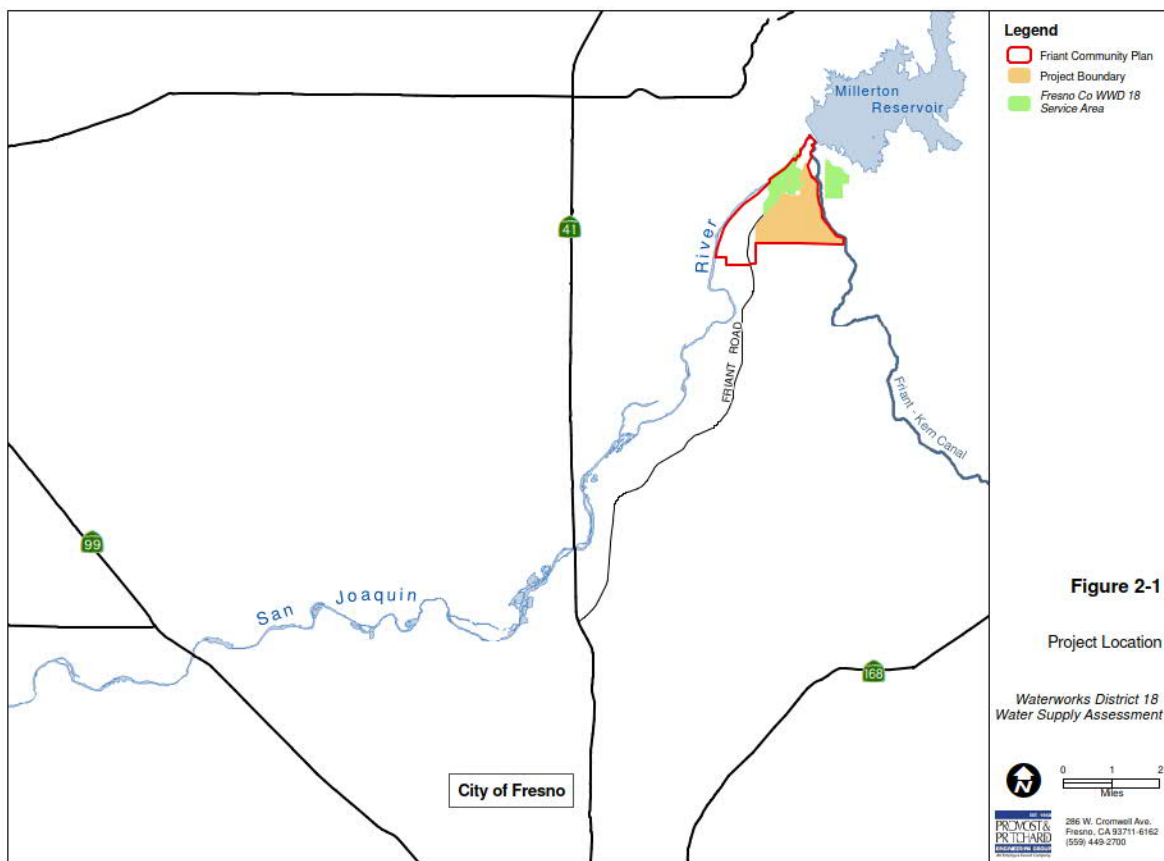


Figure 1. Project Location (Source: 2008 WSA, Figure 2-1)



The proposed Project as analyzed in the 2008 WSA included approximately 2,996 residential units; 2,683 age-restricted (55 years of age and older) single-family units, 83 age-restricted (55 years of age and older) multi-family units, 180 non-age restricted multi-family units, and 50 non-age restricted residential units, as shown in **Figure 2**. The Project also proposed a Village Center on approximately 21 acres, comprising 250,000 square feet of retail and commercial uses. The Project included 120 acres of landscaped areas, including both parks, landscaped vegetated slopes, and non-irrigated open space.

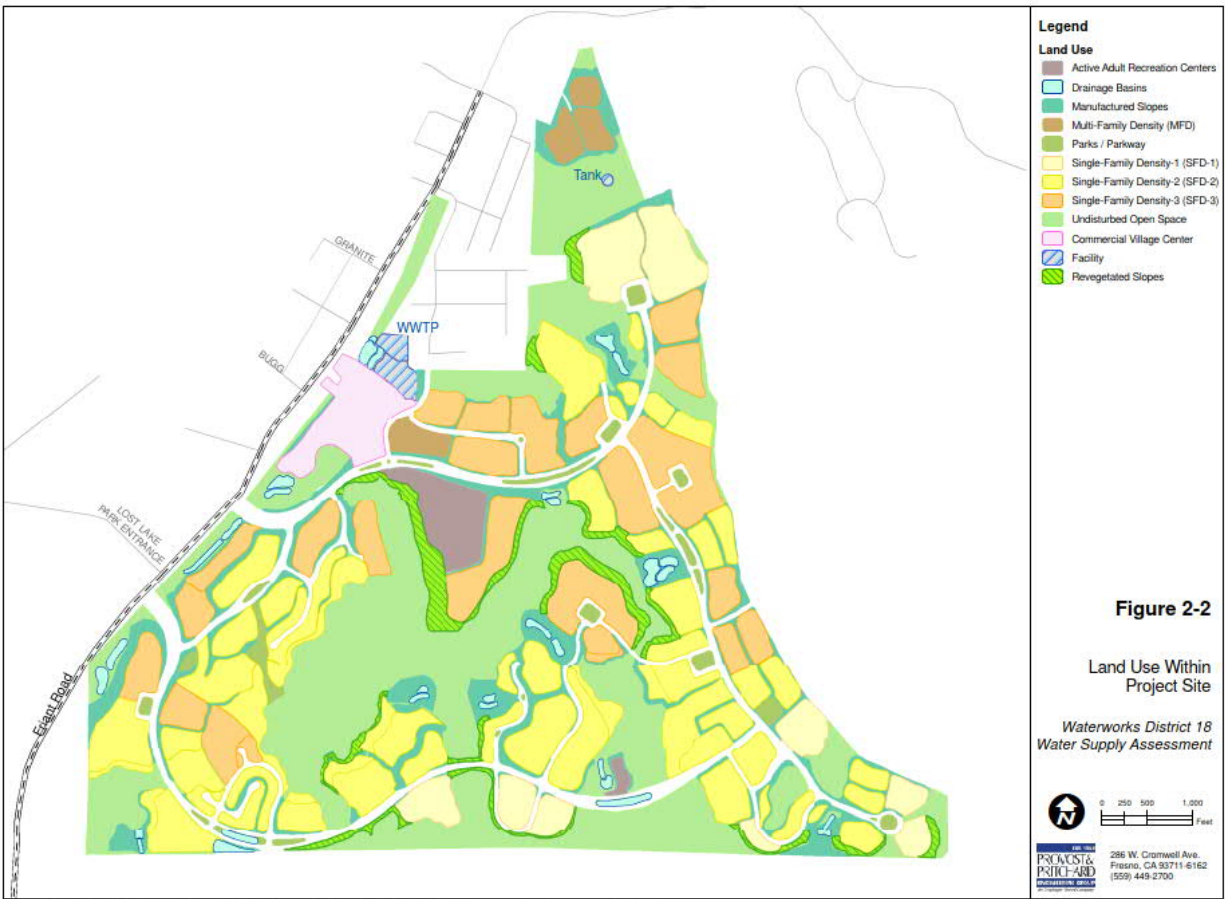


Figure 2. Land Use within Project site (Source: 2008 WSA, Figure 2-2)

The projected population at full build-out for the approved Project was approximately 5,692. Build-out within the combined Friant Community and Project area was projected to include: (1) more than 3,350 housing units with a population more than 6,700 people; and (2) approximately 250,000 square feet of combined commercial and office space. No industrial uses were planned. The projected Project demands determined in the 2008 WSA are provided in **Figure 3** and total 1,471 acre-feet per year (AF/yr).

<b>Customer</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Single Family	-	259	518	777	1036
Multi- Family	-	16	32	48	64
Village Center	-	3	6	9	11
Neighborhood Shopping Center	-	13	26	39	52
Active-Adult Recreational Center (CC)	-	9	18	27	37
Parks and Parkways	-	17	34	51	70
Landscaped Slopes	-	50	100	150	201
<b>Total</b>	<b>0</b>	<b>341</b>	<b>682</b>	<b>1101</b>	<b>1471</b>

Notes:  
 1. Assumes construction begins in 2010.  
 2. Assumed build-out by 2030.

Figure 3. Projected Project Demands AFY (Source: 2008 WSA, Table 8.1.3.)

The 2008 WSA was prepared for the Fresno County Board of Supervisors (Board), in connection with its approval of various entitlements for the Project. In 2011, after certifying the EIR, the Fresno Board opted not to approve all of the alternatives analyzed in the EIR, including the Project as proposed and analyzed in the WSA. Instead, the Board approved what the EIR called "Alternative 3", which proposed only 2,500 housing units and had a smaller development footprint as compared to the Project analyzed in the 2008 WSA. At the same time, the Board updated the Friant Community Plan and approved the Friant Ranch Specific Plan, consistent with the description of Alternative 3 of the EIR.

The EIR was subsequently challenged in court. In 2018, the California Supreme Court held that the EIR was inadequate, insofar as the document failed to adequately connect the air pollutant emissions from the Project with specific health effects. The Superior Court and Court of Appeal subsequently ordered that the Board had to vacate its 2011 approvals and prepare a partially recirculated draft EIR with additional air quality and health analyses. During the litigation, the County and Project proponent successfully defended the water supply analysis in the 2011 EIR. The new EIR, then, is not required to address water supply in addition to air quality and health.

Even so, the Project proponent recognized the benefit of reconsidering and updating the conclusions in the 2008 WSA to reflect (i) the current development scope included within Alternative 3 of the EIR as compared with the original proposed Project as analyzed in the 2008 WSA; (ii) the greater water supply reliability associated with the amended Transfer Agreement; and (iii) current Project water supply and demands reflective of recent legislative updates, current water conservation requirements, and current hydrologic conditions. It is the intention of the Project proponent to submit this Technical Memorandum to the County for its consideration as part of a larger analysis as to whether changes to the Project or changed circumstances since 2011 have resulted in any new significant impacts or any substantial increases in the severity of previously-identified impacts. Upon recertification of the Project EIR as updated, the Board will reconsider its approval of the Project.

## Data Acquisition and Review

The following data and reports were reviewed and analyzed for the purpose of updating the 2008 WSA. These data include but are not limited to water supply, demand, San Joaquin River Restoration Agreement, and climate change. A summary of the specific resources and associated citations are provided below:

- ConSol, Inc. (2015). *Codes and Standards Research Report: California's Residential Indoor Water Use*. Stockton: California Homebuilding Foundation.
- Das, T., Munevar, A., & Van Lienden, B. (2014). *Reclamation Managing Water in the West, Sacramento and San Joaquin Basins Climate Impact Assessment*. Sacramento: United States Department of the Interior, Bureau of Reclamation.
- Provost & Pritchard Consulting Group. (2008). *Water Supply Assessment for Fresno County Waterworks District 18 Friant Ranch Specific Plan*. Fresno: Fresno County Waterworks District 18.
- Provost & Pritchard Consulting Group. (2016). *Restated Water Supply Assessment for the Friant Ranch Specific Plan*. Fresno: Fresno County Waterworks District No. 18.
- Sierra Club et al. v. County of Fresno et al., S219783 (California Supreme Court December 24, 2018).
- Stipulation of Settlement in NRDC vs. Rodgers, et al., CIV S-8-1658 LKK/GGH (United States District Court, Eastern District of California September 13, 2006).

## Legislative Updates

California Water Code Section 10910, et seq, defines a “project” subject to certain water supply planning requirements to include any residential development of more than 500 dwelling units, or one which adds more than 10 percent to the total number of District service connections—or equivalently-large commercial development—where the District has 5,000 or fewer existing connections. For projects meeting these definitions, the water purveyor (in this case, WWD 18) or the County itself must prepare a water supply assessment prior to project approval.

Because a WSA was prepared for the original proposed Project in 2008 and that document was not successfully challenged in court, no new WSA is required for the County’s upcoming reconsideration of the Board’s 2011 approval of Alternative 3 from EIR. Therefore, the County may rely on the 2008 WSA—updated by this Technical Memorandum—which concludes that the proposed water supply for the Project is sufficient to meet its projected water demand, in addition to the existing and planned future uses, including, but not limited to, agricultural and industrial uses.

Legislative updates that have occurred following the 2008 WSA include the following:

- **Assembly Bill (AB) 1668 and Senate Bill (SB) 606** establish new long-term urban water use efficiency standards by June 30, 2022, including components for indoor residential use, outdoor residential use, water losses and other uses. The bills require local water suppliers to calculate and comply with water use objectives, monitor and report on the objectives, incorporate five-year drought risk assessments, and water shortage contingency plans into Urban Water Management Plans (UWMP).

## Project Description

As previously described, the Project has evolved over time, specifically from the Project description evaluated in the 2008 WSA. The Project as approved in 2011 and as currently envisioned, provides for higher-density development on fewer acres, and a reduced unit count. The Project now includes 2,500 residential units, consisting of 2,187 age-restricted (55 years of age and older) single-family units, 83 age-restricted (55 years of age and older) multi-family units, and 180 non-age restricted multi-family units. The Project also includes a Village Center on approximately 36.6 acres, comprising 250,000 square feet of retail and commercial uses, along with 50 non-age restricted residential units. Of the total Project area, 482 acres are reserved to open space, with a net of 460 acres to be developed. **Figure 4** depicts that land use within the Project site evaluated in this memorandum.

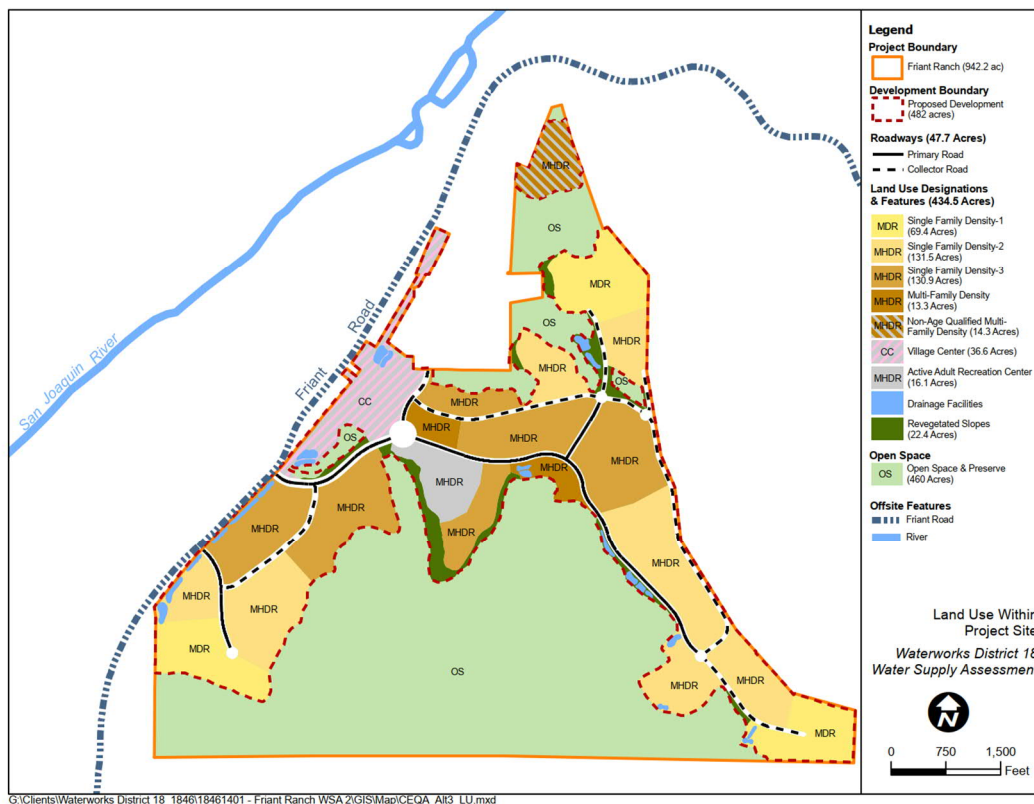


Figure 4. Land use within Project site.

**Table 1** provides a comparison in development scope between the currently envisioned Project and the Project as it was presented in 2008.

Table 1. Comparison of Project analyzed in 2008 WSA and current Project.

	2008 Project	Current Project
<b>Overall Project</b>		
Total Acreage	942	942
Developed Acreage	942	460
Total Residential Units	2,996	2,500
Population	5,692	5,000

	2008 Project	Current Project
<b>Residential Zone</b>		
Age-Restricted Single-Family Units	2,683	2,187
Age-Restricted Multi-Family Units	83	83
Non-Restricted Multi-Family Units	180	180
<b>Non-Residential Zone</b>		
Village Center Acreage	21.3	36.6
Village Center Non-Restricted Multi-Family Units	50	50
Village Center Commercial Square Footage	250,000	250,000
Active Adult Recreation Center Acreage	16.7	16.1
Communal Irrigated Landscaping Acreage	120	85

### Updated Demand Calculation

The demand calculations presented in the 2008 WSA utilize a methodology based on acreage and land use. More recent legislative updates (including SB 606 and AB 1668) encourage demand estimate calculations based on population as they impose limits on indoor residential use. For example, the upcoming per capita limit for planning purposes is 55 gpd/person from 2025 to 2030, and 50 gallons per day per person (gpd/person) beyond 2030. In addition, the Model Water Efficient Landscape Ordinance (MWELO) was adopted by California and places a limit on landscape irrigation water usage. This limit provides a solid basis for estimating outdoor water usage.

The annual Maximum Applied Water Allowance (MAWA) is calculated using the formula:

$$MAWA = (ET_0) (0.62) (ETAF \times LA)$$

Where:

MAWA = Maximum Applied Water Allowance in gal/year

ET<sub>0</sub> for Friant = 51.3 in/yr

Evapotranspiration Adjustment Factor (ETAF) for residential = 0.55

ETAF for non-residential = 0.45

LA = Landscaped area in square feet

An additional consideration when evaluating demand for this Project is that the number of residents per unit in an age-restricted community will be significantly lower than in a non-restricted community. Demand calculations based on land-use type will likely overestimate demand unless a factor is specifically applied to account for the lower population density of an age-restricted development. Therefore, the demand calculations identified below are based on population considerations and MWELO.

The overall Project demand, further described below, is summarized by the following four distinct usage types:

- Indoor residential
- Outdoor residential
- Commercial and recreational areas
- Communal landscaped areas

### Indoor Residential

Indoor residential demand calculations are presented in **Table 2**. Demand calculations are based on the California mandated limit of 55 gpd/person for indoor use which will come into effect in 2025. This estimate is conservative as the mandated limit will drop to 50 gpd/person in 2030.

Table 2. Indoor Residential Demand Based on SB 606 limit of 55 gpd/person.

Unit Type	Unit Count	gpd/ Person	People/ Unit	gpd/ Unit	Indoor Demand (AF/yr)
Age-Restricted Single-Family	2,187	55	1.9 <sup>(1)</sup>	105	256
Age-Restricted Multi-Family	83	55	1.9 <sup>(1)</sup>	105	10
Non-Restricted Multi-Family (includes Village Center units)	230	55	3.2	176	45
<b>Total Indoor Residential Demand</b>	<b>2,500</b>				<b>311</b>

Note (1) – The value reflects for age restricted units which typically result in lower demands.

### Outdoor Residential

Outdoor residential demand calculations are presented in **Table 3**. Calculations are based on the MWELo formula for residential usage. Lot size is assumed to be the largest allowed by the land use type.

Table 3. Outdoor Residential Demand Based on MWELo.

Unit Type	Unit Count	Lot Size (SF)	% Irrigated	Irrigated Area (SF/Unit)	Maximum Applied Water Allowance (MAWA) (gpd /Unit)	Outdoor Demand (AF/yr)
Age-Restricted Single-Family (SFD-1)	290	7,000	51%	3,570	171	56
Age-Restricted Single-Family (SFD-2)	745	5,000	45%	2,250	108	90
Age-Restricted Single-Family (SFD-3)	1,069	4,500	40%	1,800	86	103
Age-Restricted Multi-Family (MFD-AQ)	166	3,600	25%	900	43	8
Non-Restricted Multi-Family (MFD-NAQ)	230	3,600	25%	900	43	11
<b>Total Outdoor Residential Demand</b>	<b>2,500</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>268</b>

### Commercial and Recreational Areas

Demand calculations for the Village Center commercial area and the Active Adult Recreation Area are presented in **Table 4**. Calculations for these areas are based on the City of Clovis 2013 Water Master Plan which lists an annual usage rate for “Neighborhood Commercial” areas of 2.9 AF/Acre, which equates to 2,590 gpd/acre.

Table 4. Commercial and Recreational Demand.

Land Use	Acreage	gpd/acre	AF/yr
Village Center Commercial	36.6	2,590	106
Active Adult Recreation	16.1	2,590	47
<b>Total Commercial/Recreation Demand</b>			<b>153</b>

### Communal Landscaped Areas

The total irrigated landscape area for the project is listed at 85-acres. It is assumed that 12 of these acres are within the Village Center and Active Adult Recreation areas and irrigation demand for these 12-acres is included in the per-acre calculation presented in **Table 4**. The demand for the remaining 73-acres of communally irrigated areas is presented in **Table 5** and is based on the MWELo formula for non-residential areas.

Table 5. Communal Irrigation Demand Based on MWELo.

Land Use	Acreage	Maximum Applied Water Allowance (MAWA) (MG/yr)	AF/yr
Parks and Pathways	50.6	31.5	97
Revegetated Slopes	22.4	14.0	43
<b>Total Communal Irrigation Demand</b>			<b>140</b>

**Table 6** provides a summary of the demands identified in **Table 2** thru **Table 5** and lists total Project demand.

Table 6. Combined total demands.

Use	Demand (AF/yr)
Indoor Residential	311
Outdoor Residential	268
Commercial/Recreation Areas	153
Communal Irrigation	140
Leakage (5% of Demand)	44
<b>Total Project Demand</b>	<b>916</b>

The estimated project demand of 916 AF/yr (163 gpd/person) represents a 38% reduction in total water use as compared to the 2008 WSA estimate of 1,471 AF/yr (231 gpd/person).

### Evaluation of Available Water Supply

As previously described, the evaluation of the available water supply provided below is limited to a review of changes that have occurred following the 2008 WSA. Of specific interest are changes to available Project water supplies pursuant to the amended water Transfer Agreement (amended in 2016), potential water supply effects due to recent/varying hydrologic conditions, and potential water supply impacts from implementation of the San Joaquin River Restoration Settlement Agreement.

## Water Supply Contract

On April 13, 2011, the option and long-term water transfer agreement (referred to herein as Transfer Agreement) between WWD18 and Lower Tule River Irrigation District (LTRID) was executed. This Transfer Agreement provided for the long-term purchase of the right to receive up to 2,000 acre-feet of LTRID Class 1 Water Entitlement<sup>1</sup> from LTRID to WWD 18 in order to provide a safe and reliable long-term water supply for the residents within the proposed Project and within the existing Friant Community.

The source of LTRID water supply includes 61,200 acre-feet of Class 1 Water entitlement from the United States Bureau of Reclamation (USBR) for delivery of water from the Friant Division of the Central Valley Project (CVP). The option and long-term water transfer agreement identified that WWD 18 shall have the right to the available water supply from LTRID for as long as the LTRID has the right to receive Friant Division CVP water. A Letter of Agreement dated May 23, 2014, from the USBR consented to the long-term water transfer between LTRID and WWD 18.

As a result of exceptional drought conditions in 2014, USBR determined, for the first time in the history of the Central Valley Project and again in 2015, that the Friant Division of the Central Valley Project would receive a zero percent allocation of water for the holders of Class 1 Water Entitlement. Therefore, in order to ensure a safe and reliable long-term water supply for the residents within the WWD 18 Service Area, and the Project, the Transfer Agreement was amended in 2016<sup>2</sup> and included additional provisions to protect against multi-year drought conditions including a carryover supply of LTRID water available to satisfy the allocation identified in the Transfer Agreement. The following provides a summary of the amended Transfer Agreement terms and conditions.

### Back-up Water Supply

The amendment to the Transfer Agreement identified the following provisions to secure a back-up water supply for the proposed Project and within the existing Friant Community:

- a) On or before the end of each Water Year, LTRID shall request that the USBR reschedule to the subsequent Water Year an amount of LTRID Class 1 Water Entitlement for that year that is equal to two times the amount of Water Supply that as of that Water Year has been purchased under the Transfer Agreement (“Carryover Water”). The Carryover Water shall be held in Millerton Lake as a supply to meet any of LTRID’s water supply needs for the subsequent water year, including, if necessary WWD 18 demands under the Transfer Agreement.
- b) WWD 18 shall reimburse LTRID the full amount of any rates or charges charged by USBR for rescheduling LTRID water as required by Section a. above. Such reimbursement requirement shall be considered an additional component of the Cost of Water as defined in Section 5.2 of the Transfer Agreement. To the extent the Carryover Water is used by LTRID or used to meet other obligations of LTRID, WWD

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<sup>1</sup> Friant Division contractors’ water supply develops in the Upper San Joaquin River Basin Watershed and is delivered from Millerton Lake through Friant Dam to the Madera Canal and Friant-Kern Canal. The first 800,000 acre-feet of available water supply is considered Class 1; Class 2 is considered the next amount of available water supply up to 1.4 million acre-feet.

<sup>2</sup> On September 21, 2016, the first amendment to the option was executed by the same parties as the Transfer Agreement (i.e., WWD 18, LTRID).



- 18 will be reimbursed for the portion of the USBR rescheduling costs associated with such water
- c) In the event that LTRID is unable to reschedule and deliver Carryover Water pursuant to Section a. above, LTRID will take such further action as is necessary to deliver to WWD 18 the Water Supply that has been purchased by WWD 18. LTRID hereby represents and warrants that it owns or controls various hydrologic resources which can be used to allow it to deliver the Water Supply provided for in the Transfer Agreement in the event of a critical dry year shortfall. Subject to its final determination, LTRID will use its best efforts to cause the Water Supply to be delivered to WWD 18 including, but not limited to, pumping the water generated by its pre-1914 water rights on the Tule River into the Friant Kern Canal so as to meet a portion of its commitments downstream thereby making available Class I Entitlement in Millerton Lake which can be delivered to WWD 18.

### Priority Access to Carryover Water

The amended Transfer Agreement states, “LTRID hereby represents and warrants that the Carryover Water held by LTRID pursuant to Section a. above shall be available to WWD 18 on a first priority basis under the Transfer Agreement. Pursuant to such priority, LTRID may use Carryover Water to satisfy its own water supply demands or to satisfy other contractual obligations, but only after Carryover Water is first used to satisfy obligations under the Transfer Agreement, if necessary.”<sup>3</sup>

### Reaffirmation

The amended Transfer Agreement also reaffirmed each and every term and provision of the prior Transfer Agreement executed in 2011.

Therefore, the amended Transfer Agreement and additional provisions provides a more secure and reliable water supply for the proposed Project and within the existing Friant Community. **Table 7** summarizes the amended Transfer Agreement provisions.

Table 7. Summary of amended Transfer Agreement.

Transfer Agreement	Term
LTRID CVP Class 1 entitlement	61,200 AF/yr
WWD #18 CVP Class 1 entitlement	150 AF/yr
Friant Ranch development	942 acres
Friant Ranch units	2,500 units
Option Agreement	
Length of term	Ongoing in perpetuity
Purchase amount	Up to 2,000 AF per year
Purpose	Safe and Reliable water supply for Friant Ranch residents
Carryover supply	up to 4,000 AF per year
Priority	Quantities shall be available to WWD 18 on a first priority basis

<sup>3</sup> *First Amendment to Option and Long Term Water Transfer Agreement*, Lower Tule River Irrigation District-Fresno County Water Works District No. 18, September 21, 2016.

Additional information regarding the basis of the contracts between WWD 18, LTRID and the US Bureau of Reclamation can be found in the 2008 WSA.

### Change to Hydrologic Conditions

Surface water supplies available to WWD 18 from the Friant Division of the CVP will be used to support the demands within the Friant Community and this Project. The 2008 WSA considered potential limits in available surface water supply as a result of drier hydrology and multi-year drought. **Figure 5** provides the Projected surface supply available for normal, critical dry and multi-dry years in AFY that were identified in the WSA.

Supply	Normal	Critical Dry	Multi-Dry		
			Year 1	Year 2	Year 3
<b>LTRID CVP Class 1</b>	2000	1540	1540	1540	1540
<b>LTRID Pre-1914 Tule River</b>	0	460	460	460	460
<b>WWD 18 Contract</b>	150	37	37	37	37
<b>Total</b>	<b>2150</b>	<b>2037</b>	<b>2037</b>	<b>2037</b>	<b>2037</b>

Notes:  
 1. Multi-dry year scenario for WWD 18 assumes reoccurrence of the critical dry year for three consecutive years, a conservative approach since historic records from 1966 to 2006 indicate that such an event has not occurred.  
 2. Critical dry is a classification assigned to a year that had the least volume of water.  
 3. Multi-dry is a classification that is assigned to a three year period where the cumulative volume for those years is the least.  
 4. The critical dry year data used for this table is for 1977.  
 5. Pre-1914 water from the Tule River is only needed to free up additional CVP Friant Division supplies during critical dry trends of the hydrological cycle.  
 6. This table does not include Reclaimed Water, which is not a surface supply.

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Figure 5. Projected surface supply available for normal, critical dry and multi-dry years in AFY (Source: 2008 WSA).

Following the 2008 WSA, USBR determined, due to exceptional drought conditions in 2014, for the first time in the history of the CVP and again in 2015, that the Friant Division of the CVP would receive a zero percent allocation of water for the holders of Class 1 Water Entitlement.

**Table 8** provides the historical allocations from USBR for the Friant Division of the CVP.

Table 8. Friant Division Central Valley Project Water Supply.

USBR Water Year	% year	CLASS I Actual	CLASS II Actual	USBR Water Year	% year	CLASS I Actual	CLASS II Actual
1966	70.7	100	23	1994	50	80	0
1967	176.1	100	100	1995	218	100	100
1968	47	92	0	1996	124	100	58
1969	220.1	100	100	1997	158	100	60
1970	78.8	100	29	1998	178	100	10
1971	77.2	100	35	1999	150	100	20

USBR Water Year	% year	CLASS I Actual	CLASS II Actual	USBR Water Year	% year	CLASS I Actual	CLASS II Actual
1972	56.6	100	4	2000	103	100	17
1973	111.5	100	77	2001	60	100	5
1974	119.3	100	82	2002	60	100	8
1975	97.8	100	60	2003	73	100	5
1976	34.3	75	0	2004	60	100	8
1977	19.7	25	0	2005	149	100	100
1978	185.3	100	100	2006	182	100	100
1979	99.7	100	63	2007	37	65	0
1980	162	100	100	2008	61	100	5
1981	58.2	100	22	2009	79	77	18
1982	180.7	100	100	2010	110	100	15
1983	252.9	100	100	2011	180	100	20
1984	111.3	100	50	2012	45	50	0
1985	70	100	14	2013	47	62	0
1986	151	100	100	2014	28	0	0
1987	42	91	0	2015	18	0	0
1988	47.1	78	0	2016	71	75	0
1989	52.2	98	0	2017	239	100	71
1990	40	68	0	2018	73	88	0
1991	66	100	0	2019	149	100	0
1992	46	83	0	2020	48	65	0
1993	150	100	90	2021	46	20	0

USBR has historically allowed contractors to carry over unused surface water supplies allocated from a certain year to the following year (referred to as carryover). Although there are conditions<sup>4</sup> on these carryover supplies, the intent is to provide certainty for water contractors that carryover water will be available if dry hydrologic conditions exit the following year, and water supplies are reduced (or the allocations are zero). The 2016 amendment to the Transfer Agreement requires LTRID to carry over (if requested by WWD 18) up to 4,000 AF of water or approximately four years of estimated Project demand in Millerton Reservoir to promote water supply resiliency and protect against dry year conditions and the potential reduced water supply allocation the following year.

### CVP Allocation

As shown in **Table 8**, the CVP Friant Class 1 supplies have been 100% or greater in 37 of the 55 years of record, which equates to approximately 67%. There were four years (1977, 2014, 2015, and 2021) when allocated Class 1 supplies were less than 50%, two of which were consecutive and occurred in 2014 and 2015. Over the period of record, significantly reduced allocations (less

<sup>4</sup> Water supplies carried over from one year to the next is the first water lost in the event of a flood release.

than 50%) only occurred 10% of the time; however, three out of the four significant reductions in allocation occurred in the more recent hydrologic period, following the 2008 WSA.

Recent hydrologic conditions.

For the purposes of this memorandum, the historical unimpaired runoff at Millerton was reviewed (Figure 6).

Water Year <sup>1</sup>	Unimpaired Runoff <sup>2</sup>	SJRRP Water Year Type <sup>3</sup>	Water Year <sup>1</sup>	Unimpaired Runoff <sup>2</sup>	SJRRP Water Year Type <sup>3</sup>	Water Year <sup>1</sup>	Unimpaired Runoff <sup>2</sup>	SJRRP Water Year Type <sup>3</sup>	Water Year <sup>1</sup>	Unimpaired Runoff <sup>2</sup>	SJRRP Water Year Type <sup>3</sup>
1901	3,227.9	Wet	1933	1,111.4	Normal-Dry	1965	2,271.191	Normal-Wet	1997	2,817.670	Wet
1902	1,704.0	Normal-Wet	1934	691.5	Dry	1966	1,298.792	Normal-Dry	1998	3,160.759	Wet
1903	1,727.0	Normal-Wet	1935	1,923.2	Normal-Wet	1967	3,233.097	Wet	1999	1,527.040	Normal-Wet
1904	2,062.0	Normal-Wet	1936	1,853.3	Normal-Wet	1968	861.894	Dry	2000	1,735.653	Normal-Wet
1905	1,795.4	Normal-Wet	1937	2,208.0	Normal-Wet	1969	4,040.864	Wet	2001	1,065.318	Normal-Dry
1906	4,367.8	Wet	1938	3,688.4	Wet	1970	1,445.837	Normal-Dry	2002	1,171.457	Normal-Dry
1907	3,113.9	Wet	1939	920.8	Dry	1971	1,416.812	Normal-Dry	2003	1,449.954	Normal-Dry
1908	1,163.4	Normal-Dry	1940	1,880.6	Normal-Wet	1972	1,039.249	Normal-Dry	2004	1,130.823	Normal-Dry
1909	2,900.7	Wet	1941	2,652.5	Wet	1973	2,047.585	Normal-Wet	2005	2,826.872	Wet
1910	2,041.5	Normal-Wet	1942	2,254.0	Normal-Wet	1974	2,190.308	Normal-Wet	2006	3,180.816	Wet
1911	3,586.0	Wet	1943	2,053.7	Normal-Wet	1975	1,795.922	Normal-Wet	2007	684.333	Dry
1912	1,043.9	Normal-Dry	1944	1,265.4	Normal-Dry	1976	629.234	Critical-High	2008	1,116.790	Normal-Dry
1913	879.4	Dry	1945	2,134.633	Normal-Wet	1977	361.253	Critical-Low	2009	1,455.379	Normal-Wet
1914	2,883.4	Wet	1946	1,727.115	Normal-Wet	1978	3,402.805	Wet	2010	2,028.706	Normal-Wet
1915	1,966.3	Normal-Wet	1947	1,121.564	Normal-Dry	1979	1,829.988	Normal-Wet	2011	3,304.824	Wet
1916	2,760.5	Wet	1948	1,201.390	Normal-Dry	1980	2,973.169	Wet	2012	831.582	Dry
1917	1,936.2	Normal-Wet	1949	1,167.008	Normal-Dry	1981	1,067.757	Normal-Dry	2013	856.626	Dry
1918	1,466.8	Normal-Wet	1950	1,317.457	Normal-Dry	1982	3,317.171	Wet	2014	509.579	Critical-High
1919	1,297.5	Normal-Dry	1951	1,827.254	Normal-Wet	1983	4,643.090	Wet	2015	327.410	Critical-Low
1920	1,322.5	Normal-Dry	1952	2,840.854	Wet	1984	2,042.750	Normal-Wet	2016	1,300.986	Normal-Dry
1921	1,604.4	Normal-Wet	1953	1,226.830	Normal-Dry	1985	1,135.975	Normal-Dry	2017	4,395.400	Wet
1922	2,355.1	Normal-Wet	1954	1,313.993	Normal-Dry	1986	3,031.600	Wet	2018	1,348.979	Normal-Dry
1923	1,654.3	Normal-Wet	1955	1,161.161	Normal-Dry	1987	756.853	Dry	2019	2,734.772	Wet
1924	444.1	Critical-High	1956	2,959.812	Wet	1988	862.124	Dry	2020	886.025	Dry
1925	1,438.7	Normal-Dry	1957	1,326.573	Normal-Dry	1989	939.168	Normal-Dry	2021	521.853	Critical-High
1926	1,161.4	Normal-Dry	1958	2,631.392	Wet	1990	742.824	Dry	2022	Pending	Pending
1927	2,001.3	Normal-Wet	1959	949.456	Normal-Dry	1991	1,027.209	Normal-Dry			
1928	1,153.7	Normal-Dry	1960	826.021	Dry	1992	807.759	Dry			
1929	862.4	Dry	1961	647.428	Critical-High	1993	2,672.322	Wet			
1930	859.1	Dry	1962	1,924.066	Normal-Wet	1994	824.097	Dry			
1931	480.2	Critical-High	1963	1,945.266	Normal-Wet	1995	3,876.370	Wet			
1932	2,047.4	Normal-Wet	1964	922.351	Dry	1996	2,200.707	Normal-Wet			

<sup>1</sup> Water year is from Oct 1 through Sept 30, for example the 2010 water year began Oct 1, 2009. Unimpaired Runoff is based on Reclamation calculations, and hypothetical water year types are shown here; actual Restoration water year types are based on the final allocation, which may sometimes differ slightly from the calculated water year total.

<sup>2</sup> Also known as “Natural River” or “Unimpaired Runoff into Millerton” – This is the total runoff that would flow into Millerton Lake if there were no dams or diversions upstream. There was a lower level of precision prior to 1945. Friant Dam uses 1.9835 conversion from cfs to AF.

<sup>3</sup> The six SJRRP Water Year Types are based on Unimpaired Runoff and are not updated as climatology changes as per the Settlement. Critical-Low= <400 TAF, Critical-High=400-669.999 TAF, Dry= 670-929.999 TAF, Normal-Dry 930-1449.999, Normal-Wet 1450-2500, Wet>2500.

Figure 6. History of unimpaired runoff of Millerton (source: Final 2022 Restoration Allocation & Default Schedule, May 13, 2022, Table C- Water Year Totals in Thousand Acre-feet).

The unimpaired runoff provided in **Figure 6** suggests normal conditions were experienced during the period from 1966 through 2021 with typical variations in hydrology. There was a reduction in precipitation in recent years (2008 through 2021) with an average runoff of 88% as compared to the entire period of record. It is unknown if the more recent period represents a drought condition or if these conditions reflect a new normal due to climate change.

Years 1924 through 1934 are the driest hydrologic period on record, even as compared to the drier hydrology experienced in recent years. The next driest period on record is 2007 through 2021 which shows a 14% reduction in runoff compared to the entire period of record.

Although overall, the 1924 through 1934 dry hydrology was more severe on average, the “critical-high” and “critical-low” year designation in the most recent period were more severe from year to year. The multi-year dry and critical (both critical-high and critical-low) designations during 2012 through 2015 and 2020 through 2021 (and currently experienced in 2022) may indicate more severe annual reductions in unimpaired runoff going forward. These more recent drought conditions also may suggest a need to secure water supplies to account for prolonged periods (multi-year) drought conditions.

### Effects of San Joaquin River Settlement Agreement

In 2006, a historic settlement agreement<sup>5</sup> (referred to herein as SJRSA, or Settlement Agreement) between the National Resources Defense Council (NRDC) and USBR was reached with two primary goals: 1) restore and maintain fish populations in “good condition” in the main stem San Joaquin River below Friant Dam to the confluence of the Merced River, and 2) reduce or avoid adverse water supply impacts on all the Friant division of the CVP long-term contractors that may result from the interim and restoration flows provided for in the settlement.

To achieve the restoration goal, the Settlement Agreement requires the USBR to release specified amounts of water into the San Joaquin River from Friant Dam (“Restoration Flows”) based upon the water runoff forecast for each year. The Settlement Agreement flow schedule, by water year type, is provided in **Figure 7**. The agreement requires additional flow to the river in year types in all but the critical low water year type. **Figure 8** provides a map of the USBR CVP holding contracts from the Friant Dam to Gravelly Ford Weir.

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<sup>5</sup> Stipulation of Settlement in NRDC vs. Rodgers, et al., CIV S-8-1658 LKK/GGH (United States District Court, Eastern District of California September 13, 2006).

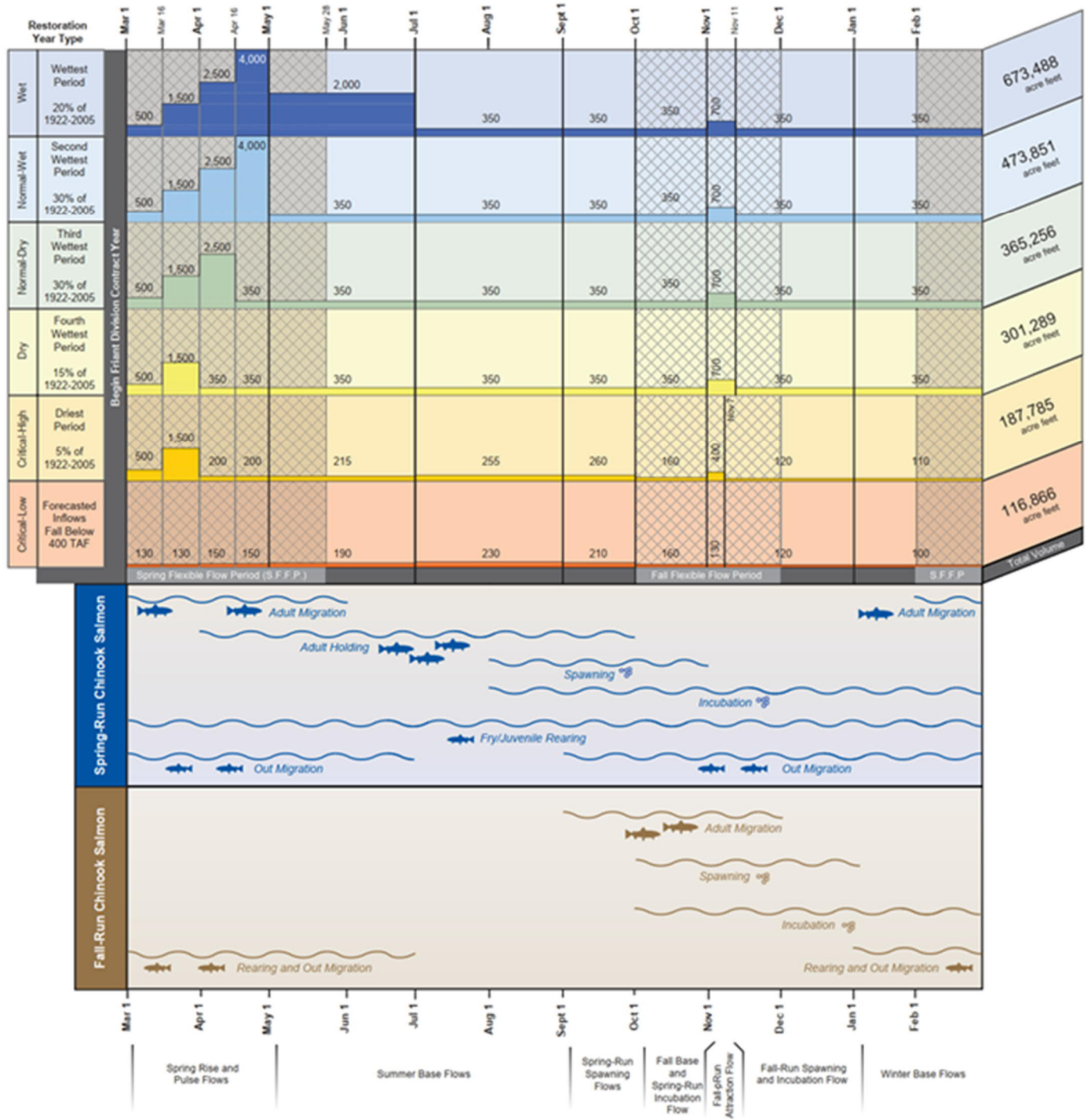


Figure 7. Settlement Agreement flow schedule (source: ES-4. Exhibit B of Settlement Agreement)

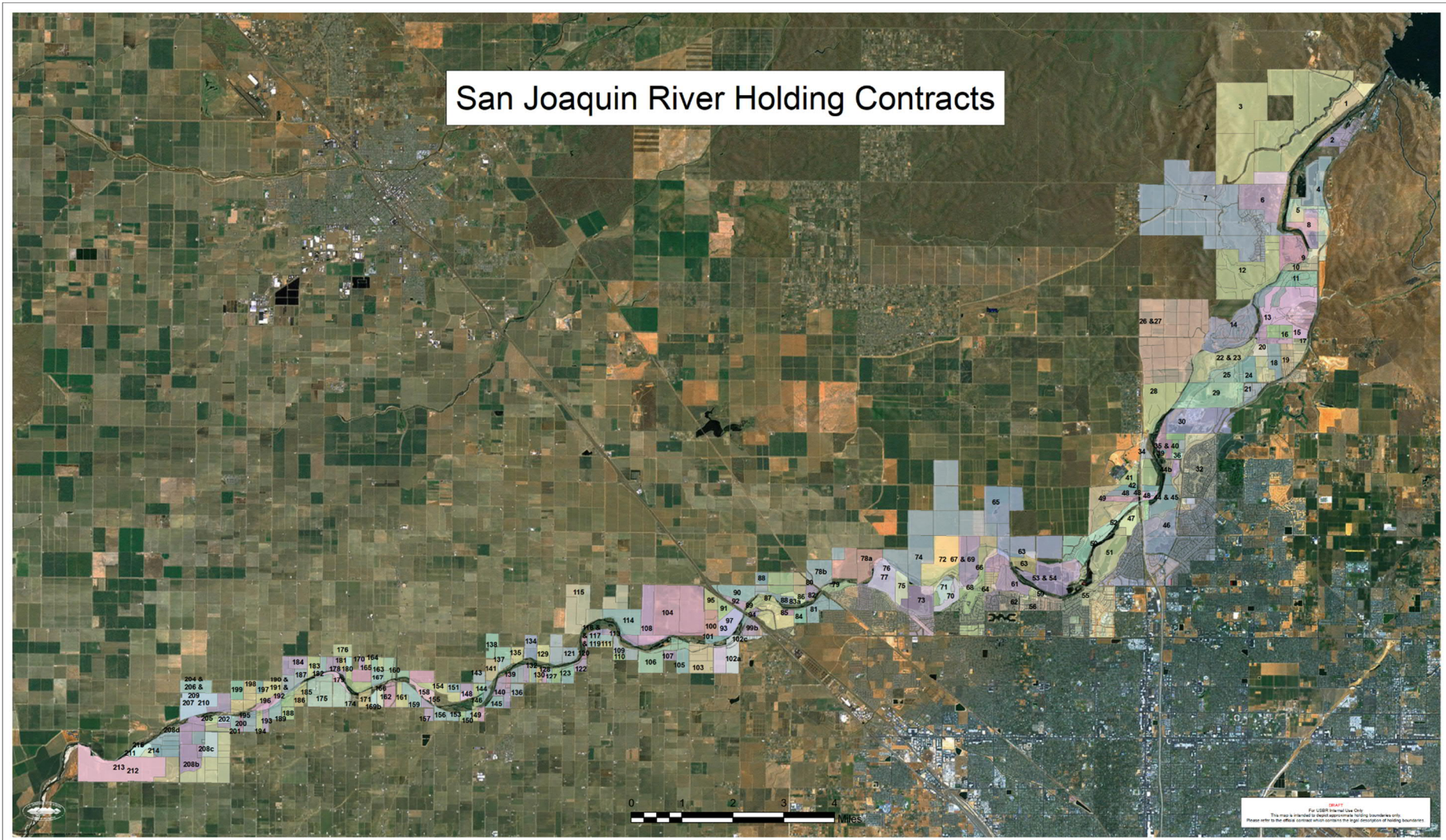


Figure 8. USBR CVP Holding Contracts Map

Although, the Settlement Agreement significantly reduces overall average deliveries to agricultural users by approximately 19%, more than half of the surface water availability impacts are to the Class 2 contractors. In general, the surface water impact to Class 1 contractors from restoration program actions is in the critical-dry year classification. In critical-low years the 400,000 acre-feet per year of San Joaquin supplies does not change the historic operational methodology. **Figure 7** identifies the flow requirements during wetter year types such as “wet”, “normal-wet”, “normal-dry” and “dry” and “critical-high” year types. The water supply required for restoration activities is intended to be redistributed from the water supply available to Class 2 contractors and generally results in small or no impacts to Class 1 water supplies during these year types.

In critical-low years when runoff is anticipated to be less than 400,000 acre-feet, no supplemental restoration water is to be released. During these years, the releases to the river are a reflection the commitment by the USBR to the riparian and “holding contract” users to meet the flow requirements of maintenance of a minimum 5 cubic feet per second flow past the Gravelly Ford weir. Dedicated flows released during critical-high years are estimated at 70,919 AF which is the difference between the flow requirements between the critical-high and critical-low requirements. This amount correlates with the Class 1 Friant CVP allocation which would suggest a potential reduction in Class 1 supplies of about 8 percent. The USBR allocates water first to fulfil the Class 1 Friant CVP allocations. If there is available remaining water supply, Class 2 contractors receive an allocation.

While it is apparent that Friant CVP Class 2 supplies will be reduced in future years, the available water supply for the Project, as secured in the amended Transfer Agreement, is not reliant on Class 2 allocations. However, there is a potential that Class 1 allocations may be reduced during “Critical High” water year types depending upon the total inflow to Millerton Reservoir. The carryover provisions of the amended Transfer Agreement provide further protections for the Project and a multi-year supply to meet Project demand.

### Climate Change Impacts

The Sacramento and San Joaquin River Basins Climate Impact Assessment (SSJRBC Impact Assessment)<sup>6</sup> was reviewed to evaluate the potential impacts to the Project from climate changes. Of specific interest were the evaluations and potential climate change impacts to precipitation, water supplies and demands in the San Joaquin River hydrologic subbasins.

#### Precipitation

**Figure 9**, identifies the estimated change in precipitation from 2025 to 2084.

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<sup>6</sup> Das, T., Munevar, A., & Van Lienden, B. (2014). *Reclamation Managing Water in the West, Sacramento and San Joaquin Basins Climate Impact Assessment*. Sacramento: United States Department of the Interior, Bureau of Reclamation.



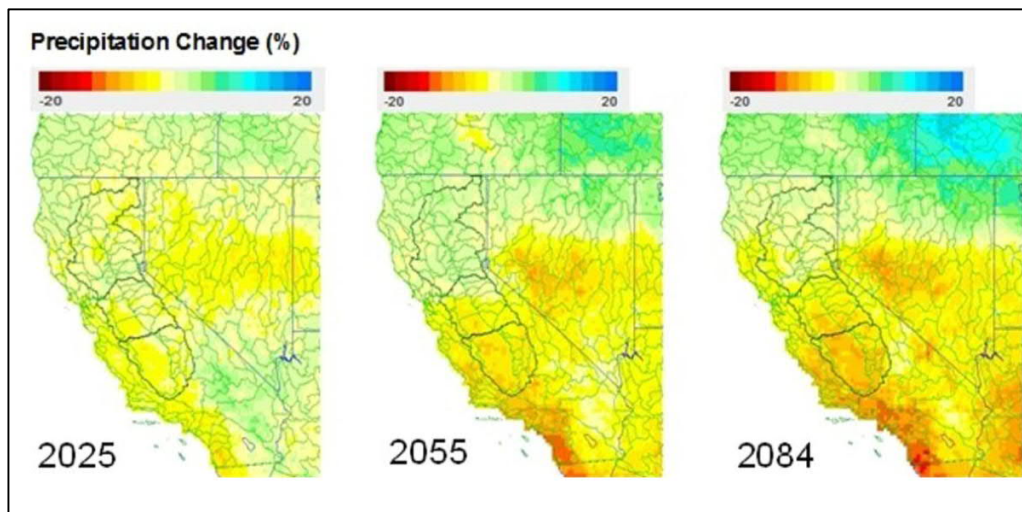


Figure 9. Projected annual average precipitation changes (percent in the early, mid and late 21<sup>st</sup> century (Source: SSJRBC Impact Assessment, Figure 6).

The SSJRBC Impact Assessment projects changes in annual average precipitation in the Central Valley basins including a clear north to south trend of decreasing precipitation, similar to historical conditions. This trend is projected to occur throughout the 21st century. In the northern part of the Sacramento Valley, projections indicate a slight increase of a few percent in precipitation around the mid-century period. A slight decrease in precipitation was projected to occur in both the San Joaquin and Tulare Lake basins. In these basins, the reductions tend to increase throughout the 21st century from a few percent to nearly 10 percent in the southern parts of the Central Valley.

### Sea Level Rise

The SSJRBC Impact Assessment also identified that sea level, relative to levels in 2000 at the Golden Gate Bridge in San Francisco, could rise by 92 centimeters by the end of the century with a potential range from 42 to 166 centimeters.

### Water Supply

The impacts of potential climate changes on water supplies were evaluated for each of the three major hydrologic basins in the study area (Sacramento, San Joaquin, and Tulare Lake hydrologic basins). The assessments included evaluating changes in the seasonality and volume of runoff due to the combined effects of temperature and precipitation. The full suite of 18 transient climate projections was simulated using the WEAP-CV hydrologic model to characterize the wide range of uncertainty associated with water supplies during the 21st century. For the purposes of this memorandum, the only the climate changes assessment for the San Joaquin hydrologic subbasin is included.

**Figure 10** provides the monthly pattern of runoff in the San Joaquin hydrologic basin for each of the 18 socioeconomic-climate scenarios. Differences in the monthly pattern of runoff conditions between the basins reflect differences in latitude, watershed elevation, vegetation, and soil conditions. The climate scenarios exhibit a pattern similar to the Central Trend No Climate Change scenario (CT\_NoCC, dashed line), but with a shift to more runoff in the winter and less in the spring months. This projected shift occurs because higher temperatures during winter cause more precipitation to occur as rainfall which increases runoff and reduces snowpack. This shift in runoff is especially evident when comparing the approximately equivalent amounts of precipitation

in the Current Trend, central tendency (CT\_Q5) and Central Trend No Climate Change (CT\_NoCC) scenarios. In the winter months (Dec, Jan, Feb) Current Trend, central tendency (CT\_Q5) has more runoff than Central Trend No Climate Change (CT\_NoCC), but in the spring (Mar, Apr, May) Central Trend No Climate Change (CT\_NoCC) has greater runoff.

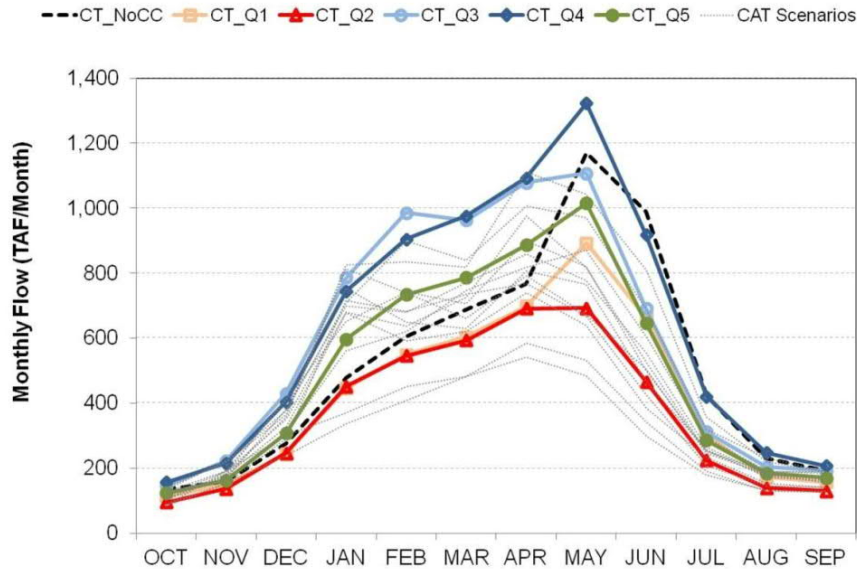


Figure 10. Average runoff in each month in the San Joaquin Basin in each climate scenario (Source: SSJRBC Impact Assessment, Figure 11).

**Figure 11** provides the time series of “unimpaired” annual runoff for each of the 18 socioeconomic-climate scenarios in the San Joaquin River system. Unimpaired runoff is the flow that would occur without development of the CVP, SWP and other water management systems in the study area.

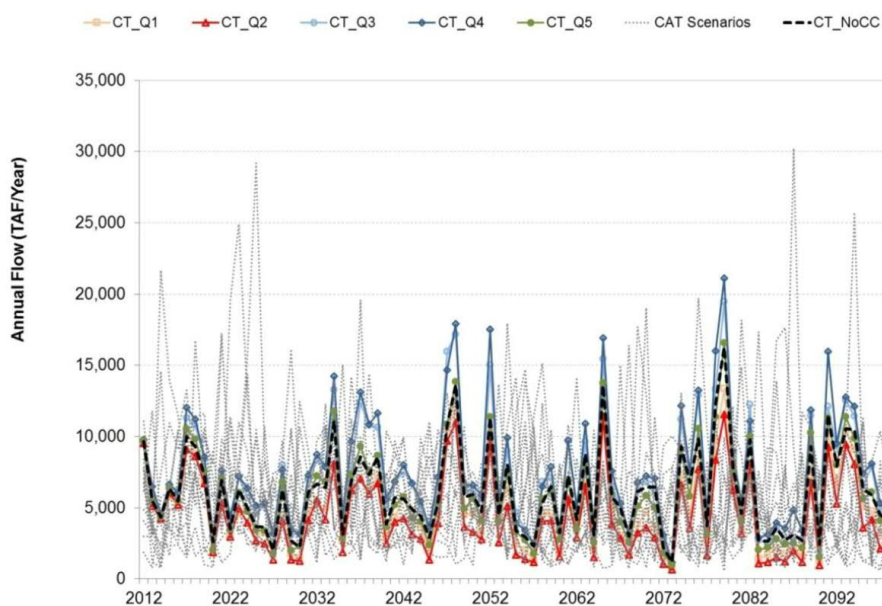


Figure 11. Annual time series of unimpaired runoff in the San Joaquin River system in each climate scenario (Source: SSJRBC Impact Assessment, Figure 14).

In general, the SSJRBC Impact Assessment identifies that the magnitude of the California Climate Action Team (CAT) high runoff events in the San Joaquin River subbasin is greater than the projected runoff simulated based on historic observations. This is especially true in the early 21st century period when the 12 California Climate Action Team (CAT) high-runoff events are notably greater than projected historical events. SSJRBC Impact Assessment also identified that there is an increased frequency and lower magnitude of runoff events in the San Joaquin basins especially in the early 21st century period. The lower average annual runoff in the San Joaquin in most of the 12 California Climate Action Team (CAT) scenarios as compared to the No Climate Change (NoCC) scenario would result in lower flows into the Delta and lower storage levels in CVP and SWP reservoirs in these scenarios, resulting in lower overall water supply agricultural, urban, and environmental uses within the study area.

The climate scenarios exhibit a seasonal shift to more runoff in the winter and less in the spring months. This projected shift occurs because higher temperatures during winter cause more precipitation to occur as rainfall, which increases runoff and reduces snowpack. The projected annual runoff into major Central Valley reservoirs is similar to the historical period with a north to south geographical trend toward slightly reduced runoff reflecting a similar trend in precipitation.

SSJRBC Impact Assessment identifies that under current reservoir operational criteria, the seasonal shift in runoff has a negative impact on the ability to store water for later use. With earlier runoff and more precipitation occurring as rainfall, reservoirs may fill earlier and excess runoff may have to be released downstream to ensure adequate capacity for flood control purposes.

### *Water Demands*

the SSJRBC Impact Assessment identifies that water demands were impacted by both changes in climate and socioeconomics. The projected increases in population resulted in a steady increase in urban water use during the 21st century. Agricultural demands were also impacted by the assumed decrease in irrigated acreage and the changing climate. Unlike urban demands, agricultural demands have considerable inter-annual variability. In low precipitation years, demand is higher while in high precipitation years, agricultural water demands decrease. During the 21st century, the average annual agricultural demands are projected to decrease because of reduced irrigated acreage and to a lesser extent the effects of increasing carbon dioxide on decreasing water use by some crops despite increased temperatures in the latter half of the 21st century.

### *Conclusions of Evaluation*

The overall conclusion of the analysis above, provides that the available water supply exceeds the estimated Project demand in all years, including periods of multi-year drought. This conclusion is supported by the following:

- Project as currently envisioned reduces estimated demand from 1,471 acre-feet per year (as identified in 2008 WSA) to 916 acre-feet per year (current Project demand)
- There was a reduction in precipitation in recent years, following the analysis performed for the 2008 WSA, with an average runoff of 88% as compared to the historic period of record.
- The recent multi-year dry and critical (both critical-high and critical-low) water year designations during 2012 through 2015 and 2020 through 2021 (and currently experienced in 2022) may indicate reductions in unimpaired runoff going forward. These more recent drought conditions may prompt the Legislature to enact more stringent water

supply planning requirements; however, based on the current water supply available for the Project and current demand projections there are sufficient water supplies to meet Project demand.

- Implementation of the San Joaquin River Restoration Settlement Agreement will impact Class 2 Friant CVP Contractors. Limited impacts are anticipated for Class 1 Friant CVP Contractors except for the driest of hydrologic conditions.
- Recent reductions in Class 1 allocations due to drought conditions have not affected the available water supply from LTRID to WWW 18.
- Climate change impacts will likely result in higher runoff events in the San Joaquin River subbasin. This is especially true in the early 21st century period when the high-runoff events are notably greater than projected historical events. Climate change as analyzed in the SSJRBC Impact Assessment scenarios also show a seasonal shift to more runoff in the winter and less in the spring months. This projected shift occurs because higher temperatures during winter cause more precipitation to occur as rainfall, which increases runoff and reduces snowpack.
- The amended Transfer Agreement secures a reliable multi-year surface water supply including 2,000 acre-feet per year with a carryover potential of up to 4,000 acre-feet per year
- Therefore, the available surface water supply of 2,000 acre-feet per year is more than adequate to meet the annual projected Project demand of 916 acre-feet per year. In addition, the amended Transfer Agreement secures a multi-year surface water supply due to the carryover potential of up to 4,000 acre-feet per year. This additional water supply reliability is sufficient to meet the Project's demand during a multi-year drought scenario.

## Attachment 1

**WATER SUPPLY ASSESSMENT FOR  
FRESNO COUNTY WATERWORKS  
DISTRICT 18**

**FRIANT RANCH SPECIFIC PLAN**

**FRIANT, CA**

**JANUARY 2008**

***Prepared for:***

Fresno County Waterworks District No. 18

***Prepared by:***

Provost & Pritchard Engineering Group, Inc.

Fresno, California



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**LIST OF ABBREVIATIONS**

AB	Assembly Bill
ac	Acre(s)
AF	Acre-feet
AFY	Acre-feet per Year
CEQA	California Environmental Quality Act
CVP	Central Valley Project
DHS	Department of Health Services
DWR	Department of Water Resources
ESA	Endangered Species Act
FMFCD	Fresno Metropolitan Flood Control District
FWUA	Friant Water Users Authority
gpm	Gallons per Minute
GMP	Groundwater Management Plan
M&I	Municipal and Industrial
MG	Million Gallons
MGD	Million Gallons per Day
NEPA	National Environmental Policy Act
O&M	Operations and Maintenance
RWQCB	Regional Water Quality Control Board
RWWTF	Regional Wastewater Treatment Facility
SB	Senate Bill
SOI	Sphere of Influence
SWTP	Surface Water Treatment Plant
USACE	United States Army Corp of Engineers
USBR	United States Bureau of Reclamation
UWMP	Urban Water Management Plan
WSA	Water Supply Assessment
WWD	Waterworks District
WWTF	Wastewater Treatment Facility
WWTP	Wastewater Treatment Plant

## EXECUTIVE SUMMARY

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### EXECUTIVE SUMMARY

This Water Supply Assessment evaluates the ability of Fresno County Waterworks District No. 18 (WWD 18) to meet water supply demands associated with the mixed use development proposed through the Draft Friant Ranch Specific Plan (Project), in accordance with the requirements of Section 10910, et seq, of the California Water Code.

The Project proposes approximately 2,996 residential units, which include 2,683 age-restricted (55 years of age and older) single-family units, 83 age-restricted (55 years of age and older) multi-family units, and 180 non-age restricted multi-family units. The Project also proposes a Village Center on approximately 21.3 acres, comprising 250,000 square feet of retail and commercial uses, along with 50 non-age restricted residential units.

The 942-acre Project area is adjacent to the existing community of Friant (depicted by the current Fresno County Friant Community Plan boundaries, which do not include the Project area, and referred to herein as the “Friant Community”) in northeastern Fresno County, California. Along with consideration of the Project, the County of Fresno (“County”) will consider an update to the current Fresno County Community Plan to include the Project area within the Friant Community Plan area.

This Water Supply Assessment discusses the estimated water demands and proposed water sources for the Project, in addition to existing and planned future uses for the remaining lands within Waterworks District 18, which serves the vast majority of the current Friant Community Plan area. In fact, all developable areas within the Friant Community fall within the WWD 18 service area. See Figure 2-1. This report provides a summary of water supply calculations and evaluations pertaining to the Project and WWD 18’s existing and planned future uses.

The CEQA Notice of Preparation for the Draft Community Plan Update suggests there will be one land use change within the existing Community Plan area. One parcel (referred to as the “Friant Depot Parcel”) that was designated in 1983 as residential is proposed for designation as commercial. This proposed change is taken into account for purposes of this assessment.

The Project’s estimated average annual demand of 1,471 acre-feet (“AF”) (approximately 1.55 AF per acre) will be met with the following water supplies:

- Long-term surface water availability for the Project is derived from an agreement in principle between WWD 18 and the Lower Tule River Irrigation District (LTRID) for 2,000 AF of Class 1 supply from the Central Valley Project (CVP), Friant Division under a United States Bureau of Reclamation (USBR) contract with LTRID. (The significance of “Class 1 water is described in section 5.3.) Upon completion of environmental review and USBR approvals,

## EXECUTIVE SUMMARY

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- LTRID and WWD 18 will consider authorization of the formal agreement to memorialize the water transfer (“Water Supply Agreement”).
- Pre-1914 water from the Tule River will be used during critical dry periods of the hydrologic cycle to make up for an anticipated shortfall of 460 AF in LTRID’s CVP Class 1 supply, which is anticipated to occur only during critical dry periods. No Tule River water will be delivered to the Project. Rather, Tule River supplies will be pumped into the Friant-Kern Canal by LTRID and used to meet a portion of LTRID’s South Valley commitments which would normally be met with CVP Class 1 supplies, thereby freeing up Class 1 water to be delivered to WWD 18 pursuant to the Water Supply Agreement.
  - Approximately 50 percent of the reclaimed wastewater resulting from each phase (and ultimately, full buildout) of the Project will be reused to satisfy *non-potable water demands* of outdoor landscaping within each phase (and ultimately full buildout) of the Project. The total amount of reclaimed wastewater available for reuse after full buildout of the Project will be 400 acre-feet annually (approximately 30 percent of the *total consumptive water demand* of the Project).

The existing and planned future uses within the WWD 18 boundaries west of the Friant Kern Canal, which generally comprises the developable areas of the Friant Community as depicted in Figure 2-1 are referred to herein as the “Western Service Area”. The current and proposed future uses within this area, combined with the Project’s demands, total an estimated average annual demand of 1,806 AF.

The current demand of the Western Service Area is 150 AF. At present, WWD 18 has surface water supply available from a single source: a 150 AF supply from the Central Valley Project (CVP), Friant Division under a United States Bureau of Reclamation (USBR) contract. Regardless of the outcome of the Project application, WWD 18 will need to acquire additional water supplies to meet the additional 185 AF demand as its Western Service Area builds out. (See Table 10.1.1.) The Western Service Area is generally that portion of WWD 18 that aligns with the developable area of the Friant Community. Details about the existing and planned future uses within WWD 18 are provided in Section 8.2.

WWD 18 has additional service area east of the Friant-Kern Canal. This service area, which encompasses only the “Mira Bella at the Lake” development (Mira Bella), currently has no service connections, as no homes have been built within Mira Bella. Fresno County approved this development, which will be served by groundwater wells within the tract, and WWD 18 has agreed to act as the water service purveyor. In addition to the wells, WWD 18 will operate an iron and manganese removal plant which was constructed by the developer of Mira Bella, located within the development. There are no plans or obligation on the part of the District to pipe surface water to Mira Bella. It will always be a separate zone of benefit operating on a separate groundwater supply.

## EXECUTIVE SUMMARY

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WWD 18 and LTRID have each entered into CVP Friant Division long-term water supply contracts with the USBR. Each of the separate renewal contracts negotiated by these districts in January 2001 expires on February 28, 2026, with one 25-year renewal provision (see **Appendices B** and **C**). If a USBR contractor wishes to renew its respective contract pursuant to the 25-year renewal provision beyond the current expiration date of February 28, 2026, the contractor must submit a formal written request to the Secretary of the Interior two years prior to the date of expiration. In addition, each USBR contractor must also comply with certain conditions, such as: prepare a water conservation plan, implement this plan, operate and maintain all water measuring devices, use contract water supply in a reasonable and beneficial manner (see **Appendix J**).

As justified herein, WWD 18 has identified sufficient future water supplies currently available to satisfy the projected 20-year demands for the Project, in addition to WWD 18's existing and planned future uses, during normal, critical dry and multiple-dry years. Since WWD 18 does not currently have the water supply infrastructure or water rights to serve the identified water supply to the Project or other planned future growth within the district, this Water Supply Assessment explains the requisite steps WWD 18 is taking to acquire and develop the identified water supplies to serve the Project. Summarily, WWD 18 will:

- (1) Participate in County California Environmental Quality Act, Pub. Res. Code, § 21000 et seq (CEQA) process for Friant Community Plan Update and Friant Ranch Specific Plan, and adopt CEQA findings for related WWD 18 actions including Water Supply Agreement, water service agreement for Project, approval of water supply infrastructure agreements, and inclusion of Project Site into WWD 18.
- (2) Participate in USBR and LAFCO approval processes for annexation of Project boundaries into WWD 18.
- (3) Obtain USBR and LTRID approvals for Water Supply Agreement; authorize execution of Water Supply Agreement.
- (4) Approve inclusion of Project Site into WWD 18 service area (as a separate zone of benefit) and authorize water service agreement for Project.
- (5) Obtain USBR, Orange Cove Irrigation District, and Department of Fish and Game approval (as appropriate) for use of water supply pipeline from Friant Dam.
- (6) Obtain Regional Water Quality Control Board and Department of Public Health approvals for wastewater reuse and water treatment facilities.
- (7) Participate in the Fresno County approval process for the various phases of the Project, requiring construction of all necessary water infrastructure (in

## EXECUTIVE SUMMARY

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accordance with the Project's Infrastructure Master Plan) as phases are proposed.

- (8) Construct (or inspect developer's construction of) the required infrastructure improvements, and verify that infrastructure is ready to be placed in service prior to occupancy of homes in the corresponding Project phases. (Upon completion of any developer-constructed facilities, take ownership and assume operating responsibility in accordance with the water service agreement).

This Water Supply Assessment also explains potential uncertainties related to the water supply and WWD 18's plan for addressing such uncertainties. Summarily, the following uncertainties relate to the identified Project water supply:

- The agreement in principle between LTRID and WWD 18, which is subject to CEQA review and USBR approval, could result in a potential critical dry year shortfall of 460 AF out of the 2,000 acre-feet of CVP Class 1 supply to be provided to WWD 18 by LTRID under the Water Supply Agreement. See Appendix D [memorandum from Lower Tule River Irrigation District discussing proration of shortage of Class 1 supplies among LTRID Class 1 commitments]. (The contracted water supply, even with this 460 AF shortfall, will still be in excess of the critical dry year demand for the Project.) To address this uncertainty, WWD 18 has negotiated with LTRID to include provisions within the Water Supply Agreement that ensure LTRID will make use of other water it has available to it, including its Pre-1914 water from the Tule River, only during critical dry years of the hydrologic cycle, to offset any shortfall of CVP Class 1 supply. No Tule River water will be delivered to the Project. Instead, LTRID will pump Tule River water into the Friant Kern Canal for delivery to LTRID's South Valley customers in lieu of CVP Class 1 supplies they would normally receive. (The Tule River water is normally delivered to growers within the LTRID service area, but would be replaced in critical dry years by pumped groundwater to which LTRID has rights and access.) According to LTRID's review of historic hydrologic data for the Tule River, implementing such a procedure will assure that the identified 460 AF of Tule River water will be available during these critical dry years. (See **Appendix D** [memorandum from Lower Tule River Irrigation District].)
- An Eastern District Court ruling in 2006 against the CVP Friant Division threatened to result in a judicial remedy that could curtail allocations under the USBR's contracts for CVP water from Millerton Reservoir. In 2007, the parties to the litigation settled on a restoration plan for the San Joaquin River in lieu of a judicial remedy. The San Joaquin River Settlement Agreement, while significantly changing the allocation of water supplies between agricultural users and fisheries by reducing overall average deliveries to ag users by approximately 19 percent, will not significantly affect the Water Supply Agreement proposed between WWD 18 and LTRID. In normal years, adequate flows are available to meet all Class 1 demands as now recorded in addition to agreed-upon fish flows, so LTRID would experience no reduction in its available Class 1 supplies and would have no increased difficulty in meeting its obligations to WWD 18. The river restoration hydrograph in critically

## EXECUTIVE SUMMARY

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dry and multiple dry years does not propose to change current conditions. Rather, the restoration plan envisions that salmon would be trapped and trucked from the spawning beds to the Delta for release when the river is low. Thus, the percentage of LTRID's Class 1 supplies (under the LTRID Contract with USBR) allocated to LTRID in critically dry and multiple dry years are not expected to change significantly from allocations in prior critically dry years. The Settlement Agreement itself is not without uncertainty as it hinges on funding to carry out the restoration efforts.

- Another Eastern District Court-imposed remedy limiting the pumping operations related to the CVP export facilities in the Delta will cause water shortages for USBR contractors that receive CVP Northern California water supplies through the Delta. Though WWD 18 does not receive exported water supplies through the Delta, there is a remote chance that "Exchange Contractors" that agreed to trade pre-Friant Dam San Joaquin River water rights for CVP Delta originated supplies will exercise their "call" on CVP Friant Division water if they are unable to receive CVP exported water supply per the existing Exchange Agreement. WWD 18 recognizes this potential uncertainty, but based on the priority given to Exchange Contractors and current projections for pumping restraints through the Delta, concludes that the potential "call" does not threaten to reduce the CVP Friant Division water supplies for the Friant Community and the Project at this time. (Further, in the unlikely event that any Exchange Contractor(s) attempted to make such a "call", the threatened consequences to the 1 million acre Friant Division of the CVP would inspire immediate collective actions to meet emergency water needs of the Friant Division contractors.)
- The LTRID and WWD 18 contracts with the USBR for CVP Friant Division Class 1 water supplies (see **Appendices B and C**) are set to expire in 2026. However, the contracts provide for a 25-year renewal so long as certain conditions are met. The USBR will consider the contractors' written request for a renewal, subject to Endangered Species Act, 16 U.S.C. § 1536 et seq (ESA) and National Environmental Policy Act, 42 U.S.C. § 4321 et seq (NEPA) compliance.
- The Project water supply includes use of reclaimed water for outdoor landscaping uses. This reclaimed water is not included in the summary of surface water available to the project, but is counted as a separate source. Use of reclaimed water is subject to environmental review and approval by the Central Valley Regional Water Quality Control Board.



## SECTION ONE

# 1 INTRODUCTION

This Water Supply Assessment evaluates the ability of Fresno County Waterworks District No. 18 (WWD 18) to meet water supply demands associated with the construction of a mixed use development through the proposed Friant Ranch Specific Plan ("Project"), in accordance with the requirements of Section 10910, et seq., of the California Water Code. The 942-acre Project area is adjacent to the existing community of Friant (depicted by the current Fresno County Friant Community Plan boundaries) ("Friant Community") in northeastern Fresno County, California. This assessment considers the Project water demand, in addition to the demand for existing and planned future uses within the current WWD 18 boundaries.

WWD 18 consists of two separate service areas that are separated by the Friant-Kern Canal (FKC) with the portion of the service area west of the canal generally comprising the developable areas of the Friant Community as depicted in Figure 2-1 and referred to herein as the "Western Service Area," located within the Friant Community. The present boundary for the Western Service Area of WWD 18 is formed by the San Joaquin River (west), the Project (east) and by Friant Dam (north), and is located within the Friant Community. The boundaries of the Eastern Service Area coincide with the Mira Bella development. The differences between WWD and Community Plan boundaries are illustrated on **Figure 2-1** and are discussed in more detail in Section 8.2.

Along with consideration of the Project, the County of Fresno ("County") will consider an update to the current Fresno County Community Plan to include the entire Project area within the Friant Community area.

In 2001, the State of California passed into law Senate Bills 221 and 610. In October 2001, the Governor signed SB 610 into law, amending Section 10910, et seq., of the Water Code to require preparation of a Water Supply Assessment to inform the environmental review process for new development projects. New development projects subject to the SB 610 requirements include any proposed residential development: (1) having more than 500 dwelling units; or (2) increasing the number of service connections for a public water system that has less than 5,000 connections by 10 percent or more.

Also in 2001, the Governor signed SB 221 into law, adding Government Code Section 66473.7. This legislation requires a city, county, or local agency, as part of the Tentative Map process, to prepare, or direct the water purveyor to prepare, a Water Supply Verification documenting the availability of a sufficient water supply to serve a subdivision.

The conditions and requirements of these two bills are similar. However, due to the current stage of entitlements for the Project, this Water Supply Assessment has been structured to address the requirements of SB 610. (See Section 2, State Water Code Requirements, for more information on these mandated reports.)

## SECTION ONE

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The water sources available to WWD 18 include an existing contract with the United States Bureau of Reclamation (USBR) for 150 AF of Class 1 water (currently serves existing users with the WWD service area west of the Friant Kern Canal, and a proposed transfer of 2,000 AF of CVP Friant Division Class 1 water from Lower Tule River Irrigation District (LTRID) to WWD 18 (“Water Supply Agreement”). LTRID and WWD 18 have not formally approved or executed the Water Supply Agreement, pending environmental review and USBR processing of the proposed transfer. On April 21, 2005, LTRID executed a letter of intent to provide WWD 18 with 2000 AF of CVP Friant Division Class 1 water annually for service to the Project; a copy of that letter is attached hereto as **Appendix A**. This report assumes the final Water Supply Agreement will reflect the quantity, quality, and reliability of the water supply described in the Letter of Intent.

The LTRID water supply originates from a Class 1 contract for water supply from the CVP Friant Division between LTRID and the USBR. This water is from Millerton Lake, in which USBR stores the runoff of the San Joaquin River for diversion to its water contractors, which include LTRID and WWD 18. The LTRID and WWD 18 contracts with USBR provides for an annual water supply totaling 61,200 AF through 2026, subject to 25-year renewals so long as certain conditions are met. Two years prior to expiration of that contract, the contractors must submit a written renewal request to the Secretary of the Interior requesting a contract extension (see **Appendices B** and **C**). The USBR will consider the contractors’ written request for a renewal, subject to Endangered Species Act, 16 U.S.C. § 1536 et seq (ESA) and National Environmental Policy Act, 42 U.S.C. § 4321 et seq (NEPA) compliance.

WWD 18 has historically purchased additional quantities of CVP water from other long-term CVP contractors in years when the full Class 1 entitlement has not been available. For example, in 2007 the District received 60 percent of its contracted 150 AF of Class 1 supply (90 AF). To make up for that shortfall, the District negotiated purchase of 30 AF of water from Madera Irrigation District and 30 AF from Lower Tule River Irrigation District, for a total available supply of 150 AF. The District anticipates that these ad hoc purchases will continue in future years when Class 1 supplies are not fully delivered, however there is no contract in place to assure that will happen. Therefore, none of these supplemental supplies have been considered in this Water Supply Assessment.

## SECTION TWO

### 2 DESCRIPTION OF DEVELOPMENT

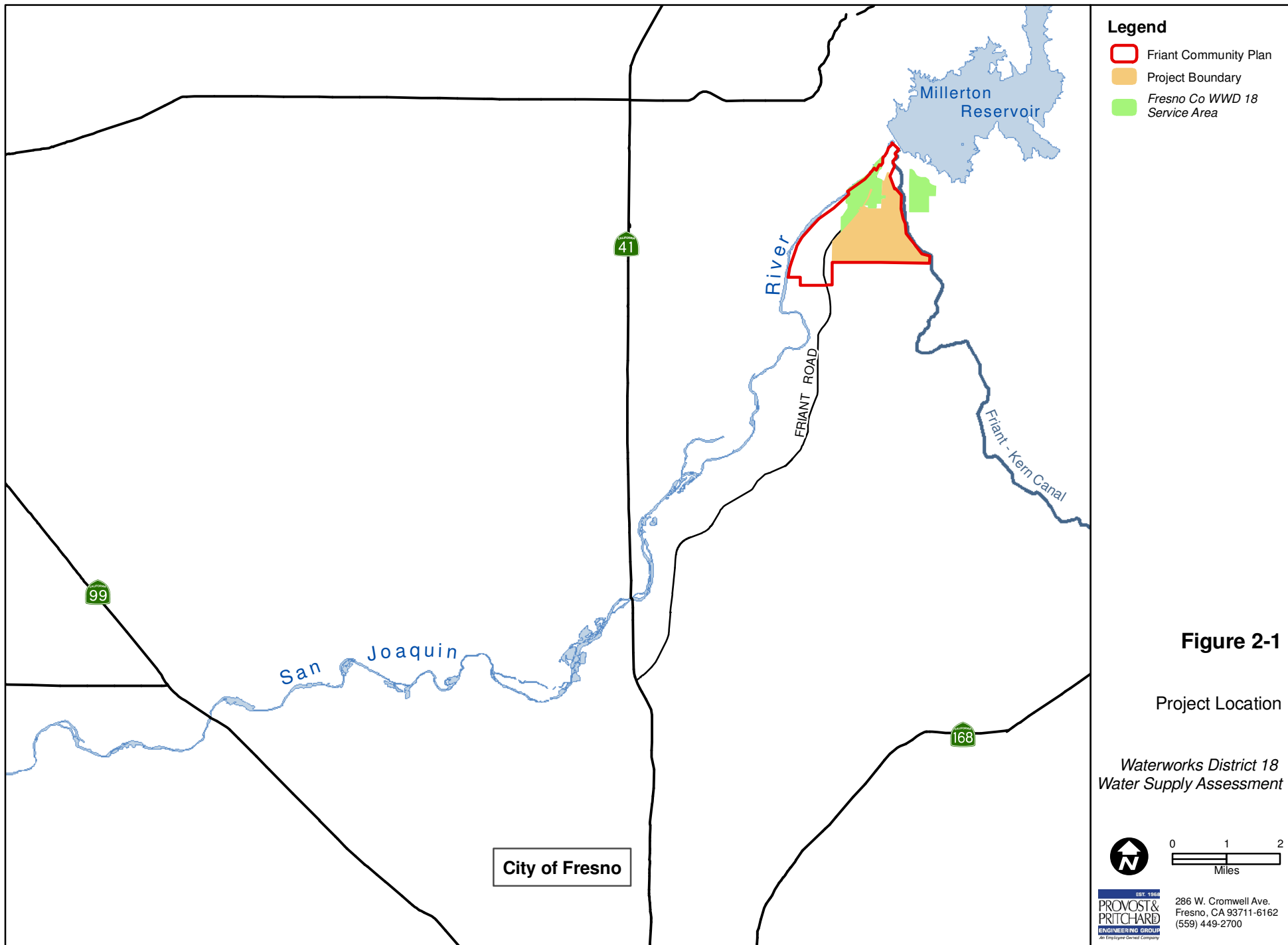
The approximately 942 acres comprising the Project site ("Site") are located in northeastern Fresno County. The Site is generally bordered on the east by the Friant-Kern Canal, on the north by the existing community of Friant, on the south by open lands and on the west by Friant Road. The Site is approximately five miles north of the Fresno city limit and is 21 miles east of the city of Madera (see Figure 2-1).

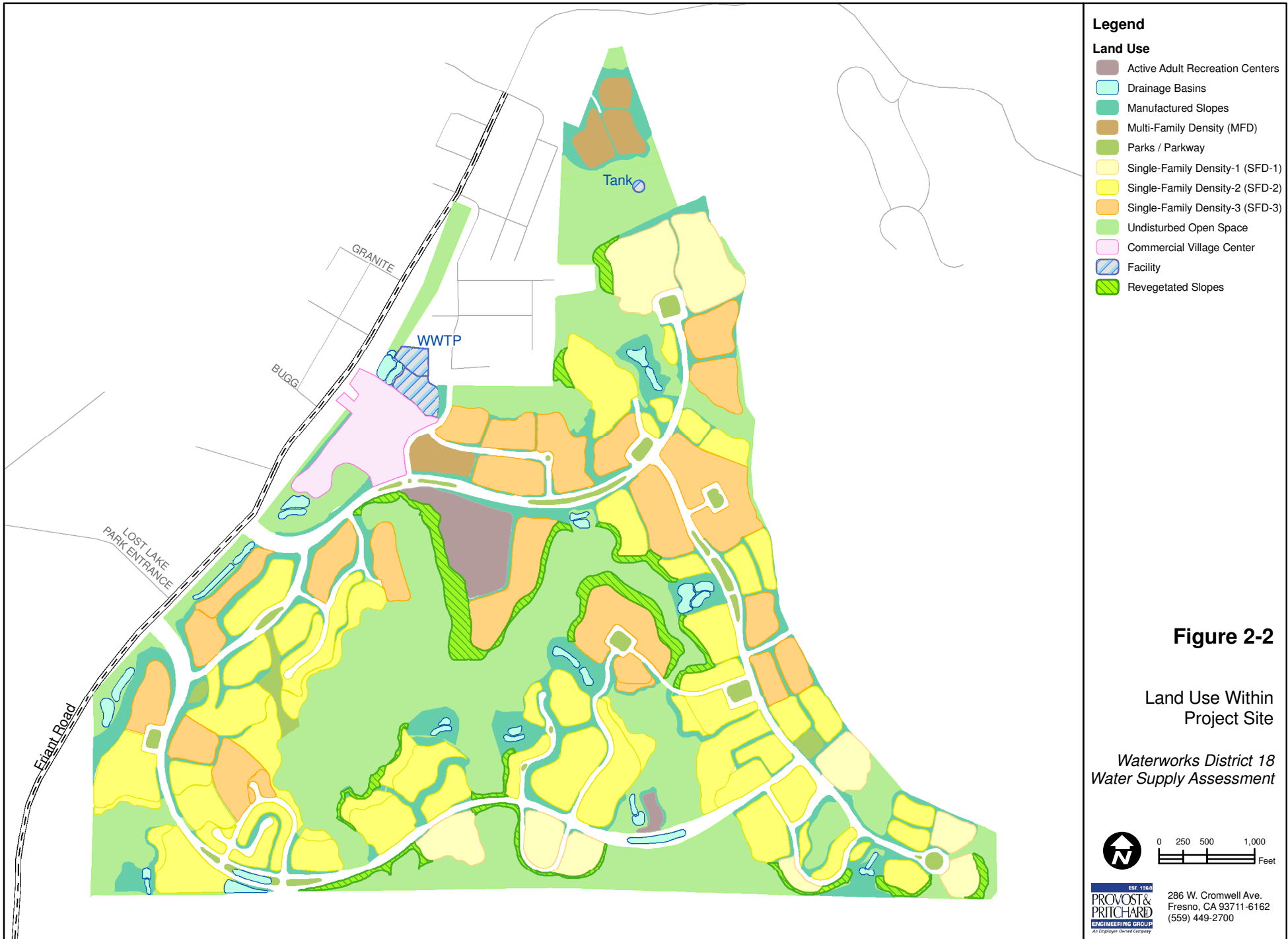
The Project proposes approximately 2,996 residential units, which include 2683 age-restricted (55 years of age and older) single-family units, 83 age-restricted (55 years of age and older) multi-family units, and 180 non-age restricted multi-family units. The Project also proposes a Village Center on approximately 21 acres, comprising 250,000 square feet of retail and commercial uses, along with 50 non-age restricted residential units. The Project includes 120 acres of landscaped areas, including both parks and landscaped vegetated slopes. The Project also includes non-irrigated open space. (See **Figure 2-2**)

The projected population at full build-out for the Project is approximately 5,692. Build-out within the combined Friant Community and Project area is projected to include: (1) more than 3,350 housing units with a population in excess of 6,700 people; and (2) approximately 250,000 square feet of combined commercial and office space. No industrial uses are planned.

The Friant Community is located in northeastern Fresno County near the base of Friant Dam. The Friant Community was recognized in the 1900s to honor a local businessman, Thomas Friant. Land use planning for the unincorporated Friant Community is governed by the *Friant Community Plan*, prepared and adopted by Fresno County.

Certain infrastructure improvements related to the Project will be constructed on lands outside of the Project boundary. These include development of domestic water supply facilities running from the Project area to near Friant Dam and wastewater effluent storage and reclamation areas.





## SECTION THREE

### 3 WATER CODE REQUIREMENTS

#### 3.1 SB 610 Water Supply Assessment

Water Code Section 10910, et seq, as amended by SB 610 in 2001, defines a “project” as any residential development of 500 or more dwelling units (or equivalently-large commercial development), and requires the water purveyor (in this case, WWD 18) or the County itself to prepare a “Water Supply Assessment” prior to project approval. “Project approval” includes approval of any general plan amendment, rezoning, Specific Plan, or associated land use entitlements, including parcel or subdivision maps. The Water Supply Assessment must be included with the environmental document addressing the potential environmental impacts of the project. The Water Supply Assessment must evaluate whether the supply of domestic water available to the development is adequate, and will continue to be adequate over the next 20 years, during normal, dry, and multiple-dry years. If the water purveyor concludes that its water supplies are, or will be, insufficient to meet the project demands (either in short or long term), the purveyor shall provide the County with its plans for acquiring additional water supplies, setting forth the measures that are being undertaken to acquire and develop those water supplies.

#### ***SB 221 Verification of Water Supply***

SB 221, codified in Government Code Section 66473.7 requires preparation of a “Verification of Water Supply” report when a proposed subdivision triggers certain criteria. The primary procedural difference between the Verification of Water Supply under SB 221 and the Water Supply Assessment pursuant to SB 610 is that the former report must be made at the time approval is sought for a Tentative Map for any phase of the project. In addition, the two requirements vary substantively, as the SB 221 Verification of a Water Supply must: 1) be based on the historical record for at least 20 years, 2) include an urban water shortage contingency analysis, and 3) identify supply reduction for “specific water use sector” per the Water Supplier’s resolution, ordinance, or contract. The Project has not yet reached the tentative map stage. Moreover, the Project has not been planned at the level of detail typical for subdivision map processes and the Project does not at this time trigger the SB 221 requirements.

This Water Supply Assessment has been structured to address the requirements of SB 610 and will provide foundational information for any future Water Supply Verification reports which may be required.

#### 3.2 Urban Water Management Plan

The California Urban Water Planning Act requires urban water suppliers to submit an Urban Water Management Plan (UWMP) to the California Department of Water Resources (DWR) every five years if they provide water for municipal purposes to more than 3,000 customers or supply more than 3,000 acre-feet annually.

## SECTION THREE

SB 610 contemplates the use of UWMPs to obtain most of the information and evaluations needed to prepare a Water Supply Assessment in compliance with the above requirements. However, WWD 18 has not prepared a UWMP to date because WWD 18 does not meet the 3,000 acre-feet minimum to trigger the UWMP requirement.

During project build-out, WWD 18 will exceed 3,000 water connections, and therefore will be required to prepare and submit an UWMP. Based upon growth projections for the Friant Community and proposed development phasing for the Project, WWD 18 is not anticipated to exceed 3,000 water supply connections until approximately 2020.

## SECTION FOUR

### 4 AGENCIES

Water resources management and utilization of these resources within the Friant Community and Project area are primarily influenced by three separate agencies. Each of the subsections below provides a brief synopsis of the history, water supplies, facilities, and purpose of each agency. **Figure 4-1** identifies agencies within the Friant Community as well as other water-related agencies in the surrounding area. Detailed explanations on water supplies are provided in Sections Five & Six.

#### 4.1 Fresno County Waterworks District 18

WWD 18 consists of two main areas – Mira Bella and a portion of the Friant Community – divided by the Friant-Kern Canal and operating independently and separately. The current service area for WWD 18 encompasses 443 acres. 244 acres are located west of the Friant-Kern Canal, within the Friant Community Plan boundary (the “Western Service Area”). The remaining 199 acres (“the Eastern Service Area”) are all located within the Mira Bella development east of the Friant-Kern Canal along Friant Road (Eastern Service Area) and were annexed into WWD 18 in 2002. As of this report, Mira Bella has no active water service connections. Mira Bella is not connected to WWD 18’s surface water delivery system and WWD 18 has no plans to make such a connection.

WWD 18 will provide water for Mira Bella from three groundwater wells east of the Friant Kern Canal; no water will be sourced from the San Joaquin River. The well water has notable levels of iron and manganese; the developer has constructed a treatment plant for the Eastern Services Area within the boundaries of Mira Bella which WWD 18 will operate once the development begins to build out. As of the date of this assessment, WWD 18 has not taken over management and operations of the water system infrastructure for Mira Bella as no homes have been constructed.

In 2005, WWD 18 delivered 150 acre-feet of treated surface water from Millerton Lake to 219 residential and 19 commercial/industrial customers within the Western Service Area. Water is delivered to the WWD 18 water treatment plant via a 6-inch diameter pipe that connects to a larger discharge pipe (used to supply water to the State Fish hatchery) near the base of Friant Dam. Raw surface water from this connection point is treated with a series of clarifiers and pressure filters, and is disinfected using chlorination.

WWD 18 also provides contract water treatment services for Table Mountain Rancheria, Millerton Lake State Park, California Division of Forestry and Fire Protection (CDF) and the Bureau of Reclamation. The present processing agreement between WWD 18 and Table Mountain Rancheria requires the WWD 18 water treatment plant to treat 2 AF per month, not to exceed 20 AF annually. This water is obtained from Madera Irrigation District and remains in Millerton Lake until processing at the District’s WTP. Treated water is trucked by Table Mountain for use at the casino located approximately six miles to the east. This contract is a fee-for-service arrangement. Other than the contract in



## SECTION FOUR

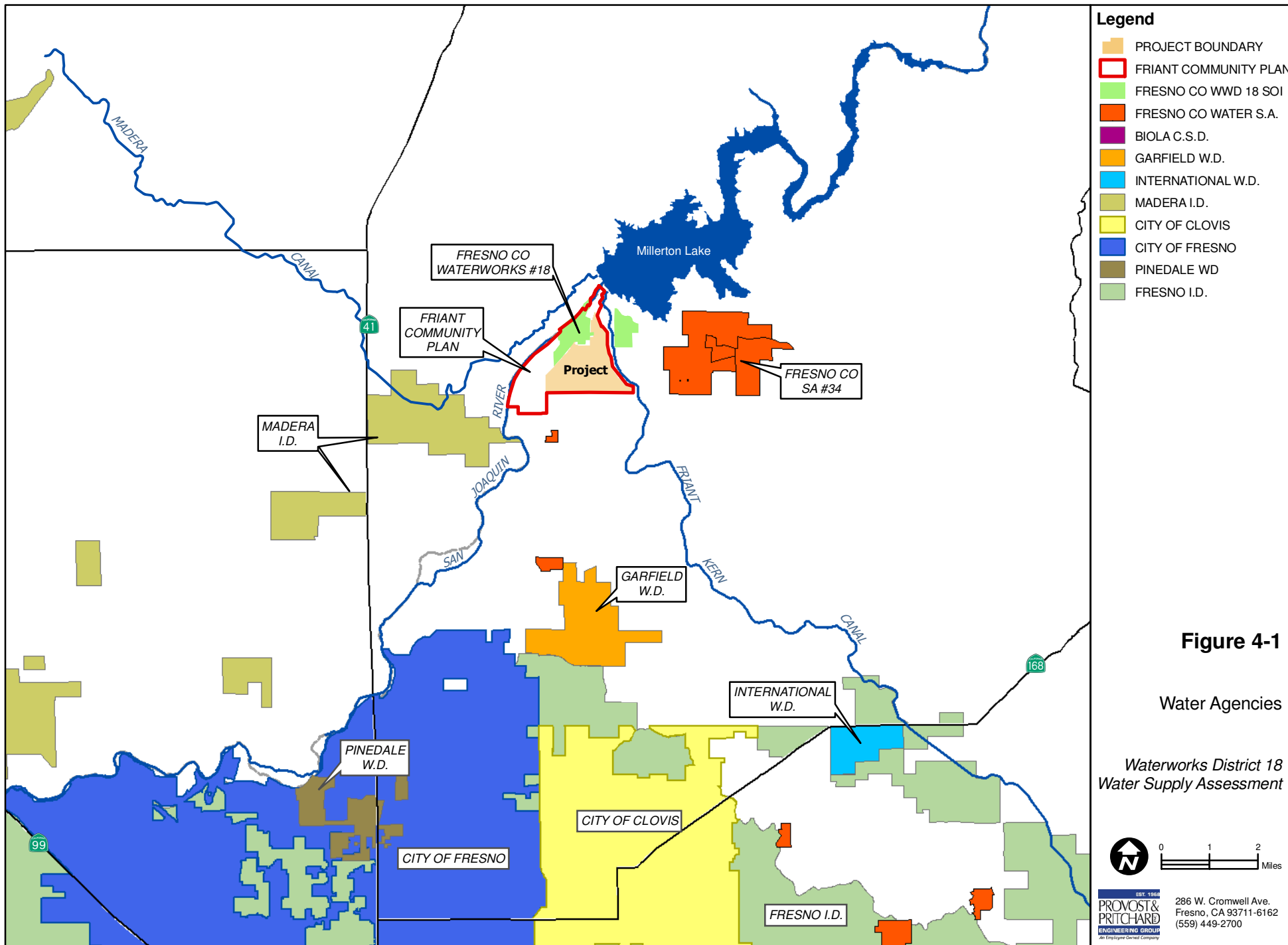
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place, WWD 18 has no obligation to provide water service of any kind or water supply to Table Mountain.

The other three users (Millerton Lake State Park, the CDF station in Friant and the USBR office in Friant) receive water treatment under a single agreement which states that the water delivered to these entities is not charged against WWD 18's Class 1 supply. District records indicate an average of approximately 1.25 AF per month is treated for these three users, with 82 percent going to the State Park, 16 percent to CDF and the remainder to the Bureau office.

Water for Millerton Lake State Park is pumped to a state-owned storage tank east of Friant on the north side of Millerton Road, where the State Park takes over the job of distribution for its own uses. The CDF Station and the USBR office are served directly off the WWD 18 distribution system. Each of these three services are metered separately to provide for accurate credit for the water used.

The water supply and demand associated with these contract water treatment services for Table Mountain Rancheria, Millerton Lake State Park, CDF and USBR are not included in the water supply and demand calculations presented herein because the contracts are for treatment and delivery of wholly separate water supplies controlled by the respective contracting parties.



## SECTION FOUR

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### 4.2 Bureau of Reclamation

USBR is the sole State of California water right permit holder for the stored San Joaquin River water impounded by, diverted, and released from Friant Dam. USBR provides service contracts for use of stored water from the CVP Friant Division to the 31 water agencies designated as CVP Friant Division “long-term contractors.” USBR has existing long-term service contracts with WWD 18 and LTRID (see **Appendices B** and **C** for contracts).

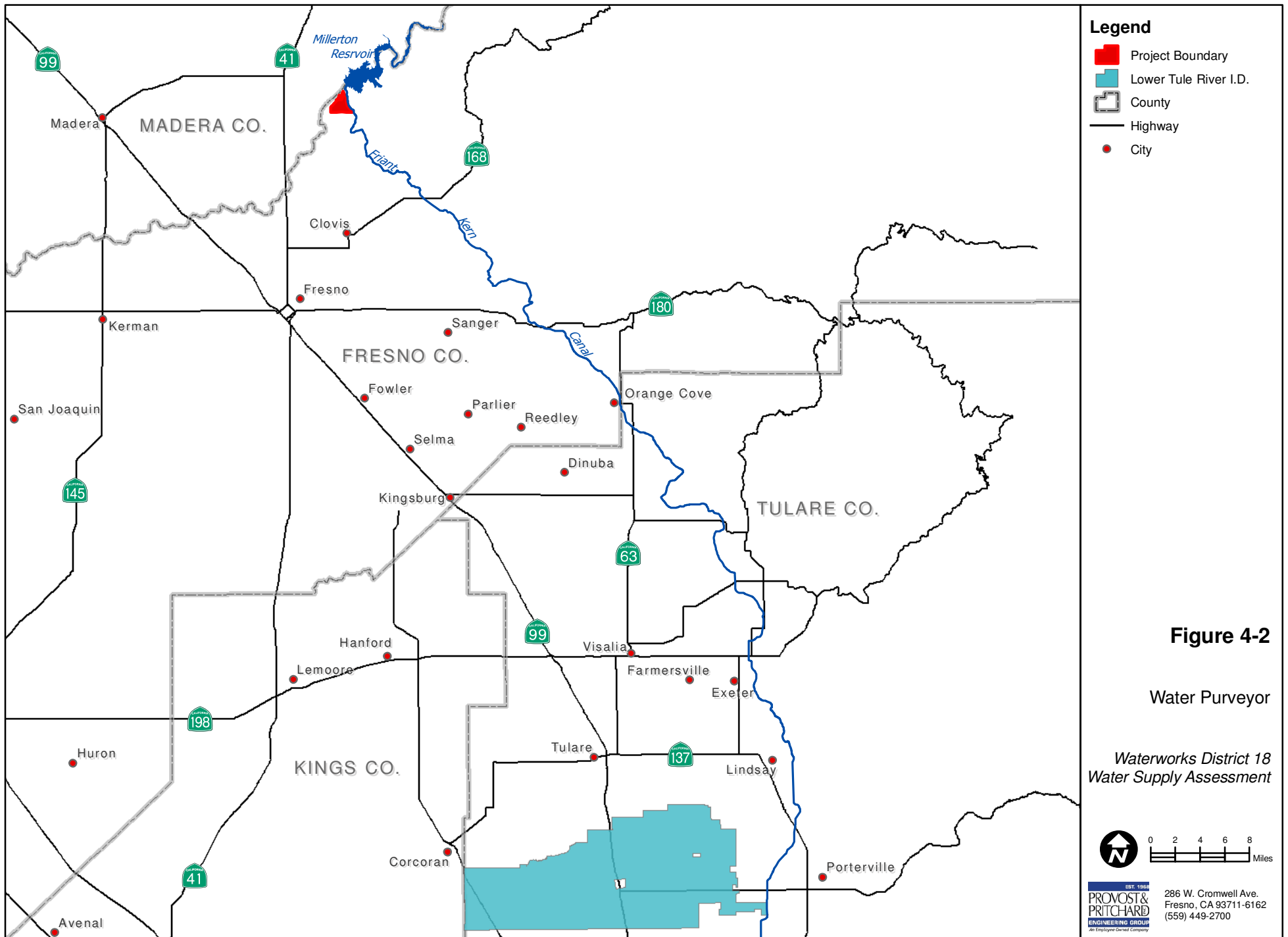
### 4.3 Lower Tule River Irrigation District

LTRID was formed in 1950 and is located in the southern third of Tulare County (see **Figure 4-2**). LTRID encompasses an area of 103,000 acres, including approximately 85,000 acres of agricultural lands irrigated by surface waters and groundwater. The other 18,000 acres comprise native lands (river bottom and riparian areas and uses incidental to agriculture such as residences, on-farm infrastructure, roads, etc.) Water is conveyed to these lands through a system of 150 miles of canals.

LTRID’s water supply portfolio includes:

- Class 1 supplies from the CVP Friant Division in the amount of 61,200 AF (The significance of Class 1 is explained in Section 5.3 herein)
- Class 2 supplies from the CVP Friant Division in the amount of 238,000 AF (The significance of Class 2 is explained in Section 5.3 herein)
- Cross Valley Canal Water, in the amount of 31,200 AF.
- Pre-1914 water right for water from the Tule River, which is stored behind Success Dam and has an average yield of 40,000 AF. (LTRID would make water under these rights available to the Project in critical dry years by pumping Tule River water into the Friant-Kern Canal for use by downstream CVP contractors in lieu of CVP Class 1 supplies. The CVP Class 1 supplies in Millerton Lake originally reserved for those downstream CVP contractors would instead be delivered to the Project (in critical dry years).)

(See **Appendix D** for memorandum from LTRID explaining water supplies.)



## SECTION FIVE

# 5 REGIONAL WATER SUPPLIES

This section summarizes the regional water supplies in the Central Valley that are used to satisfy the urban and agricultural demands within this region. The three major water supplies for the Central Valley are 1) precipitation, 2) groundwater, and 3) surface water. More detailed information pertaining to water supply in the Friant Community and Project area is contained in Section Six, *Local Water Supplies*.

## 5.1 Precipitation

Annual rainfall in and around the community of Friant area typically varies from around eight inches in a dry year to more than 28 inches in a wet year. The average annual precipitation is approximately 14 inches. The amount of precipitation captured and stored in the water table depends upon the soil conditions, slopes, and duration of storm events. Most natural seepage of precipitation occurs in the drainage courses that meander from east to the west. Since the unit water demand factors that were used to estimate annual water demand of the Project already account for any benefits that are derived from local precipitation, we have intentionally excluded this water source from water budget evaluations in this assessment. Additionally, the amount of demand that is offset by rainfall during the growing season is insignificant even in the wettest years.

## 5.2 Groundwater

Regional groundwater conditions for the Central Valley are described in a DWR report titled *California's Groundwater – Bulletin 118, Update 2003*, attached hereto as **Appendix E**. Friant is located within the San Joaquin Valley basin of Tulare Lake hydrologic region (Tulare Lake HR), which encompasses approximately 17,000 square miles from the San Joaquin River to the Tehachapi Mountains in the south, and is comprised of 13 distinct groundwater water basins. The San Joaquin Valley groundwater basin is then divided into seven subbasins, with the Friant Community residing in the Kings Subbasin.

The Kings Subbasin is the northern most subbasin within the San Joaquin Valley groundwater basin and covers approximately 8,000 square miles (5.15 million acres). The boundary for this subbasin is formed by the San Joaquin River (north), the western boundaries of the Westside and Mendota Subbasin (west), southern fork of the Kings River and the southern boundary of Alta Irrigation District (south), and by the alluvium-granitic rock interface of the Sierra Nevada foothills (east).

Groundwater is the predominate water supply for agricultural and urban users in the Tulare Lake hydrologic region, as groundwater supplies account for 41 percent of the total water supply in the hydrologic region (DWR 2003). When comparing recorded groundwater use within Tulare Lake hydrologic region to statewide records of groundwater use, DWR discovered that groundwater use in the Tulare Lake hydrologic

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region accounts for just over one-third of the total groundwater use in the State (DWR 2003). Well yields in the Tulare Lake hydrologic region typically range from 200 to 2,500 gpm. Higher yields are generally realized in the thick sections of the aquifer made up of unconsolidated continental deposits. As one moves towards the eastern boundary of the basin, near the interface of the valley floor and foothills, the aquifer thins and generally results in wells with lower yields (less than 300 gpm).

Water levels in most of the subbasin within the San Joaquin Valley have declined steadily as users within these basins have increased their reliance on groundwater. According to Bulletin 118-80, five of the seven subbasins within the San Joaquin Valley, including the Kings Subbasin, were identified as being in a condition of critical overdraft. In order to offset the impact to groundwater levels from the sole reliance on groundwater, many water purveyors within these basins import surface water to augment their water supplies.

Groundwater plays a vital role in water budgets for agricultural and urban users across the Central Valley. However, the ability to utilize this resource depends on the types of surface and subsurface conditions that are present at the point of use. Those regions that have permeable soil conditions in conjunction with a thick aquifer will tend to rely on and use groundwater more readily than a user located in foothills where the aquifer tends to be shallow and soils are less permeable because of clay. However, even with poor subsurface soil conditions, it is commonly observed that enough water can be extracted to support the needs of a few individual residences, but not the production capacity needed to support a large community.

The Project will not rely on groundwater resources. As discussed above in Section 4.1, WWD 18 does not serve groundwater supplies for uses within the Friant Community. However, WWD 18 plans to use separate infrastructure to serve groundwater supplies to Mira Bella (which is outside of the Friant Community). Additionally, nine individual residences within the Friant Community rely on independent groundwater wells. Seven of these groundwater users are located along the bluff adjacent to the western boundary of the Project and east of Friant Road. Two of these groundwater users are located west of Friant Road, approximately 1,000 feet north of a gravel quarry at the southern end of the Friant Community area. An additional groundwater well is located within the Friant Community and the service area of WWD 18, near the entrance to the Mobile Home Village. This additional well does not comply with Department of Public Health well standards, thus preventing it from being used to supply potable water.

### 5.3 San Joaquin River

Millerton Lake, impounded by Friant Dam, is located on the main stream of the San Joaquin River about 25 miles northeast of Fresno, and is the principal storage facility in the Friant Division of the CVP. The dam was completed in 1947. Small diversions through the Madera Canal began in 1944 and through the Friant-Kern Canal in 1949. However, full operation of Friant Dam did not occur until 1951, when the Delta-Mendota Canal was completed. Until that time, water was released from Friant Dam for the

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exchange contractors downstream. The “exchange contractors” are the San Joaquin River water rights holders who exchanged their use of natural river runoff for a substitute supply delivered through one of the three canals mentioned above. Total water supply from stored water within the CVP Friant Division is approximately 2,150,000 AF. Water made available from the Friant Division of the CVP may be assigned one of three possible classifications depending on hydrologic conditions. These classifications include:

- Class 1 - water that is considered dependable in most years with deficiencies only in dry or very dry years. Class 1 commitments total 800,000 AF annually.
- Class 2 - water that is in excess of Class 1 commitments, and accordingly is less dependable as to its quantity and time of occurrence. Class 2 commitments total 1,400,000 AF annually.
- Section 215 – surplus water released into the San Joaquin River during “flood” conditions to regulate Millerton Lake storage. Section 215 water availability varies from year to year.

According to delivery records from the USBR, average allotments for Class 1 and 2 waters from 1966 to 2006 are 94 percent and 45 percent, respectively. (see **Appendix F**) During this same period, contractors received their full allotment of Class 1 water allotment during 32 of the 41 years. The critical dry year for Class 1 water occurred in 1977 with a yield that was 25 percent of normal. The average yield for Class 2 water from 1966 to 2006 is 45 percent with no water available from 1987 to 1992.

In addition to the allocated Class 1 and Class 2 supplies, USBR makes Section 215 water available during “flood releases” from Millerton Lake. The San Joaquin River tends to experience more frequent flood releases than some larger reservoirs because of the limited storage capacity of Friant Dam (540,000 AF) versus the size of the average San Joaquin river runoff (approximately 1.5 million AF). Annual flood releases from Friant Dam to the San Joaquin River have averaged approximately 465,000 AF, though the year-to-year variance is very high.

Unlike the recent San Joaquin River Settlement, which requires release of water from the CVP Friant Division for in-stream habitat restoration, the provisions of the CVPIA 3406 b(2) have not been applied to the Friant Division operations and thus will not have any direct impact upon water supplies to be made available to LTRID (or the Project) from the Friant Division of the CVP. The total project yield for this program is 800,000 AF; however, release of this water is not required during critical drought conditions on the system. Although CVPIA does require flow to be put back into the San Joaquin River, all plans require congressional approval.

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# 6 LOCAL WATER SUPPLIES AND RELIABILITY

## 6.1 Groundwater

Groundwater supplies in the vicinity of the Friant Community are limited and geographically spotty. Typically, groundwater wells are used to support individual single-family homes and other developments that do not reside in the service boundary of a water purveyor or within the place of use for a particular water supply. Groundwater users within the Friant Community include a few residences along the bluff and a few residences in the overland flow area of the flood plain, concentrated in the southern portion of this planning area. WWD 18 will not use groundwater to satisfy Project demands or the existing and planned future uses within the Western Service Area. Rather, WWD 18 will rely on surface water sources, specifically, CVP Class 1 water firmed up by other resources available to LTRID, as discussed in other sections of this report.

## 6.2 San Joaquin River

WWD 18 will provide San Joaquin River water supply, stored behind Friant Dam in Millerton Reservoir, to the Project. WWD 18 has a San Joaquin River water supply by virtue of a contract with the USBR for 150 AF of CVP Friant Division Class 1 water and an agreement in principle for 2,000 AF of CVP Friant Division Class 1 water from LTRID, as discussed above. Both of these water supplies are sourced from Millerton Lake, which stores runoff from the San Joaquin River watershed for diversion to its water contractors.

Use of stored water from the San Joaquin River is controlled by contracts between a number of special districts in the Central Valley and the USBR, dating from the 1940s and 1950s. According to the USBR website, the USBR has renewed approximately 27 long-term contracts, which means that 27 entities (including WWD 18 and LTRID) rely on the same source: stored water in Millerton Reservoir behind Friant Dam (see **Appendices B and C**). However, USBR's operation of the CVP Friant Division has been subject to environmental litigation in the United States District Court, Eastern District of California. (*Natural Resources Defense Council v. Rodgers*, E.D. Cal. Civ. No. S-88-1658.) The plaintiffs in the lawsuit, the National Resources Defense Council (NRDC), have sought greater water releases from Millerton Reservoir into the San Joaquin River to maintain water temperature and support fisheries, among other objectives. Doing so would mean reduced quantities of water for the long-term contractors in many years, as flows normally released into the canals, including the Friant-Kern Canal that provides LTRID its water supply from Millerton Lake, would instead be released directly into the San Joaquin River channel.

In 2006, the District Court ruled in favor of the plaintiffs. In 2007, prior to the District Court's consideration of appropriate remedies, the litigants agreed to a proposed remedy within a settlement agreement, which can be reviewed at



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<http://www.fwua.org/settlement/settlement.html>. Under the settlement agreement, the USBR will be required to release specified amounts of water into the San Joaquin River from Friant Dam based upon the water runoff forecast for each year. No supplemental restoration water is to be released in the driest five percent of years, as compared with the period between 1922 and 2004. The settlement agreement does not require supplemental releases for instream uses when the annual runoff is projected to be 35 percent of average or less. (The five-percent benchmark looks to the driest four years of the 82-year period between 1924 and 2005 which are: 1924, at 25 percent of average annual runoff; 1931, at 27 percent; 1976, at 35 percent; and 1977, at 20 percent)

This assessment assumes the District Court will not have to issue a remedy order in lieu of the settlement terms. However, the settlement ultimately hinges on federal financing. Without federal support to fund the restoration activities, all USBR contracts for CVP Friant Division water will be subject to a future court-ordered remedy. The scope of any such order will affect all CVP Friant Division contractors, including WWD 18 and LTRID.

In addition to the NRDC case against the USBR operations of the CVP Friant Division, NRDC also challenged the Endangered Species Act Section 7 consultation associated with USBR's operation of the entire CVP system. (*NRDC v. Kempthorne*, E.D. Cal. Case No. CV-01207.) After finding in favor of the plaintiffs on ESA violations related to the United States Fish and Wildlife Service's biological opinion concerning the USBR CVP operations, the District Court issued an oral decision regarding interim remedies for Delta smelt. This ruling, which as of this writing was not yet adopted in written form, will impact the CVP and State Water Project (SWP) contractors reliant upon export water from the San Joaquin-Sacramento Delta ("Export Contractors"). Key remedies in this ruling include: reduction in SWP supplies up to 30%, restricting Tracy and Banks Pumping Plant pumping operations from November until June, and implementation of a monitoring program for the Delta smelt. Although the exact impact upon Export Contractors of this ruling cannot be quantified at this time, one can reasonably expect reductions in their contract amounts. Ultimately, the impacts will vary by water year and will result in substantial water allocation reductions in critical dry years.

Runoff flow from the San Joaquin River was first recorded in 1892 and now the USBR is responsible for tracking this data. According to delivery records from the USBR, average allotments for Class 1 and 2 waters from 1966 to 2006 are 94 percent and 45 percent, respectively. During this same period, contractors received full allotment of their Class 1 water allotment in 32 of the 41 years. The critical dry year for Class 1 water occurred in 1977 with a yield that was 25 percent of normal. The average yield for Class 2 water from 1966 to 2006 was 45 percent, although no Class 2 water was available during the extended drought period from 1987 to 1992. For additional information about runoff volume from the San Joaquin River, see **Appendix F**

Under WWD 18's current contract with USBR, the normal water supply is 150 AF per year, single- and multiple dry year supplies, using the 1977 drought as the basis, are reduced to 37 AF. This level of supply caused water shortages in the existing Friant Community in past dry years. These dry years were accommodated by prohibiting

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outdoor water use throughout the WWD 18 service area, by encouragement of indoor water conservation by limiting bathing and showers, and reducing toilet flushes, and by securing short-term water supplies from other CVP Friant Division water contractors.

The LTRID has agreed in principle to provide WWD 18 an annual CVP Friant Division Class 1 water supply amount of 2,000 AF, net of conveyance losses and evaporation, to be available for the Project. See Appendix A for further explanation of this agreement. LTRID has a USBR long-term contract for a total of 61,200 AF of CVP Friant Division Class 1 supplies, which has been reduced to as low as 15,300 AF in the critical dry year (occurred in 1977) on record. LTRID has other CVP Class 1 commitments, so absent other supplies and only during critical dry years, LTRID will experience a 460 AF shortfall of CVP Class 1 water to fulfill its commitment to WWD 18 under the Water Supply Agreement (see **Appendix C** for details of LTRID's supplies and commitments.) This shortfall, however, will be offset by an additional 460 AF of Tule River pre-1914 water rights, which LTRID will make available during critical dry years. By pumping Tule River water into the Friant-Kern Canal, LTRID will free up CVP Class 1 water in quantities sufficient to allow it to meet its 2000 AF commitment to WWD 18.

Because Class 1 water availability, based upon the driest five percent of years on record, which are considered to be "critically dry," has been 25 percent of normal Class 1 supply, and because given this amount of Class 1 water, LTRID has demonstrated ability to deliver 1,456 AF to the Project in critical dry years, LTRID has sufficient supplies for the projected uses within the Project. Between Project water demands (1456 AF) being less than the Class 1 water supply available during a critical dry period (1540 AF) and the additional 460 AF of Class 1 made available through Tule River exchanges to make up the deficit CVP Class 1 supply, water supplies for the Project are reliable and capable of supporting projected demands.

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# 7 EXISTING WATER USAGE

## 7.1 Project Area

The Project Site has historically relied only on natural precipitation and does not depend on any additional water supply to support grazing by cattle of an onsite pasture. "Use" of natural precipitation for the cattle grazing on the proposed Project Site was estimated from crop survey reports prepared by DWR.

In order to account for the changes in water use from different cropping patterns, crop surveys for two separate reporting years (1994 and 2000) were used to estimate annual consumptive water demand. However, upon further review of these crop surveys no changes were recorded in usage between these surveys. Therefore, water demand calculations for existing conditions were based upon the 2000 crop survey.

According to the 2000 crop survey, the entire Project Site is classified as native vegetation (see **Figure 7-1**). Using the agronomic water rate (0.5 acre-feet per acre per year) data from the University of California Experiment Station in Kearney and historic cropping patterns, water use for the existing Project Site is estimated at 560 acre-feet per year (AFY).

## 7.2 Existing WWD 18 Service Area

The WWD 18 boundaries consists of two main areas – Mira Bella and a portion of the Friant Community – divided by the Friant-Kern Canal and operated independently and separately. The current service area for WWD 18 encompasses 443 acres. 244 acres constitute the Western Service Area located with the current Friant Community Plan boundary. The remaining 199 acres comprising the Eastern Service Area are located all within Mira Bella, east of the Friant-Kern Canal along Friant Road, and were annexed into WWD 18 in 2002.

Even though Mira Bella is within the Eastern Service Area of WWD 18, the water system servicing these users is a stand-alone system and there are no plans to connect this service area to the Western Service Area of WWD 18. WWD 18 will provide water for Mira Bella from three groundwater wells east of the Friant Kern Canal; no water will be sourced from the San Joaquin River. WWD 18 has not, as of the date of this assessment, taken over management and operations of the water system infrastructure for Mira Bella.

In 2005, WWD 18 delivered 150 acre-feet of treated surface water from Millerton Lake to 219 residential and 19 commercial/industrial customers within the Friant Community. Water is delivered to the WWD 18 water treatment plant via a 6-inch diameter pipe that connects to a larger discharge pipe (used to supply water to the State Fish hatchery)

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near the base of Friant Dam. Raw surface water from this connection point is treated with a series of clarifiers and pressure filters, and is disinfected using chlorination.

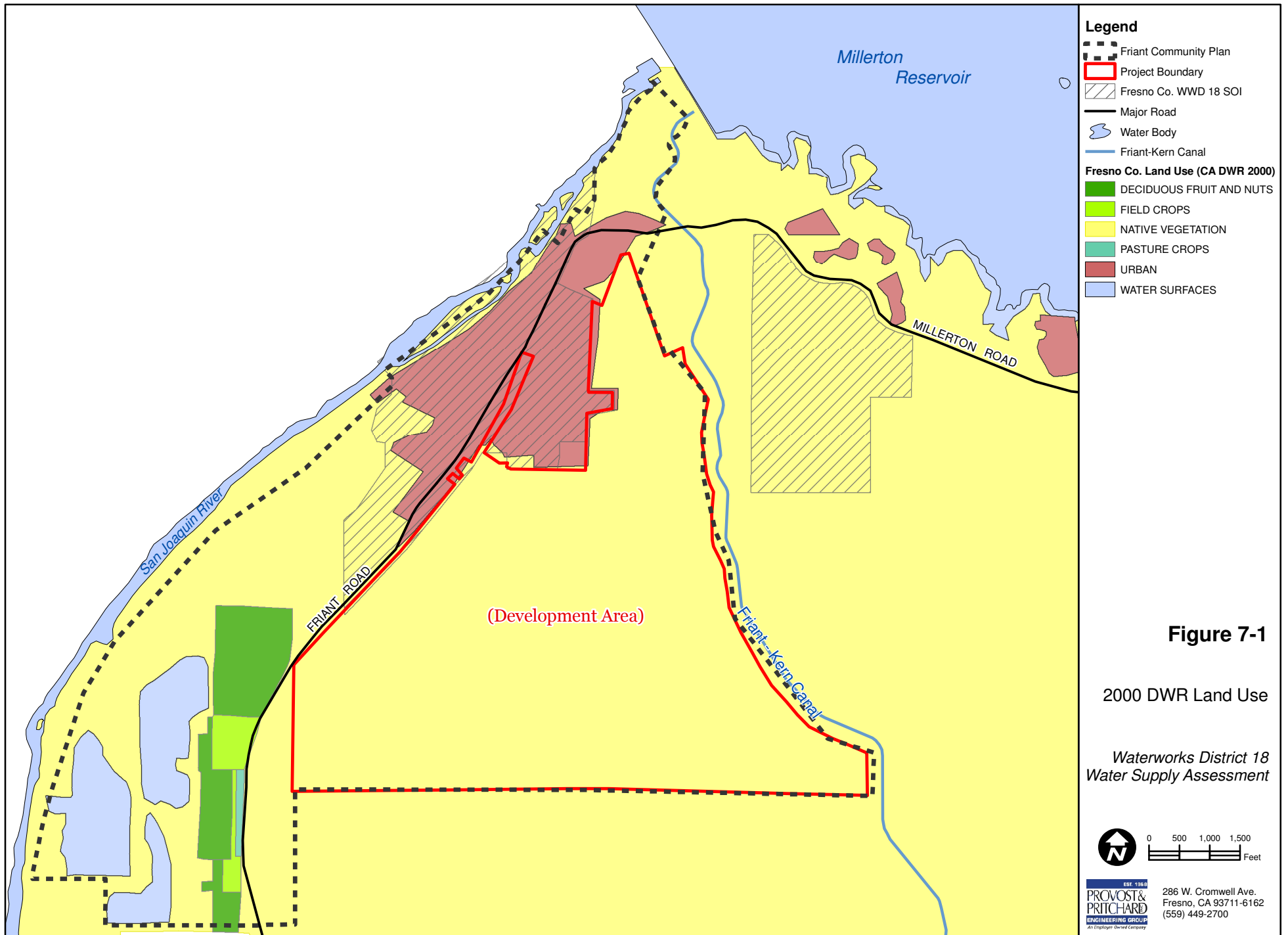
WWD 18 also provides contract water treatment services for Table Mountain Rancheria, Millerton Lake State Park, the CDF Fire Station in Friant, and the USBR office in Friant.

The present process agreement between WWD 18 and Table Mountain Rancheria requires WWD 18 to process 2 AF per month, not to exceed 20 AF annually. This water is purchased from Madera Irrigation District by WWD 18 on behalf of Table Mountain, and it remains in Millerton Lake until processing at the District's WTP. Treated water is trucked by Table Mountain for use at their casino, located approximately six miles to the east. This contract is a fee-for-service arrangement. Other than the contract in place, WWD 18 has no on-going obligation to provide water service of any kind or water supply to Table Mountain.

The other three users (Millerton Lake State Park, the CDF station in Friant and the USBR office in Friant) receive water treatment under a single agreement which states that the water delivered to these entities is not charged against WWD 18's Class 1 supply. District records indicate an average of approximately 1.25 AF per month is treated for these three users, with 82 percent going to the State Park, 16 percent to CDF and the remainder to the Bureau office.

Water for Millerton Lake State Park is pumped to a state-owned storage tank east of Friant on the north side of Millerton Road, where the State Park takes over the job of distribution for its own uses. The CDF Station and the USBR office are served directly off the WWD 18 distribution system. Each of these three services are metered separately to provide for accurate credit for the water used.

The water supply and demand associated with these contract water treatment services for Table Mountain Rancheria, Millerton Lake State Park, CDF and USBR are not included in the water supply and demand calculations presented herein because the contracts are for treatment and delivery of wholly separate water supplies controlled by the respective contracting parties.



## SECTION EIGHT

# 8 WATER DEMANDS AND FACILITIES

This section summarizes water demands of the Project and existing and planned future WWD 18 service boundaries (including the Friant Community and Mira Bella) along with water system infrastructure that is required to provide potable water to the users within the Project and the Friant Community. Project demands were evaluated by customer types and in 5-year increments until build-out in 2030. After build-out water demands are quantified, and demands for the Project and Friant Community were evaluated for normal, critical dry, and multi-dry year hydrologic conditions

## 8.1 Project Demand

All Project water demand estimates are based upon the proposed Land Use Plan in the draft Friant Ranch Specific Plan. The Project will be limited to 2,996 units, distributed amongst single-family residential units of various lot sizes and multi-family housing. The Project proposes approximately 2,996 residential units, which include 2683 age-restricted (55 years of age and older) single-family units, 83 age-restricted (55 years of age and older) multi-family units, and 180 non-age restricted multi-family units. The Project also proposes a Village Center on approximately 21.3 acres, comprising 250,000 square feet of retail and commercial uses, along with 50 non-age restricted residential units. The Project includes 117 acres of landscaped areas, including both parks and landscaped vegetated slopes. The Project also includes non-irrigated open space. (See **Figure 2-2**)

Indoor potable water demands were estimated based on land use type. Historical unit use factors for similar development in the San Joaquin Valley and calculated outdoor use was based on irrigable acreage composed of planned dedicated open-space acres and/or percent coverage for each land use type.

Using this method, the average annual demand for the proposed Project is estimated to be 1,471 acre-feet in a normal hydrological year.

Expected water demand for the Project will be a composite of the specific water demands for the various types of land uses proposed. These demands are summarized in Table 1 and Table 2.

With 2,996 units proposed in the Specific Plan area, it is possible to calculate average unit densities, which have been correlated with land use designations in Clovis that allow for the use of selected specific water use factors which are, presented in Table 1, below. These factors have not been adjusted for the much-lower average occupancy of each unit in an age-restricted 55+ active adult community such as the Project. Approximately two-thirds of domestic water is for external use. Lower average occupancy has not been factored into these tables, as a measure of conservatism. The following **Table 8.1.1** presents a summary of water usage for residential development within the area, based upon the methodology above.

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**Table 8.1.1 Projected Project Average Daily Demand for Water By Residence Type and Lot Size By Land Use at Build-Out –Residential  
 (Based upon City of Clovis Information and General Plan Designations)**

<i>Project Land Use</i>	<i>No. Of Units</i>	<i>ADD (gpd/ac)</i>	<i>Acres</i>	<i>Demand (gpd)</i>	<i>Demand (AF/Day)</i>	<i>Demand (AF/yr)</i>
<i>SFD-1 Single-Family (6,000–7,200 SF)</i>	293	1,875	60.7	113,812	0.349	127
<i>SFD-2 Single-Family (3,500-5,000 SF)</i>	1,295	1,875	214.4	402,000	1.23	449
<i>SFD-3 Single-Family Cluster &amp; Alley- load (8.0-12.0 du/ac)</i>	1,095	3,035	135	409,725	1.26	460
<i>MFD Apartments, Condos, Triplexes (12.0-18.0 du/ac)</i>	83	3,035	5.3	16,085	0.049	18
<i>MFD Non-Age Qualified Apartments (12.0- 18.0 du/ac)</i>	180	3,035	13.5	40,972	0.126	46
<i>Village Center (Live/Work)</i>	50	200 (gpd/unit)	-	10,000	0.031	11
<b>Total</b>	<b>2,996</b>		<b>428.9</b>	<b>992,594</b>	<b>3.04</b>	<b>1111</b>

Overall water use patterns for proposed land uses and densities are expected to be similar to those of other Valley communities which have implemented water metering together with tiered rates. The City of Clovis was used for comparison due to its similarity and proximity to Project, and the abundance of data available from that system. See Table 8.1.2. In contrast, the City of Fresno has not fully implemented water metering and so has not been used as a basis for comparison.

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**Table 8.1.2: Projected Project Average Daily Demand (ADD) for Water By Land Use at Build-Out – Non-Residential (Based upon City of Clovis Information and General Plan Designations)**

<i>Land Use</i>	<i>ADD (Gpd/ac)</i>	<i>Acres</i>	<i>Total Demand (gpd)</i>	<i>Total Demand (AF/Day)</i>	<i>Total Demand (AF/yr)</i>
<i>Village Center</i>	1,965	23.8	46,767	0.14	52
<i>Active-Adult Recreational Center (CC)</i>	1,965	16.7	32,815	0.10	37
<i>Parks and Parkways (P)</i>	2,500	25	62,900	0.19	70
<i>Landscaped Slopes</i>	1,965	92	180,780	0.55	201
<b>Total</b>			<b>322,862</b>	<b>0.98</b>	<b>360</b>

Total annual consumptive water demand for all land uses, combining totals from Tables 8.1.1 and 8.1.2, will be 1,471 AF.

The water demands for the Project at build-out are presented in **Table 8.1.3**.

**Table 8.1.3: Projected Project Demands in AFY**

<i>Customer</i>	<i>2010</i>	<i>2015</i>	<i>2020</i>	<i>2025</i>	<i>2030</i>
<i>Single Family</i>	-	259	518	777	1036
<i>Multi- Family</i>	-	16	32	48	64
<i>Village Center</i>	-	3	6	9	11
<i>Neighborhood Shopping Center</i>	-	13	26	39	52
<i>Active-Adult Recreational Center (CC)</i>	-	9	18	27	37
<i>Parks and Parkways</i>	-	17	34	51	70
<i>Landscaped Slopes</i>	-	50	100	150	201
<b>Total</b>	<b>0</b>	<b>341</b>	<b>682</b>	<b>1101</b>	<b>1471</b>

Notes:

1. Assumes construction begins in 2010.
2. Assumed build-out by 2030.



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### 8.2 WWD 18 Demand – Western Service Area

For purposes of this assessment, demands within the Western Service Area comprise those demands for all lands within the current WWD 18 service area west of the Friant Kern Canal that do not fall within the boundaries of the Project (see **Figure 2-1**).

Per District records, the current potable water demands within WWD 18 are attributed to 219 residential and 19 commercial/industrial users that used 150 AF in 2005.

For purposes of this assessment, the “planned future uses” for the Western Service Area are determined based on the current Friant Community Plan (amended in 1983) land use designations for the land within the current WWD 18 boundaries, with the following exceptions:

- The 2007 CEQA Notice of Preparation for the Draft Community Plan Update suggests that the County is considering a land use change within the existing Community Plan area. One parcel (referred to as the “Friant Depot Parcel”) that was designated in 1983 as residential is proposed for designation as commercial. This proposed change is taken into account for purposes of determining future planned uses within the WWD 18 boundaries in this assessment.
- 11 acres within the Project area are already a part of the current WWD 18 service area and included within the current Community Plan area (1983 amendment). For purposes of determining water demands for this assessment, those 11 acres are not included within the “future planned uses” of WWD 18 because they are included within the Project.

At build out, the Western Service Area is anticipated to have an additional annual demand of 185 AF, which results in a future cumulative water demand of 335 AFY. Most of that demand will be associated with residential (low, medium, and medium-high) land uses. Community Plan Land Uses are shown in Table 8.2.1 below.

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**Table 8.2.1: Western Service Area Land Use Distribution (All in Acres)<sup>1</sup>**

Land Use	Total Community Plan Area	Total Outside of Project	Currently Developed Outside of Project	Total Developable Area <sup>2</sup>	Developable Area, Outside of Project
Agriculture	337	337	337	--	--
<b>Residential</b>					
Low Density	43	43	25	18	18
Medium Density	109	48	43	66	5
Medium High Density	398	13	5	393	8
Roads	77	--	--		
<b>Commercial</b>					
Highway	42	42	11	31	31
Community	24	--	--	24	
Special	17	17	--	17	17
<b>Public Facilities</b>					
Sewage Treatment Plant	6	2	2	4	--
Fish Hatchery	49	49	49	--	--
Telephone Relay Station	2	2	2	--	--
Landscaped Slopes	92	--	--	92	--
Parks & Parkways	25	--	--	25	--
Corporation Yard	4	4	4	--	--
<b>Open Space</b>					
Lost Lake Regional Park	273	273	273	--	--
San Joaquin River Zone at Lost Lake Park	24	24	24	--	--
Floodplain	7	7	7	---	--
Open Space <sup>3</sup>	275	--	--	275	--
<b>Total Acreage</b>	<b>1,804</b>	<b>861</b>	<b>782</b>	<b>945</b>	<b>80</b>

Notes:

1. Per Friant Community Plan (1983 ) but including proposed change of designation for Friant Depot Parcel to commercial and excluding 11 acres situated within the WWD 18 service area; includes Project except as noted.
2. Developable Land Acreage excludes lands designated as Agriculture, Public Facilities and Open Space including Lost Lake Regional Park, floodplain, and open space as these areas do not receive surface water supplies from WWD 18. This column includes land within the Project
3. Open Space includes natural open space and revegetated slopes.

### 8.3 WWD 18 Demand – Eastern Service Area

The eastern service area for WWD 18 is comprised entirely of the Mira Bella tract, a 180-lot low density single family residence development that covers 199 acres. Existing water demand for the eastern service area of WWD 18 is zero AF because Mira Bella does not have any existing users. According to design engineers for Mira Bella, build out demand is projected to be 130 AFY. Because this portion of WWD 18 will be stand-

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alone water system, supplied by local groundwater resources rather than San Joaquin River supplies, demands within this area are not included in the water balance evaluations for the Western Service Area.

### 8.4 Water Demand Summary

Water demands in the Central Valley generally do not change significantly due to hydrological conditions from year-to-year, except that demands can be made to decrease during drought conditions because water purveyor/suppliers place restrictions on outdoor water usage. Since outdoor water use for residential land use types accounts for 60 percent of total water use, outdoor watering restrictions may reduce demands by 10 to 30 percent depending upon the severity of use restriction. For purposes of this investigation, this assessment assumes demands are constant for all hydrologic conditions, a conservative approach. Build-out demands at each hydrologic condition are shown below in **Tables 8.4.1 and Table 8.4.2** on the following page.

**Table 8.4.1 Surface Water Demand at Build-out in AF  
 (Projected WWD 18 Western Service Area, with Project)**

Customer	Normal	Critical Dry	Multi-Dry		
			Year 1	Year 2	Year 3
<b>Project</b>	1471	1471	1471	1471	1471
<b>Current Uses</b>	150	150	150	150	150
<b>Planned Future Uses</b>	185	185	185	185	185
<b>Total</b>	<b>1806</b>	<b>1806</b>	<b>1806</b>	<b>1806</b>	<b>1806</b>

Note:

1. Future Planned Uses include all land use that are within the Western Service Area and the Friant Community boundary but fall outside the Project boundary. Demands for the Western Service Area of WWD 18 are accounted for by the Friant Community demands per the 1983 Friant Community Plan, except that this demand considers the proposed change of land use for the Friant Depot Parcel. Within the Community Plan area.
2. Although Project area is not yet annexed into the WWD 18 service area, for purposes of this Assessment this Chart includes the Project demand within the WWD 18 Western Service Area Total.

## SECTION EIGHT

**Table 8.4.2 Groundwater Demand at Build-out in AF**  
 (Projected WWD 18 Eastern Service Area)

Customer	Normal	Critical Dry	Multi-Dry		
			Year 1	Year 2	Year 3
<b>Total</b>	130	130	130	130	130

Note:

1. Eastern service area for WWD 18 consists only of the Mira Bella development.

WWD 18’s current 150 AF Friant Division CVP Class 1 supply will not be adequate to meet the demands of the Western Service Area at full build out (without the Project), and WWD 18 will need to acquire additional water supplies to meet those needs as buildout occurs. As demonstrated in Section 10, the water supplies proposed by the Project meet this need and eliminate the potential shortage.

### 8.5 Facilities

The facilities comprising the water system infrastructure for the Project consist of upgrades to the existing WWD 18 surface water treatment plant, water storage tanks, and a transmission main. All other water related infrastructure required to convey water to end users within the Project are considered In-Tract improvements and will not be discussed herein. See **Figures 8-1** and **8-2** for maps of existing and future water facilities within the Draft Friant Community Plan Update. However, the supplies proposed by the Project alleviate this situation and in fact, create a modest surplus of supply (see Section 10).

The Project will be supplied water from Millerton Lake, delivered to WWD 18’s SWTP by connecting to an existing pipeline that is fed from an outlet located near the base of Friant Dam (subject to approval and/or consent from USBR, Department of Fish and Game, and Orange Cove Irrigation District, who are collectively the owners and users of this pipeline). There are existing connections in this location, which are used by the Orange Cove Irrigation District power plant and the State of California’s fish hatchery. In order provide water to the Project during down times at the power plant, a by-pass line will be constructed around the power plant, thereby allowing uninterrupted deliveries to the SWTP and fish hatchery.

To accommodate the water demands for the Project, a total of 0.9 million gallons per day (mgd) of treatment capacity will be needed at the SWTP. This expansion may be designed and constructed by the District, or the District may choose to have the Project construct the necessary improvements under its direction and supervision. In either case, the Project would bear its pro-rata share of the improvement cost.

WWD 18 will also add capacity to meet the needs of future planned growth within the Western Service Area outside the project. The District anticipates that this growth will

## SECTION EIGHT

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occur in two or more phases, ending with a plant capacity of 1.8 to 2.0 mgd, which will be adequate for the Project plus the fully-developed Western Service Area. Although specific unit processes have not been selected for the process trains at the SWTP, all equipment will be chosen so that finished water complies with water quality regulations that are in effect at the time of design and construction, as stipulated by the Department of Public Health and EPA.

After water is treated at the SWTP, it will be conveyed to the Project by a 20-inch diameter transmission main planned for the abandoned right-of-way of a railway that runs along the west side of the Project. This pipeline is projected to be approximately 6,000 feet long. In order to provide water to the Project during peak demand periods and to meet fire protection requirements, two 1-million gallon water storage tanks will be installed. One tank will be sited near the SWTP and the other within the Project at a location to be determined in the future.

### 8.6 Water Conservation Policies

Water conservation and reclamation will be emphasized in Project design in order to meet the water use goals for the Project. Implementation of conservation policies and the use of reclamation facilities represent two of the most cost-effective ways to efficiently use limited resources. For example, the Project is proposing to incorporate water-saving plumbing fixtures, and to use reclaimed water on outdoor landscaping. Further, WWD 18 is proposing to impose tiered water rates as an incentive for conservation.

Consideration is given in project design for use of reclaimed water (treated, disinfected wastewater effluent) for irrigation of parks and publicly maintained open spaces (trails, road medians, landscape easements) wherever practical and economically feasible. This may mean that certain parks, medians, etc., are irrigated by reclaimed water while others are irrigated by the domestic supply. Although potable and reclaimed water will each be used to irrigate landscaped area within the Project, the water distribution systems conveying these sources will be two stand-alone facilities as required by the Department of Public Health, thereby preventing any blending of these water sources.

Another example of conservation measures and policies to be employed by WWD 18 includes issuing public notices when supplies are limited. For example, USBR issued a declaration to WWD 18 stating that Class 1 supplies for the 2007-2008 water year would be 60 percent of normal. In response to this information WWD 18 adopted a new resolution and rules summarizing how the district plans to reduce consumptive demands to match available supplies. A copy of this resolution is contained in **Appendix J**.

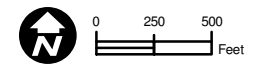


- Legend**
- MIRA BELLA
  - FRIANT COMMUNITY PLAN
  - FRESNO CO WWD 18 SOI

**Figure 8-1**

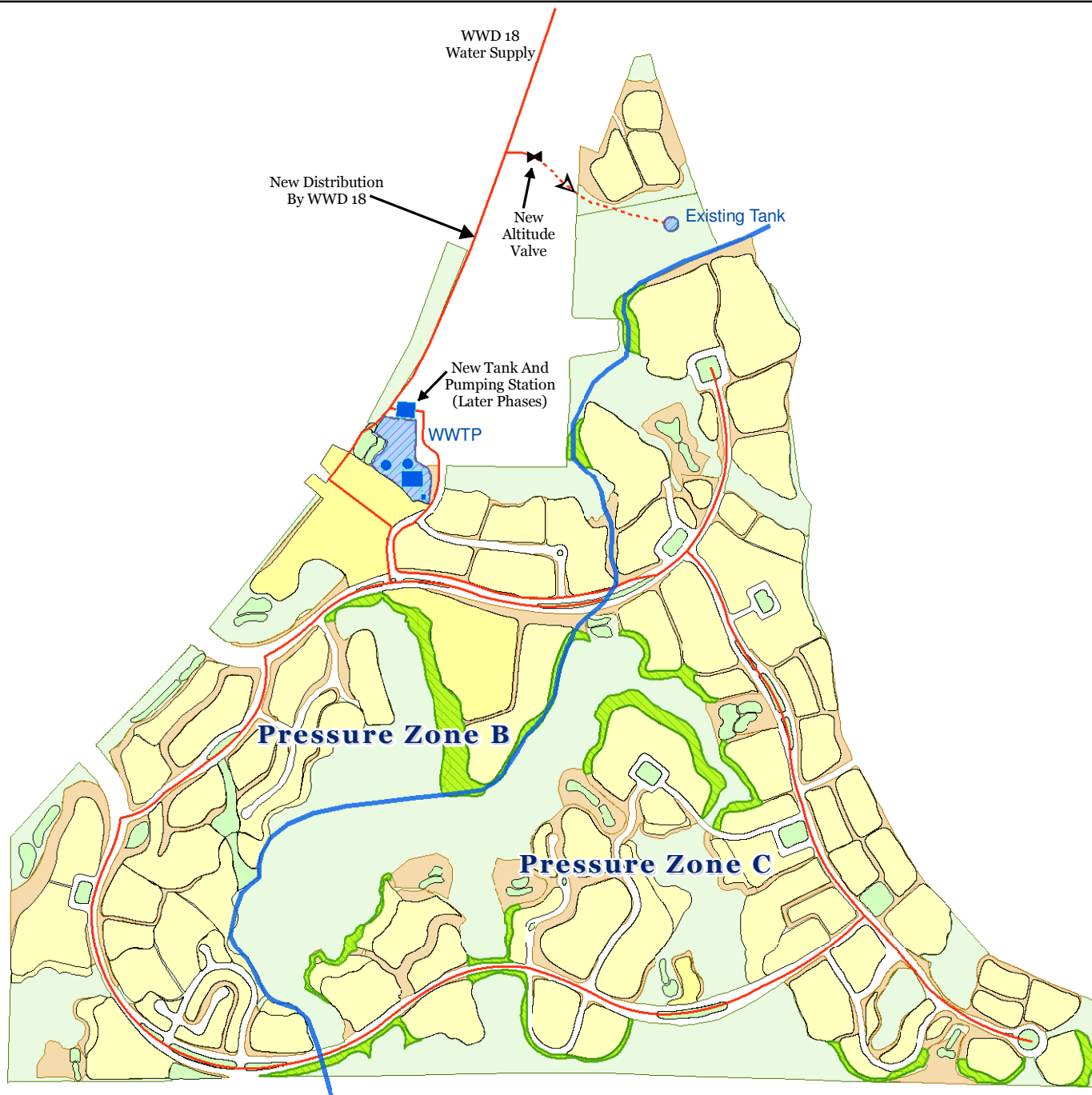
Existing Water Facilities

*Waterworks District 18  
Water Supply Assessment*








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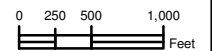
**Legend**

-  Pressure Zone Boundary
-  Proposed Facility
-  Existing Facilities
- Water Mains**
-  Existing
-  Proposed

**Figure 8-2**

Proposed Backbone  
Water System

*Friant Ranch  
Water Supply Assessment*



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## SECTION EIGHT

### 8.5 Capital Facilities Program

Infrastructure improvements necessary to meet Project demands will be constructed in phases as the project develops. Additional facilities will be constructed to meet the demands of the planned future uses within WWD 18 service boundaries, as required. In general terms, developments will be required to reimburse WWD 18 for all costs associated with the assured water supply, as well as reimbursement of capital related water, sewer, and reclaimed improvements required to support a development.

Currently, the water treatment plant and distribution system are sufficient to meet the public health and safety needs of the existing uses within the Friant Community. In order to satisfy water demands of the Project, additional water treatment, storage, and distribution facilities will need to be constructed. These Project-related improvements will be constructed on behalf of or by WWD 18, and funded by the Project. Prior to construction of houses within the Project, construction will begin on the water treatment plant (WTP) as well as the backbone water transmission line (the pipeline from the WTP to the Project). Major water system infrastructure will also include two potable water storage tanks. One tank will be constructed at the same time as the WTP and backbone water transmission line improvements; a second tank is not required until the Project reaches 50 percent of its build-out house count (approximately 2015). All water system improvements required to convey water to the various tracts within the Project will be constructed, as each tract is built-out. These improvements are considered to be part of the in-tract expenses rather than backbone infrastructure or capital facilities.

Financing of water infrastructure (WTP, backbone distribution, and storage) can be accomplished through many different financing programs available to a WWD 18. On April 24<sup>th</sup>, 2006, the WWD 18 Board of Directors adopted Resolution No. 06-06 to authorize entering into a reimbursement agreement with the Project proponents for the processing of requisite approvals for the WTP (see **Appendices G and H**). All direct and indirect costs and expenditures incurred by WWD 18 to install the major water system infrastructure will be reimbursed by the Project in accordance with the terms and conditions of a reimbursement agreement to be entered into after completion of environmental review. Operations and maintenance (O&M) expenses associated with major water system infrastructure will be funded from user fees and potential development impact fees. All costs associated with In-Tract improvements are the sole responsibility of a developer of that project and not WWD 18.

The water-related infrastructure costs total approximately \$9.08 million, of which \$3.0 million is associated with acquisition of the water supply from LTRID. The water treatment plant expansion has a projected cost of \$2.25 million, with costs for water storage facilities and the transmission main totaling \$3.73 million. A breakdown of the infrastructure costs is contained in **Appendix I**. WWD 18 will approve plans for these facilities, which will then be submitted to, reviewed and approved by Fresno County, all prior to the recordation of any Parcel or Final maps.



## SECTION NINE

# 9 PROPOSED WATER SUPPLY

## 9.1 Surface Water

Surface water supplies available to WWD 18 will be used to support the demands within the Friant Community and the Project. At this time, all of the surface water supplies that are available to WWD 18 are from runoff within the San Joaquin River watershed that is captured and stored behind Friant Dam. Once the LTRID contract is executed by the districts (after environmental review) and approved by the USBR, an additional 2,000 AF (normal year yield) will be available to WWD 18 for service to the Project. Use of these supplies by WWD 18 is made possible by the following agreements, which are included herein as **Appendices B** and **C**.

- WWD 18 Contract No. 14-06-200-5904-LTR1
- LTRID Contract No. I75r-2771-LTR1

Since surface water supplies are not constant and can fluctuate from year to year, and due to regulatory limitations on the stored water supply, the supplies mentioned above were evaluated at key hydrologic conditions in order to ensure that supplies will be sufficient to meet projected demands. The hydrologic conditions that are of the most concern are the critical dry and multi-dry years because the yield during these conditions can be as little as 20 to 30 percent of normal year yields. Refer to **Table 9.1.1** for a summary of surface water availability during different hydrologic conditions.

**Table 9.1.1: Projected Surface Supply Available for Normal, Critical Dry and Multi-Dry Years in AFY**

Supply	Normal	Critical Dry	Multi-Dry		
			Year 1	Year 2	Year 3
<b>LTRID CVP Class 1</b>	2000	1540	1540	1540	1540
<b>LTRID Pre-1914 Tule River</b>	0	460	460	460	460
<b>WWD 18 Contract</b>	150	37	37	37	37
<b>Total</b>	<b>2150</b>	<b>2037</b>	<b>2037</b>	<b>2037</b>	<b>2037</b>

Notes:

1. Multi-dry year scenario for WWD 18 assumes reoccurrence of the critical dry year for three consecutive years, a conservative approach since historic records from 1966 to 2006 indicate that such an event has not occurred.
2. Critical dry is a classification assigned to a year that had the least volume of water.
3. Multi-dry is a classification that is assigned to a three year period where the cumulative volume for those years is the least.
4. The critical dry year data used for this table is for 1977.
5. Pre-1914 water from the Tule River is only needed to free up additional CVP Friant Division supplies during critical dry trends of the hydrological cycle.
6. This table does not include Reclaimed Water, which is not a surface supply.

## SECTION NINE

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WWD 18 and LTRID have each entered into CVP Friant Division long-term water supply contracts with the USBR. Each of the separate renewal contracts negotiated by these districts in January 2001 expires on February 28, 2026, with possible 25-year renewals. (See **Appendices B** and **C**.) If LTRID wishes to renew its respective contract pursuant to the 25-year renewal provision beyond the current expiration date of February 28, 2026, the District must submit a formal written request to the Secretary of the Interior two years prior to the date of expiration. In addition, each USBR contractor must also comply with certain conditions, such as preparation of a water conservation plan, implementation of this plan, operation and maintenance of all water measuring devices and use of contract water supply in a reasonable and beneficially manner, and compliance with any court order, final judgment, or settlement pertaining to the San Joaquin River restoration.

The WWD 18 USBR contract for Municipal and Industrial uses must be renewed for a period of 25 years and thereafter for successive periods of up to 40 years each (to the extent consistent with Reclamation-wide policy in effect at the time of renewal) so long as WWD 18 is in compliance with all terms and conditions of the USBR contract and all legal obligations under any court order, final judgment, or settlement pertaining to the San Joaquin River restoration. Any such renewals of the LTRID or WWD 18 contracts must comply with NEPA and ESA.

The San Joaquin River Settlement Agreement, while significantly changing the allocation of San Joaquin River water supplies between agricultural users and fisheries by reducing overall average deliveries to ag users by approximately 19 percent will not significantly affect the Water Supply Agreement proposed between WWD 18 and LTRID. The river restoration hydrograph in critically dry and multiple dry years does not propose to change current conditions. Rather, the restoration plan envisions that salmon would be trapped and trucked from the spawning beds to the Delta for release when the river is low. Thus, the percentage of LTRID's Class 1 supplies (under the LTRID Contract with USBR) allocated to LTRID in critically dry and multiple dry years are not expected to change significantly from allocations in prior critically dry years.

An Eastern District Court-imposed remedy limiting the pumping operations related to the CVP export facilities in the Delta will cause water shortages for USBR contractors that receive CVP Northern California water supplies through the Delta.

Though WWD 18 does not receive exported water supplies through the Delta, there is a remote chance that "Exchange Contractors" that agreed to trade pre-Friant Dam San Joaquin River water rights for CVP Delta originated supplies will exercise their "call" on CVP Friant Division water if they are unable to receive CVP exported water supply per the existing Exchange Agreement. WWD 18 recognizes this potential uncertainty, but based on the priority given to Exchange Contractors and current projections for pumping restraints through the Delta, concludes that the potential "call" does not threaten to reduce the CVP Friant Division water supplies for the Friant Community and the Project at this time. (Further, in the unlikely event that any Exchange Contractor(s) attempted to make such a "call", the threatened consequences to the 1-million acre

## SECTION NINE

Friant Division of the CVP would inspire immediate collective actions to meet emergency water needs of the Friant Division contractors.)

### 9.2 Reclaimed Water

Portions of the Project will be irrigated with reclaimed water. WWD 18 will pursue reuse of 400 AF of reclaimed water from the WWD 18 wastewater treatment plant (WWTP) to irrigate turf on landscape features within the Project. Additional reclaimed water will be used offsite, potentially on Fresno County lands at Lost Lake Park. The disposal goal for this reclaimed water is to maximize the use of this resource to reduce the use of fresh water wherever technically and economically feasible. Any reclaimed water system that is used for outdoor irrigation will be standalone water system, completely separate from the potable water system. No interconnections will be permitted.

In the initial stages of the Project, the volume of effluent generated by the initial occupants will not be sufficient to make reclaimed water disposal practical on large landscaped areas. Implementation of the reclaimed water system is anticipated to occur in three phases, with Phase 1 servicing approximately 1,800 equivalent dwelling units (EDU) and Phases 2 and 3 each servicing 1,460 EDU. Phase 1 of the reclaimed water system is anticipated to deliver approximately 140 AF of reclaimed water to a 70 acre disposal area. Phases 2 and 3 are projected to have a combined disposal capacity of 260 AF, with each phase responsible for 50 percent of the total.

Effluent is generated year-round on a nearly constant basis, whereas the agronomic demand for typical landscape vegetation peaks during summer months and decreases significantly during winter, early spring and late fall months. In order to dispose of reclaimed water generated during the dormant months, it must be stored for future irrigation needs or disposed in another fashion. At build-out, 400 AF of reclaimed water will be available for use within the Project area annually. Because this water source is derived from interior water use, the reclaimed water available for use will remain constant during all hydrologic conditions.

### 9.3 Summary

The Water Supply Agreement between LTRID and WWD 18, in addition to the existing USBR Contract held by WWD 18 for 150 AF of Class 1 water from the CVP Friant Division, will generate a consistent water supply for the Project, in addition to the existing and planned future uses within the current WWD 18 water service area, over the next 20 years. During normal hydrologic years, LTRID will be able to provide 2,000 AF of Class 1 CVP Friant Division water supply to WWD 18 pursuant to the Water Supply Agreement, in addition to other demands for the LTRID 61,000 AF entitlement to Class 1 CVP Friant Division water supply. In dry years, however, LTRID may experience a shortfall in Class 1 supplies to meet all of its Class 1 water supply commitments, including WWD 18 (See Appendix D). To offset this anticipated shortfall (the prorated amount of shortfall for WWD 18 would be 460 AF), the Water Supply Agreement will provide for LTRID's provision of pre-1914 water from the Tule River to supply LTRID's Class 1 commitments to downstream users so that 2,000 AF of CVP

## SECTION NINE

Class 1 water remains in Millerton Lake, available for use by WWD 18. As discussed above, reclaimed water is available under all hydrologic conditions. Refer to Table 9.3.1 on the following page for a summary of water supply availability.

**Table 9.3.1: Projected Supply Available by Source for Normal, Critical Dry and Multi-Dry Years**

Supply	Normal	Critical Dry	Multi-Dry		
			Year 1	Year 2	Year 3
<b>LTRID CVP Class 1</b>	2000	1540	1540	1540	1540
<b>LTRID Exchange for Pre-1914 Tule River</b>	0	460	460	460	460
<b>WWD 18 CVP Class 1</b>	150	37	37	37	37
<b>Reclaimed Water</b>	400	400	400	400	400
<b>Total</b>	<b>2550</b>	<b>2437</b>	<b>2437</b>	<b>2437</b>	<b>2437</b>

Notes:

1. The critical dry year data used for this Table is for 1977.
2. Multi-dry years scenario for WWD 18 assumes reoccurrence of the critical dry year for three consecutive years.
3. All sources except Reclaimed Water are surface supplies, which will be delivered via the CVP Friant Division.

## SECTION TEN

### 10 USE OF SUPPLIES

**Table 10.1.1** illustrates how build-out water demands from the Project, in addition to the existing and planned future uses within the Friant Community, inclusive of the Western Service Area of WWD 18, during various hydrologic conditions, will be met by the supplies identified in this report.

**Table 10.1.1: Comparison of 20-year Projection of Supply and Demand for Normal, Critical Dry, and Multi-Dry Years**

Supply	Normal	Critical Dry	Multi-Dry		
			Year 1	Year 2	Year 3
<b>LTRID CVP Class 1</b>	2000	1540	1540	1540	1540
<b>LTRID Exchange for Pre-1914 Tule River</b>	0	460	460	460	460
<b>WWD 18</b>	150	37	37	37	37
<b>Reclaimed Water</b>	400	400	400	400	400
<b>Supply Total</b>	<b>2550</b>	<b>2437</b>	<b>2437</b>	<b>2437</b>	<b>2437</b>
<b>Demand Total</b>	<b>1806</b>	<b>1806</b>	<b>1806</b>	<b>1806</b>	<b>1806</b>
<b>Difference</b>	<b>744</b>	<b>631</b>	<b>631</b>	<b>631</b>	<b>631</b>

Notes:

1. This evaluation pertains only to build out conditions within the Western Service Area and the Project.
2. Demand total is cumulative build out, potable water demand for all the land uses within the Western Service Area and the Project.

Note that for most hydrologic conditions, the water made available from just the LTRID CVP Class 1 supply contract is greater than all projected demands, and it is only during critically dry periods (single and multi-dry) that all available water supplies are needed to meet the combined needs of the Project and the existing and planned future uses (of surface water) within WWD 18 service area (i.e., Friant Community).

Since water supplies are sufficient to meet all the planned demands associated with the uses contemplated for the Project and the Friant Community, implementation of any outdoor water conservation measures will ensure that more water is available to use because there will be a reduction in demand consistent with the District’s conservation policy (See Appendix J). Water conservation measures are intended to reduce outdoor water needs and therefore will not impact reclaimed water supplies because that water source is derived from indoor water use.

## SECTION TEN

### 10.1 Permits, Approvals, Agreements, or Entitlements Required

The following is a list of the permits, approvals or entitlements that are expected to be needed in order to acquire and develop the water supplies identified above. (This list is not intended to, and does not, include all entitlements necessary for the Project, including wastewater treatment and effluent discharge approvals related to the wastewater treatment plant[.] )

1. Department of Public Health– Expansion of the WWD 18 surface water treatment plant from 0.4 MGD to 0.7 MGD, with build-out capacity of 1.5 MGD. Report of Water Reclamation for wastewater effluent reuse.
2. Regional Water Quality Control Board – Report of Waste Discharge and Report of Water Reclamation for wastewater treatment and reuse.
3. United States Bureau of Reclamation – Approval of LTRID water transfer agreement with WWD 18; approval of annexation of Project area into WWD 18 service area; approvals related to infrastructure placement and use of existing pipelines
4. LTRID – Approval of water transfer agreement with WWD 18.
5. Waterworks District 18 – Approval of transfer agreement with LTRID and agreement to provide water supply to the Project area. Approve inclusion of Project within service area.
6. Local Agency Formation Commission – Approval of the WWD 18 annexation of Project lands.
7. United States Fish and Wildlife Services – Issuance of Biological Opinion and Incidental Take Permit through Endangered Species Act Section 7 consultation.
8. Department of Fish & Game 1601 Permit - Authorization for any activity within a streambed.
9. Orange Cove Irrigation District (OCID) – Agreement with Waterworks District 18 for joint use of 44-inch water supply line from Friant Dam’s face to the existing fish hatchery.
10. Fresno County Encroachment Permit – Permit for construction of water pipelines in and across Friant Road.
11. USBR approval (and related NEPA and ESA compliance) of 25 year renewals for LTRID and WWD 18 long-term contracts for CVP Friant Division Class 1 water.

## SECTION ELEVEN

### 11 CONCLUSIONS

The Project's estimated average-annual demand of 1,471 acre-feet, in addition to the average-annual demand associated with the existing and planned future uses within the boundaries of the Friant Community. The cumulative annual demand for the Project and the Friant Community is projected to be 1,806 AF and will be met with the water supplies listed below during normal, single dry, and multiple dry water years during a 20-year projection:

- Long-term water availability for the Project is derived from the Water Supply Agreement with LTRID, for 2,000 AF of Class 1 supply, with a dry year yield of 1,540 AF.
- Pre-1914 water from Tule River will be used during critical dry periods of the hydrologic cycle to offset the shortfall, 460 AF, in CVP Class 1 supply. As explained above, the Tule River water will not be delivered to the Project, but instead will be pumped into the Friant-Kern Canal and used to meet a portion of LTRID's South Valley commitments which would normally be met with CVP Class 1 supplies, thereby freeing up Class 1 water to be delivered to the Project.
- Approximately 400 acre-feet of reclaimed wastewater supplies will be recycled and utilized in a normal hydrologic year for non-potable uses on the Project Site.
- WWD 18 long-term contract for 150 AF of Class 1 CVP Friant Division supply, with a dry year yield of 37 AF.

According to the Fresno County Economic Development Commission (FCEDC), regional growth within the County is expected to be 2 to 3 percent on an annual average basis for the next 20 years. However, FCEDC expects the rate of growth within the major urbanized areas within the County, particularly the City of Fresno and City of Clovis, to be greater than other areas within the County. The unincorporated areas of this County are projected to grow at a slower rate of 1 to 2 percent per annum. Based upon such projections, a tentative timeline to reach build-out for the Project is 15 years once construction has started, which equates to approximately 2030. Consistent with the FCEDC report, the growth rate within the WWD 18 service area will also be no more than 1 to 2 percent per annum. The speed of growth within the WWD service area will be governed by housing and commercial market conditions. Favorable market conditions will increase the growth rate while less than desirable market conditions will cause it to slow.

## SECTION ELEVEN

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This assessment analyzes the complete build out of the WWD Western Service Area in accordance with the current land use designations for the Friant Community. Notably, however, based on the above growth projections, it is unlikely that the entire Community Plan area will be built out within the 20-year projection required for this water supply assessment.

These identified water supplies, current and agreed upon in principle, satisfy the projected 20-year demands of the Project together with WWD 18's existing and planned future uses during normal, critical dry and multiple-dry years. To secure and develop the identified supplies, WWD 18 will need to accomplish the following steps:

- (1) Participate in County California Environmental Quality Act, Pub. Res. Code, § 21000 et seq (CEQA) process for Friant Community Plan Update and Friant Ranch Specific Plan, and adopt CEQA findings for related WWD 18 actions including Water Supply Agreement, water service agreement for Project, approval of water supply infrastructure agreements, and inclusion of Project Site into WWD 18.
- (2) Participate in USBR and LAFCO approval processes for annexation of Project boundaries into WWD 18.
- (3) Obtain USBR and LTRID approvals for Water Supply Agreement; authorize execution of Water Supply Agreement.
- (4) Approve inclusion of Project Site into WWD 18 service area (as a separate zone of benefit) and authorize Water Service Agreement for Project.
- (5) Obtain USBR, Orange Cove Irrigation District, and Department of Fish and Game approval (as appropriate) for use of water supply pipeline from Friant Dam.
- (6) Obtain Regional Water Quality Control Board and Department of Public Health approvals for wastewater reuse and water treatment facilities.
- (7) Participate in the Fresno County approval process for the various phases of the Project, requiring construction of all necessary water infrastructure (in accordance with the Project's Infrastructure Master Plan) as phases are proposed.
- (8) Construct (or inspect developer's construction of) the required infrastructure improvements, and verify that infrastructure is ready to be placed in service prior to occupancy of homes in the corresponding Project phases. (Upon completion of any developer-constructed facilities, take ownership and assume operating responsibility in accordance with the water service agreement).



**APPENDIX A**



Benjamin R. Serafin  
*President*

April 21, 2005

Donald MacMillan  
*Vice President*

Bigelow/Silkwood Friant Ranch

Anton G. Simonich  
*Director*

C/O Bryan N. Wagner

Gary Fernandes  
*Director*

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1322 East Shaw, Suite 340

Fresno, CA 93710

Robert Bowman  
*Director*

## **Re: Friant Ranch – Letter of Intent for Delivery of Lower Tule River Irrigation District Long-Term Water**

Dear Mr. Wagner,

Daniel G. Vink  
*General Manager*

Following is an outline describing a water partnership program between the Lower Tule River Irrigation District (LTRID), and Bigelow-Silkwood Friant Ranch L.P. (FRIANT RANCH), the developer of the Friant Ranch, Fresno County's first active adult retirement lifestyle community. It is anticipated that the water deliveries will be coordinated through Fresno County Water Works District No. 18 (FCWWD No. 18), the current municipal water provider in the community of Friant.

Eric Limas  
*Treasurer*

Beth Grote-Lewis  
*Assessor*

### **Water Sales Program Overview**

Dan Dooley  
*Legal Counsel*

FCWWD No. 18 has an existing contract for 150 acre-feet of annual contract entitlement of Central Valley Project (CVP) Friant Division water diverted at Friant Dam for municipal and industrial use in the town of Friant and could potentially (with additional facilities) serve Friant Ranch if additional CVP Friant Division water were made available to FCWWD No. 18 for such purposes. LTRID holds a contract for CVP Friant Division water from the San Joaquin River diverted at Friant Dam for 61,200 acre-feet of Class 1 annual contract entitlement and 238,000 acre-feet of Class 2 annual contract entitlement. This proposed program will provide FCWWD No. 18 with additional CVP Friant Division Class 1 water supplies to be made available by LTRID with assumed delivery to Friant Ranch by FCWWD No. 18. Further it will provide for significant one-time reserve and option payments and annual payments to be made to LTRID by FRIANT RANCH or its successor-in-interest which will be instrumental in assisting LTRID to more efficiently use and deliver its water to its users. The principal construction of the proposed program and agreement formalizing the proposed program (Agreement) will be between FRIANT RANCH and LTRID. FCWWD No. 18 is the entity through which agreements associated with the delivery of water will be formalized and may become the successor-in-interest to FRIANT RANCH relative to the proposed Agreement.

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or (559) 752-5050  
FAX (559) 686-0151  
e-MAIL [ltrid@ltrid.org](mailto:ltrid@ltrid.org)

e) Annual Payment and Operations

- i) Following the exercise of the option for delivery of water by FRIANT RANCH, FRIANT RANCH shall annually pay LTRID's cost of water and an additional \$400 per acre-foot for each acre-foot so exercised and actually delivered. LTRID's cost of water consists of the average canal-side per acre foot cost of LTRID's federal CVP Friant Division water supply consisting of all charges which LTRID must pay in order to receive the federal CVP Friant Division water supply, including, but not limited to: (i) USBR charges, (ii) CVPIA charges, (iii) Friant-Kern Canal operation and maintenance charges (as currently estimated using the 25-year average deliveries) and State Water Resource Control Board fees or charges. Such average canal-side per acre-foot cost shall be determined annually and attached as an exhibit to the Agreement;
  - ii) The annual scheduling of water, timing of payments and refunding provisions will be specifically address in the proposed Agreement;
  - iii) FRIANT RANCH will at a minimum make annual payment for no less than 80 percent of the water where the option has been exercised regardless of the amount actually delivered;
  - iv) FRIANT RANCH is free to remarket (subject to state and federal law and regulation) any water it has exercised the option for delivery of. Any remarketing must have the approval of LTRID.
- f) U.S. Bureau of Reclamation and Other Delivery Costs - LTRID will be responsible for all USBR water costs and any other costs associated with the purchase and delivery of the CVP Friant Division water supplies to FCWWD No. 18 by LTRID under the proposed Agreement subject to Paragraph 1(e) above.

**2) Good-Faith Deposit**

- a) FRIANT RANCH will place into escrow \$50,000 as a show of good faith at the time of acceptance of this Letter of Intent by LTRID and FRIANT RANCH. Such escrowed amount, including interest, will be released to LTRID at the time of commencement of the proposed Agreement.
- b) Such escrowed amount, including interest, will be credited against the one-time Option payment to be paid by FRIANT RANCH at the first point of exercise of the option to begin taking delivery of water under the proposed Agreement.
- c) Such deposit will only be returned to FRIANT RANCH if the proposed Agreement fails to be executed or fails to commence as a result of conditions or circumstances beyond the reasonable control of FRIANT RANCH.

**3) Assignment** – It is anticipated that a successor-in-interest will assume the responsibilities of FRIANT RANCH under this agreement once Friant Ranch is developed and operational.

**4) Agreement or Transaction Costs** - FRIANT RANCH will pay for all transaction costs including the costs associated with complying with the California Environmental Quality

## 1) Friant Ranch Water Purchase Program

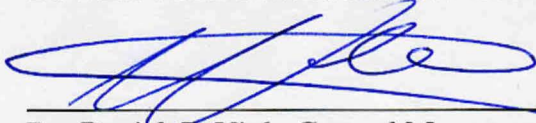
- a) Amount - LTRID will annually provide FCWWD No. 18 with up to 2,000 acre-feet of its CVP Friant Division Class I water supply pursuant to the terms and conditions of LTRID's Friant Division contract for use at Friant Ranch.
- b) Initial Reserve Payment - FRIANT RANCH will pay LTRID a one-time reserve payment of \$150 per acre-foot for the entire 2,000 acre-feet upon commencement of infrastructure construction of the Friant Ranch Project, but in any event no later than 5-years after commencement of the proposed Agreement.
- c) Water Option:
  - i) FRIANT RANCH may exercise the option to begin taking delivery of this water by:
    - (1) Notifying LTRID in writing of their intent to begin delivery of water; and
    - (2) Making a one-time option payment of \$300 per acre-foot for each acre-foot FRIANT RANCH desires to start taking delivery of annually. This option can be exercised in increments of no less than 500 acre-feet (up to 2,000 acre-feet).
  - ii) At a minimum, taking and paying the initial one-time option payment for the following amount of water will be required from the date of commencement of the proposed Agreement:
    - (1) A total of 500 acre-feet within 5-years;
    - (2) A total of 1,500 acre-feet within 7-years;
    - (3) A total of 2,000 acre-feet within 10-years.
- d) Agreement Term:
  - i) The term of the proposed Agreement will commence upon approval of the program of long-term water transfer by the U.S. Bureau of Reclamation as described in the proposed Agreement;
  - ii) The term of the proposed Agreement will extend through the period of LTRID's current long-term CVP Friant Division contract and the one renewal currently contractually provided for. The term of the current contract extends through February 28, 2026.
  - iii) In the event the term of LTRID's current CVP Friant Division contract is modified or terminated, the proposed Agreement will similarly be modified or terminated;
  - iv) The proposed Agreement may be extended upon terms and conditions mutually agreeable to LTRID and FRIANT RANCH or their successors-in-interest and will be subject to any extension or subsequent renewal of LTRID's long-term CVP Friant Division contract.

Act (CEQA) and the National Environmental Policy Act (NEPA) and federal Endangered Species Act (ESA) associated with the proposed Agreement.

**5) Place of Use – All water used by FRIANT RANCH under this Agreement must be delivered within the current Friant Place of Use for municipal water.**

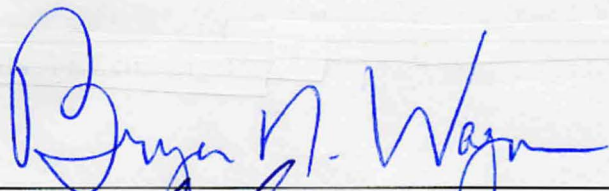
The terms outlined in this letter of intent will be subject to execution by both parties of a formal water supply agreement which will contain definitive terms covering the water supply and terms set forth in this letter. Additionally it is acknowledged by both parties that the terms outlined in this letter of intent will be subject to the approval of the U.S. Bureau of Reclamation and the review and certification of appropriate environmental documentation required under state and federal law. Both parties agree to use all practical efforts to complete the formal agreement as soon as reasonably possible.

Agreed and Accepted:  
LOWER TULE RIVER IRRIGATION DISTRICT



By: Daniel G. Vink, General Manager

Agreed and Accepted:  
BIGELOW-SILKWOOD FRIANT RANCH L.P.  
MANAGEMENT COMMITTEE



By: Bryan Wagner



By: Dennis Bacopulos



By: John Martin

**APPENDIX B**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION  
Central Valley Project, California

LONG-TERM RENEWAL CONTRACT BETWEEN THE UNITED STATES  
AND  
FRESNO COUNTY WATER WORKS DISTRICT NO. 18  
PROVIDING FOR PROJECT WATER SERVICE  
FROM FRIANT DIVISION

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1 UNITED STATES  
2 DEPARTMENT OF THE INTERIOR  
3 BUREAU OF RECLAMATION  
4 Central Valley Project, California

5 LONG-TERM RENEWAL CONTRACT BETWEEN THE UNITED STATES  
6 AND  
7 FRESNO COUNTY WATER WORKS DISTRICT NO. 18  
8 PROVIDING FOR PROJECT WATER SERVICE  
9 FROM FRIANT DIVISION

10 THIS CONTRACT, made this 20<sup>th</sup> day of January, 2001, in pursuance generally  
11 of the Act of June 17, 1902 (32 Stat. 388), and acts amendatory or supplementary thereto, including, but  
12 not limited to, the Acts of August 26, 1937 (50 Stat. 844), as amended and supplemented, August 4, 1939  
13 (53 Stat. 1187), as amended and supplemented, July 2, 1956 (70 Stat. 483), June 21, 1963 (77 Stat. 68),  
14 October 12, 1982 (96 Stat. 1262), October 27, 1986 (100 Stat. 3050), as amended, and Title XXXIV of  
15 the Act of October 30, 1992 (106 Stat. 4706), all collectively hereinafter referred to as Federal  
16 Reclamation law, between THE UNITED STATES OF AMERICA, hereinafter referred to as the United  
17 States, and FRESNO COUNTY WATER WORKS DISTRICT NO. 18, hereinafter referred to as the  
18 Contractor, a public agency of the State of California, duly organized, existing, and acting pursuant to the  
19 laws thereof, with its principal place of business in California;

20 WITNESSETH, That:

21 EXPLANATORY RECITALS

22 [1<sup>st</sup>] WHEREAS, the United States has constructed and is operating the Central Valley Project,  
23 California, for diversion, storage, carriage, distribution and beneficial use, for flood control, irrigation,  
24 municipal, domestic, industrial, fish and wildlife mitigation, protection and restoration, generation and

25 distribution of electric energy, salinity control, navigation and other beneficial uses, of waters of the  
26 Sacramento River, the American River, the Trinity River, and the San Joaquin River and their tributaries; and

27 [2<sup>nd</sup>] WHEREAS, the United States constructed Friant Dam (thereby creating Millerton Lake)  
28 and the Friant-Kern and Madera Canals, hereinafter collectively referred to as the Friant Division facilities,  
29 which will be used in part for the furnishing of water to the Contractor pursuant to the terms of this Contract;  
30 and

31 [3<sup>rd</sup>] WHEREAS, pursuant to Section 8 of the Act of June 17, 1902 (32 Stat. 388), the United  
32 States has acquired water rights and other rights to the flows of the San Joaquin River, including without  
33 limitation the permits issued as the result of Decision 935 by the California State Water Resource Control  
34 Board and the contracts described in subdivision (n) of Article 3 of this Contract, pursuant to which the  
35 Contracting Officer develops, diverts, stores and delivers Project Water stored or flowing through Millerton  
36 Lake in accordance with State and Federal law for the benefit of Project Contractors in the Friant Division;  
37 and

38 [3.1] WHEREAS, the water supplied to the Contractor pursuant to this Contract is Project Water  
39 developed through the exercise of the rights described in the third (3rd) Explanatory Recital of this Contract;  
40 and

41 [4<sup>th</sup>] WHEREAS, the Contractor and the United States entered into Contract  
42 No. 14-06-200-5904, as amended, which established terms for the delivery to the Contractor of Project  
43 Water from the Friant Division from August 17, 1956, to February 28, 1997; and

44 [5<sup>th</sup>] WHEREAS, the Contractor and the United States have pursuant to subsection 3404(c)(1)  
45 of the Central Valley Project Improvement Act (CVPIA), subsequently entered into interim renewal  
46 contract(s) identified as Contract No(s). 14-06-200-5904-IR1, IR2, IR3, and IR4, the current of which is  
47 hereinafter referred to as the Existing Contract, which provided for the continued water service to the  
48 Contractor from December 1, 2000, through February 28, 2001; and

49 [6<sup>th</sup>] WHEREAS, Section 3404(c) of the CVPIA provides for long-term renewal of interim and  
50 existing long-term Project Water service contracts following completion of appropriate environmental  
51 documentation, including a programmatic environmental impact statement (PEIS) pursuant to the National  
52 Environmental Policy Act analyzing the direct and indirect impacts and benefits of implementing the CVPIA  
53 and the potential renewal of all existing contracts for Project Water; and

54 [7<sup>th</sup>] WHEREAS, the United States has completed the PEIS and all other appropriate  
55 environmental review necessary to provide for long-term renewal of the Existing Contract; and

56 [8<sup>th</sup>] WHEREAS, the Contractor has requested the long-term renewal of the Existing Contract,  
57 pursuant to the terms of the Existing Contract, Federal Reclamation law, and the laws of the State of  
58 California, for water service from the Central Valley Project; and

59 [9<sup>th</sup>] WHEREAS, the United States has determined that the Contractor has fulfilled all of its  
60 obligations under the Existing Contract; and

61 [10<sup>th</sup>] WHEREAS, the Contractor has demonstrated to the satisfaction of the Contracting Officer  
62 that the Contractor has utilized the Project Water supplies available to it for reasonable and beneficial use  
63 and/or has demonstrated projected future demand for water use such that the Contractor has the capability

64 and expects to utilize fully for reasonable and beneficial use the quantity of Project Water to be made  
65 available to it pursuant to this Contract; and

66 [11<sup>th</sup>] WHEREAS, water obtained from the Central Valley Project has been relied upon by urban  
67 and agricultural areas within California for more than fifty (50) years, and is considered by the Contractor as  
68 an essential portion of its water supply; and

69 [12<sup>th</sup>] WHEREAS, the economies of regions within the Central Valley Project, including the  
70 Contractor's, depend upon the continued availability of water, including water service from the Central  
71 Valley Project; and

72 [13<sup>th</sup>] WHEREAS, the Secretary intends through coordination, cooperation, and partnerships to  
73 pursue measures to improve water supply, water quality, and reliability of the Project for all Project  
74 purposes; and

75 [14<sup>th</sup>] WHEREAS, the mutual goals of the United States and the Contractor include: to provide  
76 for reliable Project Water supplies; to control costs of those supplies; to achieve repayment of the Central  
77 Valley Project as required by law; to guard reasonably against Project Water shortages; to achieve a  
78 reasonable balance among competing demands for use of Project Water; and to comply with all applicable  
79 environmental statutes, all consistent with the legal obligations of the United States relative to the Central  
80 Valley Project; and

81 [15<sup>th</sup>] Omitted;

82 [15.1] WHEREAS, during Uncontrolled Seasons, Friant Division Project Contractors utilize  
83 undependable Class 2 Water in their service areas to, among other things, assist in the management and

84 alleviation of groundwater overdraft in the Friant Division service area, provide opportunities for  
85 environmental enhancement, including restoration of the San Joaquin River below Friant Dam, minimize  
86 flooding along the San Joaquin River, encourage optimal water management, and maximize the reasonable  
87 and beneficial use of the water; and

88 [15.2] WHEREAS, the parties desire and intend that this Contract not provide a disincentive to  
89 the Friant Division Project Contractors continuing to carry out the beneficial activities set out in the  
90 Explanatory Recital immediately above; and

91 [16<sup>th</sup>] WHEREAS, the United States and the Contractor are willing to enter into this Contract  
92 pursuant to Federal Reclamation law on the terms and conditions set forth below;

93 NOW, THEREFORE, in consideration of the mutual and dependent covenants herein contained, it  
94 is hereby mutually agreed by the parties hereto as follows:

95 DEFINITIONS

96 1. When used herein unless otherwise distinctly expressed, or manifestly incompatible with the  
97 intent of the parties as expressed in this Contract, the term:

98 (a) "Calendar Year" shall mean the period January 1 through December 31, both dates  
99 inclusive;

100 (b) "Charges" shall mean the payments required by Federal Reclamation law in addition  
101 to the Rates and Tiered Pricing Components specified in this Contract as determined annually by the  
102 Contracting Officer pursuant to this Contract;

103 (b2) "Class 1 Water" shall mean that supply of water stored in or flowing through

104 Millerton Lake which, subject to the contingencies hereinafter described in Articles 3, 11, and 12 of  
105 this Contract, will be available for delivery from Millerton Lake and the Friant-Kern and Madera Canals as  
106 a dependable water supply during each Year;

107 (b3) "Class 2 Water" shall mean that supply of water which can be made available  
108 subject to the contingencies hereinafter described in Articles 3, 11, and 12 of this Contract for delivery from  
109 Millerton Lake and the Friant-Kern and Madera Canals in addition to the supply of Class 1 Water.  
110 Because of its uncertainty as to availability and time of occurrence, such water will be undependable in  
111 character and will be furnished only if, as, and when it can be made available as determined by the  
112 Contracting Officer;

113 (c) "Condition of Shortage" shall mean a condition respecting the Project during any  
114 Year such that the Contracting Officer is unable to deliver sufficient water to meet the Contract Total;

115 (d) "Contracting Officer" shall mean the Secretary of the Interior's duly authorized  
116 representative acting pursuant to this Contract or applicable Reclamation law or regulation;

117 (e) "Contract Total" shall mean the maximum amount of Class 1 Water, plus the  
118 maximum amount of Class 2 Water to which the Contractor is entitled under subdivision (a) of Article 3 of  
119 this Contract;

120 (f) "Contractor's Service Area" shall mean the area to which the Contractor is  
121 permitted to provide Project Water under this Contract as described in Exhibit "A" attached hereto, which  
122 may be modified from time to time in accordance with Article 35 of this Contract without amendment of this

123 Contract;

124 (g) "CVPIA" shall mean the Central Valley Project Improvement Act, Title XXXIV of  
125 the Act of October 30, 1992 (106 Stat. 4706);

126 (h) Omitted;

127 (i) Omitted;

128 (j) Omitted;

129 (k) Omitted;

130 (l) Omitted;

131 (m) "Irrigation Water" shall mean water made available from the Project that is used  
132 primarily in the production of agricultural crops or livestock, including domestic use incidental thereto, and  
133 watering of livestock.

134 (n) Omitted;

135 (n2) "Long Term Historic Average" shall mean the average of the final forecast of Water  
136 Made Available to the Contractor pursuant to this Contract and the contracts referenced in the fourth (4<sup>th</sup>)  
137 and fifth (5<sup>th</sup>) Explanatory Recitals of this Contract;

138 (o) "Municipal and Industrial (M&I) Water" shall mean water made available from the  
139 Project other than Irrigation Water made available to the Contractor. M&I Water shall include water used  
140 for human use and purposes such as the watering of landscaping or pasture for animals (e.g., horses) which  
141 are kept for personal enjoyment or water delivered to land holdings operated in units of less than five (5)

142 acres unless the Contractor establishes to the satisfaction of the Contracting Officer that the use of water  
143 delivered to any such landholding is a use described in subdivision (m) of this Article;

144 (p) "M&I Full Cost Water Rate" shall mean the annual rate, which, as determined by  
145 the Contracting Officer, shall amortize the expenditures for construction allocable to Project M&I facilities in  
146 service, including, O&M deficits funded, less payments, over such periods as may be required under  
147 Federal Reclamation law with interest accruing from the dates such costs were first incurred plus the  
148 applicable rate for the O&M of such Project facilities. Interest rates used in the calculation of the M&I Full  
149 Cost Rate shall comply with the Interest Rate methodology contained in Section 202 (3) (B) and (C) of the  
150 RRA;

151 (q) "Operation and Maintenance" or "O&M" shall mean normal and reasonable care,  
152 control, operation, repair, replacement (other than Capital replacement), and maintenance of Project  
153 facilities;

154 (r) "Operating Non-Federal Entity" shall mean the Friant Water Users Authority,  
155 a Non-Federal entity which has the obligation to operate and maintain all or a portion of the Friant Division  
156 facilities pursuant to an agreement with the United States, and which may have funding obligations with  
157 respect thereto;

158 (s) "Project" shall mean the Central Valley Project owned by the United States and  
159 managed by the Department of the Interior, Bureau of Reclamation;

160 (t) "Project Contractors" shall mean all parties who have water service contracts for  
161 Project Water from the Project with the United States pursuant to Federal Reclamation law;

162 (u) "Project Water" shall mean all water that is developed, diverted, stored, or



163 delivered by the Secretary in accordance with the statutes authorizing the Project and in accordance with the  
164 terms and conditions of water rights acquired pursuant to California law;

165 (v) "Rates" shall mean the payments determined annually by the Contracting Officer in  
166 accordance with the then current applicable water ratesetting policies for the Project, as described in  
167 subdivision (a) of Article 7 of this Contract;

168 (w) Omitted;

169 (x) "Secretary" shall mean the Secretary of the Interior, a duly appointed successor, or  
170 an authorized representative acting pursuant to any authority of the Secretary and through any agency of the  
171 Department of the Interior;

172 (y) "Tiered Pricing Component" shall be the incremental amount to be paid for each  
173 acre-foot of Water Delivered as described in subdivision (j) of Article 7 of this Contract;

174 (z) "Water Delivered" or "Delivered Water" shall mean Project Water diverted for use  
175 by the Contractor at the point(s) of delivery approved by the Contracting Officer;

176 (aa) "Water Made Available" shall mean the estimated amount of Project Water that can  
177 be delivered to the Contractor for the upcoming Year as declared by the Contracting Officer, pursuant to  
178 subdivision (a) of Article 4 of this Contract;

179 (bb) "Water Scheduled" shall mean Project Water made available to the Contractor for  
180 which times and quantities for delivery have been established by the Contractor and Contracting Officer,  
181 pursuant to subdivision (b) of Article 4 of this Contract; and

182 (cc) "Year" shall mean the period from and including March 1 of each Calendar Year  
183 through the last day of February of the following Calendar Year.

184

TERM OF CONTRACT

185

2. (a) This Contract shall be effective March 1, 2001, through February 28, 2026. In the

186

event the Contractor wishes to renew the Contract beyond February 28, 2026, the Contractor shall submit

187

a request for renewal in writing to the Contracting Officer no later than two (2) years prior to

188

the date this Contract expires. The renewal of this Contract insofar as it pertains to the furnishing of M&I

189

Water to the Contractor shall be governed by subdivision (c) of this Article.

190

(b) Omitted.

191

(c) Provided, the Contractor is complying with all terms and conditions of this Contract

192

and all legal obligations of the Contractor, if any, set forth in an enforceable court order, final judgment

193

and/or settlement relating to restoration of the San Joaquin River, this Contract, insofar as it pertains to the

194

furnishing of M&I Water to the Contractor, shall be renewed for a period of twenty-five (25) years and

195

thereafter shall be renewed for successive periods of up to forty (40) years each, which periods shall be

196

consistent with the then-existing Reclamation-wide policy, under terms and conditions mutually agreeable to

197

the parties and consistent with Federal and State law. The present Reclamation-wide policy, dated March

198

20, 2000, provides that the term of such contracts shall be no more than twenty-five (25) years each,

199

subject to a variance to allow a longer term in appropriate circumstances. The Contractor shall be afforded

200

the opportunity to comment to the Contracting Officer on the proposed adoption and application of any

201

revised Reclamation-wide policy applicable to the delivery of Project M&I Water that would affect the term

202

of any subsequent renewal contract with the Contractor for the furnishing of M&I Water.

203                   (d)     The Contracting Officer anticipates that by December 31, 2024, all authorized  
204 Project construction expected to occur will have occurred, and on that basis the Contracting Officer agrees  
205 by that date to allocate all costs that are properly assignable to the Contractor, and agrees further that, at  
206 any time after such allocation is made, and subject to satisfaction of the conditions set out in this subdivision  
207 of this Article, this Contract shall, at the request of the Contractor, be converted to a contract under  
208 subsection (c)(1) of Section 9, of the Reclamation Project Act of 1939, subject to applicable Federal law  
209 and under stated terms and conditions mutually agreeable to the Contractor and the Contracting Officer. A  
210 condition for such conversion to occur shall be a determination by the Contracting Officer that, account  
211 being taken of the amount credited to return by the Contractor as provided for under Reclamation law, the  
212 remaining amount of construction costs assignable for ultimate return by the Contractor can probably be  
213 repaid to the United States within the term of a contract under said subsection 9(c)(1). If the remaining  
214 amount of costs that are properly assignable to the Contractor cannot be determined by December 31,  
215 2024, the Contracting Officer shall notify the Contractor, and provide the reason(s) why such a  
216 determination could not be made. Further, the Contracting Officer shall make such a determination as soon  
217 thereafter as possible so as to permit, upon request of the Contractor and satisfaction of the conditions set  
218 out above, conversion to a contract under said subsection 9(c)(1). In the event such determination of costs  
219 has not been made at a time which allows conversion of this Contract during the term of this Contract or the  
220 Contractor has not requested conversion of this Contract within such term, the parties shall incorporate in  
221 any subsequent renewal contract as described in Article 2(c) a provision that carries forth in substantially  
222 identical terms the provisions of this Article 2(d). In the event the Contracting Officer is able to make a

223 determination of the remaining amount of costs that are properly assignable to the Contractor before  
224 December 31, 2024, the Contracting Officer shall do so at the earliest time he/she has such ability.

225 WATER TO BE MADE AVAILABLE AND DELIVERED TO THE CONTRACTOR

226 3. (a) During each Year, consistent with all applicable State water rights, permits, and  
227 licenses; Federal law; and subject to the provisions set forth in Articles 11 and 12 of this Contract, the  
228 Contracting Officer shall make available for delivery to the Contractor 150 acre-feet of Class 1 Water for  
229 M&I purposes. The quantity of Water Delivered to the Contractor in accordance with this subdivision shall  
230 be scheduled and paid for pursuant to the provisions of Articles 4 and 7 of this Contract.

231 (b) Omitted.

232 (c) The Contractor shall utilize the Project Water in accordance with all applicable legal  
233 requirements.

234 (d) The Contractor shall make reasonable and beneficial use of all Project Water or  
235 other water furnished pursuant to this Contract. Groundwater recharge programs, groundwater banking  
236 programs, surface water storage programs, and other similar programs utilizing Project Water or other water  
237 furnished pursuant to this Contract conducted within the Contractor's Service Area which are consistent  
238 with applicable State law and result in use consistent with Reclamation law will be allowed; Provided, That  
239 any direct recharge program(s) is (are) described in the Contractor's Water Conservation Plan submitted  
240 pursuant to Article 26 of this Contract; Provided, further, That such Water Conservation Plan demonstrates  
241 sufficient lawful uses exist in the Contractor's Service Area so that using a long-term average, the quantity of  
242 Delivered Water is demonstrated to be reasonable for such uses and in compliance with Reclamation law.

243 Groundwater recharge programs, groundwater banking programs, surface water storage programs, and  
244 other similar programs utilizing Project Water or other water furnished pursuant to this Contract conducted  
245 outside the Contractor's Service Area may be permitted upon written approval of the Contracting Officer,  
246 which approval will be based upon environmental documentation, Project Water rights, and Project  
247 operational concerns. The Contracting Officer will address such concerns in regulations, policies, or  
248 guidelines.

249 (e) The Contractor shall comply with requirements applicable to the Contractor in  
250 biological opinion(s) prepared as a result of a consultation regarding the execution of this Contract  
251 undertaken pursuant to Section 7 of the Endangered Species Act of 1973, as amended, that are within the  
252 Contractor's legal authority to implement. The Contractor shall comply with the limitations or requirements  
253 imposed by environmental documentation applicable to the Contractor and within its legal authority to  
254 implement regarding specific activities. Nothing herein shall be construed to prevent the Contractor from  
255 challenging or seeking judicial relief in a court of competent jurisdiction with respect to any biological opinion  
256 or other environmental documentation referred to in this Article.

257 (f) Subject to subdivisions (l) and (n) of Article 3 of this Contract, following the  
258 declaration of Water Made Available under Article 4 of this Contract, the Contracting Officer will make a  
259 determination whether Project Water, or other water available to the Project, can be made available to the  
260 Contractor in addition to the Contract Total under Article 3 of this Contract during the Year without  
261 adversely impacting other Project Contractors. At the request of the Contractor, the Contracting Officer  
262 will consult with the Contractor prior to making such a determination. Subject to subdivisions (l) and (n) of

263 Article 3 of this Contract, if the Contracting Officer determines that Project Water, or other water available  
264 to the Project, can be made available to the Contractor, the Contracting Officer will announce the availability  
265 of such water and shall so notify the Contractor as soon as practical. The Contracting Officer will thereafter  
266 meet with the Contractor and other Project Contractors capable of taking such water to determine the most  
267 equitable and efficient allocation of such water. If the Contractor requests the delivery of any quantity of  
268 such water, the Contracting Officer shall make such water available to the Contractor in accordance with  
269 applicable statutes, regulations, guidelines, and policies.

270 (g) The Contractor may request permission to reschedule for use during the subsequent  
271 Year some or all of the Water Made Available to the Contractor during the current Year referred to as  
272 “carryover.” The Contractor may request permission to use during the current Year a quantity of Project  
273 Water which may be made available by the United States to the Contractor during the subsequent Year  
274 referred to as “preuse.” The Contracting Officer’s written approval may permit such uses in accordance  
275 with applicable statutes, regulations, guidelines, and policies.

276 (h) The Contractor’s right pursuant to Federal Reclamation law and applicable State  
277 law to the reasonable and beneficial use of Water Delivered pursuant to this Contract during the term thereof  
278 and any subsequent renewal contracts, as described in Article 2 of this Contract, during the terms thereof  
279 shall not be disturbed so long as the Contractor shall fulfill all of its obligations under this Contract and any  
280 renewals thereof. Nothing in the preceding sentence shall affect the

281 Contracting Officer’s ability to impose shortages under Article 11 or subdivision (b) of Article 12 of this

282 Contract or applicable provisions of any subsequent renewal contracts.

283 (i) Project Water furnished to the Contractor pursuant to this Contract may be  
284 delivered for purposes other than those described in subdivisions (m) and (o) of Article 1 of this Contract  
285 upon written approval by the Contracting Officer in accordance with the terms and conditions of such  
286 approval.

287 (j) The Contracting Officer shall make reasonable efforts to protect the water rights and  
288 other rights described in the third (3rd) Explanatory Recital of this Contract and to provide the water  
289 available under this Contract. The Contracting Officer shall not object to participation by the Contractor, in  
290 the capacity and to the extent permitted by law, in administrative proceedings related to the water rights and  
291 other rights described in the third (3rd) Explanatory Recital of this Contract; Provided, however, That the  
292 Contracting Officer retains the right to object to the substance of the Contractor's position in such a  
293 proceeding.

294 (k) Project Water furnished to the Contractor during any month designated in a  
295 schedule or revised schedule submitted by the Contractor and approved by the Contracting Officer shall be  
296 deemed to have been accepted by the Contractor as Class 1 Water to the extent that Class 1 Water is  
297 called for in such schedule for such month and shall be deemed to have been accepted as Class 2 Water to  
298 the extent Class 2 Water is called for in such schedule for such month. If in any month the Contractor  
299 diverts a quantity of water in addition to the total amount of Class 1 Water and Class 2 Water set forth in  
300 the Contractor's approved schedule or revised schedule for such month, such additional diversions shall be  
301 charged first against the Contractor's remaining Class 2 Water supply available in the current Year. To the



302 extent the Contractor's remaining Class 2 Water supply available in the current Year is not sufficient to  
303 account for such additional diversions, such additional diversions shall be charged against the Contractor's  
304 remaining Class 1 Water supply available in the current Year. To the extent the Contractor's remaining  
305 Class 1 Water and Class 2 Water supplies available in the current Year are not sufficient to account for such  
306 additional diversions, such additional diversions shall be charged first against the Contractor's available  
307 Class 2 Water supply and then against the Contractor's available Class 1 Water supply, both for the  
308 following  
309 Year. Payment for all additional diversions of water shall be made in accordance with Article 7 of this  
310 Contract.

311 (l) If the Contracting Officer determines there is a Project Water supply available at  
312 Friant Dam as the result of an unusually large water supply not otherwise storable for Project purposes or  
313 infrequent and otherwise unmanaged flood flows of short duration, such water will be made available to the  
314 Contractor and others under Section 215 of the RRA pursuant to the priorities specified below if the  
315 Contractor enters into a temporary contract with the United States not to exceed one (1) year for the  
316 delivery of such water or, as otherwise provided for in Federal Reclamation law and associated regulations.  
317 Such water may be identified by the Contractor either (i) as additional water to supplement the supply of  
318 Class 1 Water and/or Class 2 Water made available to it pursuant to this Contract or, (ii) upon written  
319 notification to the Contracting Officer, as water to be credited against the Contractor's Class 2 Water supply  
320 available pursuant to this Contract. The Contractor shall deliver such water to Eligible Lands, or to Excess  
321 Lands in accordance with this Article. The Contracting Officer shall make water determined to be available

322 pursuant to this subsection according to the following priorities: first, to long-term Contractors for Class 1  
323 Water and/or Class 2 Water within the Friant Division; second, to long-term Contractors in the Cross  
324 Valley Division of the Project. The Contracting Officer will consider and seek to accommodate requests  
325 from other parties  
326 for Section 215 Water for use within the area identified as the Friant Division service area in the  
327 environmental assessment developed in connection with the execution of this Contract.

328 (m) Nothing in this Contract, nor any action or inaction of the Contractor or Contracting  
329 Officer in connection with the implementation of this Contract, is intended to override, modify, supersede or  
330 otherwise interfere with any term or condition of the water rights and other rights referred in the third (3rd)  
331 Explanatory Recital of this Contract.

332 (n) The rights of the Contractor under this Contract are subject to the terms of the  
333 contract for exchange waters, dated July 27, 1939, between the United States and the San Joaquin and  
334 Kings River Canal and Irrigation Company, Incorporated, et al., (hereinafter referred to as the Exchange  
335 Contractors), Contract No. I1r-1144, as amended. The United States agrees that it will not deliver to the  
336 Exchange Contractors thereunder waters of the San Joaquin River unless and until required by the terms of  
337 said contract, and the United States further agrees that it will not voluntarily and knowingly determine itself  
338 unable to deliver to the Exchange Contractors entitled thereto from water that is available or that may  
339 become available to it from the Sacramento River and its tributaries or the Sacramento-San Joaquin Delta  
340 those quantities required to satisfy the obligations of the United States under said Exchange Contract and  
341 under Schedule 2 of the Contract for Purchase of Miller and Lux Water Rights (Contract I1r-1145, dated

342 July 27, 1939).

343 TIME FOR DELIVERY OF WATER

344 4. (a) On or about February 20 of each Calendar Year, the Contracting Officer shall  
345 announce the Contracting Officer's expected declaration of the Water Made Available. The declaration will  
346 be updated monthly, and more frequently if necessary, based on then-current operational and hydrologic  
347 conditions and a new declaration with changes, if any, to the Water Made Available will be made. The  
348 Contracting Officer shall provide forecasts of Project operations and the basis of the estimate, with relevant  
349 supporting information, upon the written request of the Contractor. Concurrently with the declaration of the  
350 Water Made Available, the Contracting Officer shall provide the Contractor with the updated Long Term  
351 Historic Average. The declaration of Project operations will be expressed in terms of both Water Made  
352 Available and the Long Term Historic Average.

353 (b) On or before each March 1 and at such other times as necessary, the Contractor  
354 shall submit to the Contracting Officer a written schedule, satisfactory to the Contracting Officer, showing  
355 the monthly quantities of Project Water to be delivered by the United States to the Contractor pursuant to  
356 this Contract for the Year commencing on such March 1. The Contracting Officer shall use all reasonable  
357 means to deliver Project Water according to the approved schedule for the Year commencing on such  
358 March 1.

359 (c) The Contractor shall not schedule Project Water in excess of the quantity of Project  
360 Water the Contractor intends to put to reasonable and beneficial use within the Contractor's Service Area,

361 or to sell, transfer or exchange pursuant to Article 9 of this Contract during any Year.

362

363 (d) Subject to the conditions set forth in subdivision (a) of Article 3 of this Contract, the United  
364 States shall deliver Project Water to the Contractor in accordance with the initial schedule submitted by the  
365 Contractor pursuant to subdivision (b) of this Article, or any written revision(s), satisfactory to the  
366 Contracting Officer, thereto submitted within a reasonable time prior to the date(s) on which the requested  
367 change(s) is/are to be implemented; Provided, That the total amount of water requested in that schedule or  
368 revision does not exceed the quantities announced by the Contracting Officer pursuant to the provisions of  
369 subdivision (a) of Article 3, and the Contracting Officer determines that there will be sufficient capacity  
370 available in the appropriate Friant Division facilities to deliver the water in accordance with that schedule:  
371 Provided, further, That the Contractor shall not schedule the delivery of any water during any period as to  
372 which the Contractor is notified by the Contracting Officer or Operating Non-Federal Entity that Project  
373 facilities required to make deliveries to the Contractor will not be in operation because of scheduled O&M.

374 (e) The Contractor may, during the period from and including November 1 of each  
375 Year through and including the last day of February of that Year, request delivery of any amount of the  
376 Class 1 Water estimated by the Contracting Officer to be made available to it during the following Year.  
377 The Contractor may, during the period from and including January 1 of each Year (or such earlier date as  
378 may be determined by the Contracting Officer) through and including the last day of February of that Year,  
379 request delivery of any amount of Class 2 Water estimated by the Contracting Officer to be made available  
380 to it during the following Year. Such water shall hereinafter be referred to as preuse water. Such request

381 must be submitted in writing by the Contractor for a specified quantity of preuse and shall be subject to the  
382 approval of the Contracting Officer. Payment for preuse water so requested shall be at the appropriate  
383 rate(s) for the following Year in accordance with Article 7 of this Contract and shall be made in advance of  
384 delivery of any preuse water. The Contracting Officer shall deliver such preuse water in accordance with a  
385 schedule or any revision thereof submitted by the Contractor and approved by the Contracting Officer, to  
386 the extent such water is available and to the extent such deliveries will not interfere with the delivery of  
387 Project Water entitlements to other Friant Division Contractors or the physical maintenance of the Project  
388 facilities. The quantities of preuse water delivered pursuant to this subdivision shall be deducted from the  
389 quantities of water that the Contracting Officer would otherwise be obligated to make available to the  
390 Contractor during the following Year; Provided, That the quantity of preuse water to be deducted from the  
391 quantities of either Class 1 Water or Class 2 Water to be made available to the Contractor in the following  
392 Year shall be specified by the Contractor at the time the preuse water is requested or as revised in its first  
393 schedule for the following Year submitted in accordance with subdivision (b) of this Article, based on the  
394 availability of the following Year water supplies as determined by the Contracting Officer.

395 POINT OF DIVERSION AND RESPONSIBILITY FOR DISTRIBUTION OF WATER

396 5. (a) Project Water scheduled pursuant to subdivision (b) of Article 4 of this Contract  
397 shall be delivered to the Contractor at a point or points of delivery either on Project facilities or another  
398 location or locations mutually agreed to in writing by the Contracting Officer and the Contractor.

399 (b) The Contracting Officer, the Operating Non-Federal Entity, or other appropriate  
400 entity shall make all reasonable efforts to maintain sufficient flows and levels of water in the Friant Division

401 facilities to deliver Project Water to the Contractor at specific turnouts established pursuant to subdivision  
402 (a) of this Article.

403 (c) The Contractor shall not deliver Project Water to land outside the Contractor's  
404 Service Area unless approved in advance by the Contracting Officer..

405 (d) All Water Delivered to the Contractor pursuant to this Contract shall be measured  
406 and recorded with equipment furnished, installed, operated, and maintained by the United States, the  
407 Operating Non-Federal Entity or other appropriate entity as designated by the Contracting Officer  
408 (hereafter "other appropriate entity") at the point or points of delivery established pursuant to subdivision (a)  
409 of this Article. Upon the request of either party to this Contract, the Contracting Officer shall investigate, or  
410 cause to be investigated by the responsible Operating Non-Federal Entity, the accuracy of such  
411 measurements and shall take any necessary steps to adjust any errors appearing therein. For any period of  
412 time when accurate measurements have not been made, the Contracting Officer shall consult with the  
413 Contractor and the responsible Operating Non-Federal Entity prior to making a final determination of the  
414 quantity delivered for that period of time.

415 (e) Neither the Contracting Officer nor any Operating Non-Federal Entity shall be  
416 responsible for the control, carriage, handling, use, disposal, or distribution of Project Water Delivered to  
417 the Contractor pursuant to this Contract beyond the delivery points specified in subdivision (a) of this  
418 Article. The Contractor shall indemnify the United States, its officers, employees, agents, and assigns on  
419 account of damage or claim of damage of any nature whatsoever for which there is legal responsibility,  
420 including property damage, personal injury, or death arising out of or connected with the control, carriage,

421 handling, use, disposal, or distribution of such Project Water beyond such delivery points, except for any  
422 damage or claim arising out of: (i) acts or omissions of the Contracting Officer or any of its officers,  
423 employees, agents, or assigns, including any responsible Operating Non-Federal Entity, with the intent of  
424 creating the situation resulting in any damage or claim; (ii) willful misconduct of the Contracting Officer or  
425 any of its officers, employees, agents, or assigns, including any responsible Operating Non-Federal Entity;  
426 (iii) negligence of the Contracting Officer or any of its officers, employees, agents, or assigns including any  
427 responsible Operating Non-Federal Entity; or (iv) damage or claims resulting from a malfunction of facilities  
428 owned and/or operated by the United States or responsible Operating Non-Federal Entity; Provided, That  
429 the Contractor is not the Operating Non-Federal Entity that owned or operated the malfunctioning  
430 facility(ies) from which the damage claim arose.

431 MEASUREMENT OF WATER WITHIN THE SERVICE AREA

432 6. (a) The Contractor established a measurement program satisfactory to the Contracting  
433 Officer, all surface water delivered for municipal and industrial purposes is measured at each municipal and  
434 industrial service connection. The water measuring devices or water measuring methods of comparable  
435 effectiveness must be acceptable to the Contracting Officer. The Contractor shall be responsible for  
436 installing, operating, and maintaining and repairing all such measuring devices and implementing all such  
437 water measuring methods at no cost to the United States. The Contractor shall use the information obtained  
438 from such water measuring devices or water measuring methods to ensure its proper management of the  
439 water, to bill water users for water delivered by the Contractor; and, if applicable, to record water delivered  
440 for municipal and industrial purposes by customer class as defined in the Contractor's water conservation

441 plan provided for in Article 26 of this Contract. Nothing herein contained, however, shall preclude the  
442 Contractor from establishing and collecting any charges, assessments, or other revenues authorized by  
443 California law. The Contractor shall include a summary of all its annual surface water deliveries in the annual  
444 report described in subdivision (c) of Article 26 of this Contract.

445 (b) To the extent the information has not otherwise been provided, upon execution of  
446 this Contract, the Contractor shall provide to the Contracting Officer a written report describing the  
447 measurement devices or water measuring methods being used or to be used to implement subdivision (a) of  
448 this Article and identifying the municipal and industrial service connections or alternative measurement  
449 programs approved by the Contracting Officer, at which such measurement devices or water measuring  
450 methods are being used, and, if applicable, identifying the locations at which such devices and/or methods  
451 are not yet being used including a time schedule for implementation at such locations. The Contracting  
452 Officer shall advise the Contractor in writing within sixty (60) days as to the adequacy of, and necessary  
453 modifications, if any, of the measuring devices or water measuring methods identified in the Contractor's  
454 report and if the Contracting Officer does not respond in such time, they shall be deemed adequate. If the  
455 Contracting Officer notifies the Contractor that the measuring devices or methods are inadequate, the parties  
456 shall within sixty (60) days following the Contracting Officer's response, negotiate in good faith the earliest  
457 practicable date by which the Contractor shall modify said measuring devices and/or measuring methods as  
458 required by the Contracting Officer to ensure compliance with subdivision (a) of this Article.

459 (c) All new surface water delivery systems installed within the Contractor's Service  
460 Area after the effective date of this Contract shall also comply with the measurement provisions described in  
461 subdivision (a) of this Article.



462 (d) The Contractor shall inform the Contracting Officer and the State of California in  
463 writing by April 30 of each Year of the monthly volume of surface water delivered within the Contractor's  
464 Service Area during the previous Year.

465 (e) The Contractor shall inform the Contracting Officer and the Operating  
466 Non-Federal Entity on or before the twentieth (20<sup>th</sup>) calendar day of each month of the quantity of M&I  
467 Water taken during the preceding month.

468 RATES AND METHOD OF PAYMENT FOR WATER

469 7. (a) The Contractor shall pay the United States as provided in this Article for all  
470 Delivered Water at Rates, Charges, and the Tiered Pricing Component established in accordance with the  
471 Secretary's then-existing ratesetting policy for M&I Water. Such ratesetting policies shall be amended,  
472 modified, or superseded only through a public notice and comment procedure; (ii) applicable Reclamation  
473 law and associated rules and regulations, or policies; and (iii) other applicable provisions of this Contract.  
474 Payments shall be made by cash transaction, wire, or any other mechanism as may be agreed to in writing  
475 by the Contractor and the Contracting Officer. The Rates, Charges, and Tiered Pricing Components  
476 applicable to the Contractor upon execution of this Contract are set forth in Exhibit "B", as may be revised  
477 annually.

478 (b) The Contracting Officer shall notify the Contractor of the Rates, Charges, and  
479 Tiered Pricing Components as follows:

480 (1) Prior to July 1 of each Calendar Year, the Contracting Officer shall provide  
481 the Contractor an estimate of the Charges for Project Water that will be applied to the period October 1, of

482 the current Calendar Year, through September 30, of the following Calendar Year, and the basis for such  
483 estimate. The Contractor shall be allowed not less than two (2) months to review and comment on such  
484 estimates. On or before September 15 of each Calendar Year, the Contracting Officer shall notify the  
485 Contractor in writing of the Charges to be in effect during the period  
486 October 1 of the current Calendar Year, through September 30, of the following Calendar Year, and such  
487 notification shall revise Exhibit "B."

488 (2) Prior to October 1 of each Calendar Year, the Contracting Officer shall  
489 make available to the Contractor an estimate of the Rates and Tiered Pricing Components for Project Water  
490 for the following Year and the computations and cost allocations upon which those Rates are based. The  
491 Contractor shall be allowed not less than two (2) months to review and comment on such computations and  
492 cost allocations. By December 31 of each Calendar Year, the Contracting Officer shall provide the  
493 Contractor with the final Rates and Tiered Pricing Components to be in effect for the upcoming Year, and  
494 such notification shall revise Exhibit "B."

495 (c) At the time the Contractor submits the initial schedule for the delivery of Project  
496 Water for each Year pursuant to subdivision (b) of Article 4 of this Contract, the Contractor shall make an  
497 advance payment to the United States equal to the total amount payable pursuant to the applicable Rate(s)  
498 set under subdivision (a) of this Article, for the Project Water scheduled to be delivered pursuant to this  
499 Contract during the first two (2) calendar months of the Year. Before the end of the first month and before  
500 the end of each calendar month thereafter, the Contractor shall make an advance payment to the United  
501 States, at the Rate(s) set under subdivision (a) of this Article, for the Water Scheduled to be delivered

502 pursuant to this Contract during the second month immediately following. Adjustments between advance  
503 payments for Water Scheduled and payments at Rates due for Water Delivered shall be made before the  
504 end of the following month; Provided, That any revised schedule submitted by the Contractor pursuant to  
505 Article 4 of this Contract which increases the amount of Water Delivered pursuant to this Contract during  
506 any month shall be accompanied with appropriate advance payment, at the Rates then in effect, to assure  
507 that Project Water is not delivered to the Contractor in advance of such payment. In any month in which the  
508 quantity of Water Delivered to the Contractor pursuant to this Contract equals the quantity of Water  
509 Scheduled and paid for by the Contractor, no additional Project Water shall be delivered to the Contractor  
510 unless and until an advance payment at the Rates then in effect for such additional Project Water is made.  
511 Final adjustment between the advance payments for the Water Scheduled and payments for the quantities of  
512 Water Delivered during each Year pursuant to this Contract shall be made as soon as practicable but no  
513 later than April 30th of the following Year, or sixty (60) days after the delivery of Project Water carried  
514 over under subdivision (f) of Article 3 of this Contract if such water is not delivered by the last day of  
515 February.

516 (d) The Contractor shall also make a payment in addition to the Rate(s) in subdivision  
517 (c) of this Article to the United States for Water Delivered, at the Charges and the appropriate Tiered  
518 Pricing Component then in effect, before the end of the month following the month of delivery; Provided,  
519 That the Contractor may be granted an exception from the Tiered Pricing Component pursuant to  
520 subdivision (j)(2) of this Article. The payments shall be consistent with the quantities of M&I Water  
521 Delivered as shown in the water delivery report for the subject month prepared by the Operating Non-

522 Federal Entity or, if there is no Operating Non-Federal Entity, by the Contracting Officer. Such water  
523 delivery report shall be the basis for payment of Charges and Tiered Pricing Components by the Contractor,  
524 and shall be provided to the Contractor by the Operating Non-Federal Entity or the Contracting Officer (as  
525 applicable) within five (5) days after the end of the month of delivery. The water delivery report shall be  
526 deemed a bill for the payment of Charges and the applicable Tiered Pricing Component for Water  
527 Delivered. Adjustment for overpayment or underpayment of Charges shall be made through the adjustment  
528 of payments due to the United States for Charges for the next month. Any amount to be paid for past due  
529 payment of Charges and the Tiered Pricing Component shall be computed pursuant to Article 20 of this  
530 Contract.

531 (e) The Contractor shall pay for any Water Delivered under subdivision (d), (f), or (g)  
532 of Article 3 of this Contract as determined by the Contracting Officer pursuant to applicable statutes,  
533 associated regulations, any applicable provisions of guidelines or ratesetting policies; Provided, That the  
534 Rate for Water Delivered under subdivision (d) of Article 3 of this Contract shall be no more than the  
535 otherwise applicable Rate for M&I Water under subdivision (a) of this Article.

536 (f) Payments to be made by the Contractor to the United States under this Contract  
537 may be paid from any revenues available to the Contractor.

538 (g) All revenues received by the United States from the Contractor relating to the  
539 delivery of Project Water or the delivery of non-project water through Project facilities shall be allocated  
540 and applied in accordance with Federal Reclamation law and the associated rules or regulations, and the  
541 then current Project ratesetting policies for M&I Water.

542 (h) The Contracting Officer shall keep its accounts pertaining to the administration of the

543 financial terms and conditions of its long-term contracts, in accordance with applicable Federal standards, so  
544 as to reflect the application of Project costs and revenues. The Contracting Officer shall, each Year upon  
545 request of the Contractor, provide to the Contractor a detailed accounting of all Project and Contractor  
546 expense allocations, the disposition of all Project and Contractor revenues, and a summary of all water  
547 delivery information. The Contracting Officer and the Contractor shall enter into good faith negotiations to  
548 resolve any discrepancies or disputes relating to accountings, reports, or information.

549 (i) The parties acknowledge and agree that the efficient administration of this Contract  
550 is their mutual goal. Recognizing that experience has demonstrated that mechanisms, policies, and  
551 procedures used for establishing Rates, Charges, and Tiered Pricing Components, and/or for making and  
552 allocating payments, other than those set forth in this Article may be in the mutual best interest of the parties,  
553 it is expressly agreed that the parties may enter into agreements to modify the mechanisms, policies, and  
554 procedures for any of those purposes while this Contract is in effect without amending this Contract.

555 (j) (1) Beginning at such time as the total of the deliveries of Class 1 Water and  
556 Class 2 Water in a Year exceed eighty (80%) percent of the Contract Total, then before the end of the  
557 month following the month of delivery the Contractor shall make an additional payment to the United States  
558 equal to the applicable Tiered Pricing Component. The Tiered Pricing Component for the total of the  
559 deliveries of Class 1 Water and Class 2 Water in excess of eighty (80%) percent of the Contract Total, but  
560 less than or equal to ninety (90%) percent of the Contract Total, shall equal the one-half of the difference  
561 between the Rate established under subdivision (a) of Article 7 of this Contract and the M&I Full Cost  
562 Water Rate. The Tiered Pricing Component for the total of the deliveries of Class 1 Water and Class 2

563 Water which exceeds ninety (90%) percent of the Contract

564 Total shall equal the difference between (i) the Rate established under subdivision (a) of Article 7 of this  
565 Contract and (ii) the M&I Full Cost Water Rate.

566 (2) Omitted.

567 (3) For purposes of determining the applicability of the Tiered Pricing

568 Components pursuant to this Article, Water Delivered shall include Project Water that the Contractor  
569 transfers to others but shall not include Project Water transferred and delivered to the Contractor.

570 (k) For the term of this Contract, Rates under the respective ratesetting policies will be  
571 established to recover only reimbursable “operation and maintenance” (including any deficits) and capital  
572 costs of the Project, as those terms are used in the then-current Project ratesetting policies, and interest,  
573 where appropriate, except in instances where a minimum Rate is applicable in accordance with the relevant  
574 Project ratesetting policy. Changes of significance in practices which implement the Contracting Officer’s  
575 ratesetting policies will not be implemented until the Contracting Officer has provided the Contractor an  
576 opportunity to discuss the nature, need, and impact of the proposed change.

577 (l) Except as provided in subsections 3405(a)(1)(B) and 3405(f) of the CVPIA, the  
578 Rates for Project Water transferred by the Contractor shall be the Contractor’s Rates adjusted upward or  
579 downward to reflect the changed costs of delivery (if any) of the transferred Project Water to the  
580 transferee’s point of delivery in accordance with the then applicable CVP Ratesetting Policy.

581 (m) Pursuant to the Act of October 27, 1986 (100 Stat. 3050), the Contracting

582 Officer is authorized to adjust determination of ability to pay every five (5) years.

583 NON-INTEREST BEARING OPERATION AND MAINTENANCE DEFICITS

584 8. The Contractor and the Contracting Officer concur that, as of the effective date of this  
585 Contract, the Contractor has no non-interest bearing operation and maintenance deficits and shall have no  
586 further liability therefor.

587 SALES, TRANSFERS, OR EXCHANGES OF WATER

588 9. (a) The right to receive Project Water provided for in this Contract may be sold,  
589 transferred, or exchanged to others for reasonable and beneficial uses within the State of California if such  
590 sale, transfer, or exchange is authorized by applicable Federal and State laws, and applicable guidelines or  
591 regulations then in effect. No sale, transfer, or exchange of Project Water under this Contract may take  
592 place without the prior written approval of the Contracting Officer, except as provided for in subdivision (b)  
593 of this Article, and no such sales, transfers, or exchanges shall be approved absent compliance with  
594 appropriate environmental documentation including but not limited to the National Environmental Policy Act  
595 and the Endangered Species Act. Such environmental documentation should include, as appropriate, an  
596 analysis of groundwater impacts and economic and social effects, including environmental justice, of the  
597 proposed water transfers on both the transferor and transferee.

598 (b) In order to facilitate efficient water management by means of water transfers of the  
599 type historically carried out among Project Contractors located within the same geographical area and to  
600 allow the Contractor to participate in an accelerated water transfer program during the term of this Contract,

601 the Contracting Officer shall prepare, as appropriate, necessary environmental documentation including, but  
602 not limited to, the National Environmental Policy Act and the Endangered Species Act analyzing annual  
603 transfers within such geographical areas and the Contracting Officer shall determine whether such transfers  
604 comply with applicable law. Following the completion of the environmental documentation, such transfers  
605 addressed in such documentation shall be conducted with advance notice to the Contracting Officer, but  
606 shall not require prior written approval by the Contracting Officer. Such environmental documentation and  
607 the Contracting Officer's compliance determination shall be reviewed every five (5) years and updated, as  
608 necessary, prior to the expiration of the then existing five (5) -year period. All subsequent environmental  
609 documentation shall include an alternative to evaluate not less than the quantity of Project Water historically  
610 transferred within the same geographical area.

611 (c) For a water transfer to qualify under subdivision (b) of this Article, such water  
612 transfer must: (i) be for irrigation purposes for lands irrigated within the previous three (3) years, for M&I  
613 use, groundwater recharge, groundwater banking, similar groundwater activities, surface water storage, or  
614 fish and wildlife resources; not lead to land conversion; and be delivered to established cropland, wildlife  
615 refuges, groundwater basins or municipal and industrial use; (ii) occur within a single Year; (iii) occur  
616 between a willing seller and a willing buyer; (iv) convey water through existing facilities with no new  
617 construction or modifications to facilities and be between existing Project Contractors and/or the Contractor  
618 and the United States, Department of the Interior; and (v) comply with all applicable Federal, State, and  
619 local or tribal laws and requirements imposed for protection of the environment and Indian Trust Assets, as  
620 defined under Federal law.

621 APPLICATION OF PAYMENTS AND ADJUSTMENTS



622           10.     (a)     The amount of any overpayment by the Contractor of the Contractor’s O&M,  
623     Capital, and deficit (if any) obligations for the Year shall be applied first to any current liabilities of the  
624     Contractor arising out of this Contract then due and payable. Overpayments of more than One Thousand  
625     Dollars (\$1,000) shall be refunded at the Contractor’s request. In lieu of a refund, any amount of such  
626     overpayment at the option of the Contractor, may be credited against amounts to become due to the United  
627     States by the Contractor. With respect to overpayment, such refund or adjustment shall constitute the sole  
628     remedy of the Contractor or anyone having or claiming to have the right to the use of any of the Project  
629     Water supply provided for herein. All credits and refunds of overpayments shall be made within thirty (30)  
630     days of the Contracting Officer obtaining direction as to how to credit or refund such overpayment in  
631     response to the notice to the Contractor that it has finalized the accounts for the Year in which the  
632     overpayment was made.

633                   (b)     All advances for miscellaneous costs incurred for work requested by the Contractor  
634     pursuant to Article 25 of this Contract shall be adjusted to reflect the actual costs when the work has been  
635     completed. If the advances exceed the actual costs incurred, the difference will be refunded to the  
636     Contractor. If the actual costs exceed the Contractor's advances, the Contractor will be billed for the  
637     additional costs pursuant to Article 25 of this Contract.

638   TEMPORARY REDUCTIONS--RETURN FLOWS

639           11.     (a)     Subject to: (i) the authorized purposes and priorities of the Project and the  
640     requirements of Federal law and (ii) the obligations of the United States under existing contracts, or renewals  
641     thereof, providing for water deliveries from the Project, the Contracting Officer shall make all reasonable

642 efforts to optimize Project Water deliveries to the Contractor as provided in this Contract.

643 (b) The Contracting Officer or Operating Non-Federal Entity may temporarily  
644 discontinue or reduce the quantity of Water Delivered to the Contractor as herein provided for the purposes  
645 of investigation, inspection, maintenance, repair, or replacement of any of the Project facilities or any part  
646 thereof necessary for the delivery of Project Water to the Contractor, but so far as feasible the Contracting  
647 Officer or Operating Non-Federal Entity will give the Contractor due notice in advance of such temporary  
648 discontinuance or reduction, except in case of emergency, in which case no notice need be given; Provided,  
649 That the United States shall use its best efforts to avoid any discontinuance or reduction in such service.  
650 Upon resumption of service after such reduction or discontinuance, and if requested by the Contractor, the  
651 United States will, if possible, deliver the quantity of Project Water which would have been delivered  
652 hereunder in the absence of such discontinuance or reduction.

653 (c) The United States reserves the right to all seepage and return flow water derived  
654 from Water Delivered to the Contractor hereunder which escapes or is discharged beyond the Contractor's  
655 Service Area; Provided, That this shall not be construed as claiming for the United States any right as  
656 seepage or return flow to water being used pursuant to this Contract for surface irrigation or underground  
657 storage either being put to reasonable and beneficial use pursuant to this Contract within the Contractor's  
658 Service Area by the Contractor or those claiming by, through, or under the Contractor. For purposes of this  
659 subdivision, groundwater recharge, groundwater banking and all similar groundwater activities will be  
660 deemed to be underground storage.

661 CONSTRAINTS ON THE AVAILABILITY OF WATER

662           12.     (a)     In its operation of the Project, the Contracting Officer will use all reasonable means  
663 to guard against a Condition of Shortage in the quantity of water to be made available to the Contractor  
664 pursuant to this Contract. In the event the Contracting Officer determines that a Condition of Shortage  
665 appears probable, the Contracting Officer will notify the Contractor of said determination as soon as  
666 practicable.

667                   (b)     If there is a Condition of Shortage because of errors in physical operations of the  
668 Project, drought, other physical causes beyond the control of the Contracting Officer or actions taken by the  
669 Contracting Officer to meet legal obligations then, except as provided in subdivision (a) of Article 18 of this  
670 Contract, no liability shall accrue against the United States or any of its officers, agents, or employees for  
671 any damage, direct or indirect, arising therefrom.

672                   (c)     The United States shall not execute contracts which together with this Contract, shall  
673 in the aggregate provide for furnishing during the life of this Contract or any renewals hereof Class 1 Water  
674 in excess of 800,000 acre-feet per Year or Class 2 Water in excess of 1,401,475 acre-feet per Year;  
675 Provided, That, subject to subdivision (l) of Article 3 of this Contract, the limitation placed on Class 2 Water  
676 contracts shall not prohibit the United States from entering into temporary contracts of one year or less in  
677 duration for delivery of Project Water to other entities if such water is not necessary to meet the schedules  
678 as may be submitted by all Friant Division long-term water service Contractors entitled to receive Class 1  
679 Water and/or Class 2 Water under their water service contracts. Nothing in this subdivision shall limit the  
680 Contracting Officer's ability to take actions that result in the availability of new water supplies to be used for  
681 Project purposes and allocating such new supplies; Provided, That the Contracting Officer shall not take

682 such actions until after consultation with the Friant Division Project Contractors.

683 (d) The Contracting Officer shall not deliver any Class 2 Water pursuant to this or any  
684 other contract for water service heretofore or hereafter entered into any Year unless and until the  
685 Contracting Officer determines that the cumulative total quantity of Class 1 Water specified in subdivision (c)  
686 of this Article will be available for delivery in said Year. If the Contracting Officer determines there is or will  
687 be a shortage in any Year in the quantity of Class 1 Water available for delivery, the Contracting Officer  
688 shall apportion the available Class 1 Water among all Contractors  
689 entitled to receive such water that will be made available at Friant Dam in accordance with the following:

690 (1) A determination shall be made of the total quantity of Class 1 Water at  
691 Friant Dam which is available for meeting Class 1 Water contractual commitments, the amount so  
692 determined being herein referred to as the available supply.

693 (2) The total available Class 1 supply shall be divided by the Class 1 Water  
694 contractual commitments, the quotient thus obtained being herein referred to as the Class 1 apportionment  
695 coefficient.

696 (3) The total quantity of Class 1 Water under Article 3 of this Contract shall be  
697 multiplied by the Class 1 apportionment coefficient and the result shall be the quantity of Class 1 Water  
698 required to be delivered by the Contracting Officer to the Contractor for the respective Year, but in no  
699 event shall such amount exceed the total quantity of Class 1 Water specified in subdivision (a) of Article 3 of  
700 this Contract.

701 (e) If the Contracting Officer determines there is less than the quantity of Class 2 Water  
702 which the Contractor otherwise would be entitled to receive pursuant to Article 3 of this Contract, the  
703 quantity of Class 2 Water which shall be furnished to the Contractor by the Contracting Officer will be  
704 determined in the manner set forth in paragraphs (1), (2), and (3), of subdivision (d) of this Article  
705 substituting the term "Class 2" for the term "Class 1."

706 (f) In the event that in any Year there is made available to the Contractor, by reason of  
707 any shortage or apportionment as provided in subdivisions (a), (d) or (e) of this Article, or any  
708 discontinuance or reduction of service as set forth in subdivision (a) of Article 11 of this Contract, less than  
709 the quantity of water which the Contractor otherwise would be entitled to receive hereunder, there shall be  
710 made an adjustment on account of the amounts already paid to the Contracting Officer by the Contractor for  
711 Class 1 Water and Class 2 Water for said Year in accordance with Article 10 of this Contract.

712 UNAVOIDABLE GROUNDWATER PERCOLATION

713 13. Omitted.

714 RULES AND REGULATIONS

715 14. (a) The parties agree that the delivery of Water or use of Federal facilities pursuant to  
716 this Contract is subject to Federal Reclamation law, as amended and supplemented, and the rules and  
717 regulations promulgated by the Secretary of the Interior under Federal Reclamation law.

718 (b) The terms of this Contract are subject to any enforceable order, judgment and/or  
719 settlement in NRDC v. Patterson, No. CIVS 88-1658-LKK-EM and shall be timely modified as necessary  
720 to effectuate or facilitate any final order, judgment or settlement in said litigation.

721 (c) The parties acknowledge that, as of the effective date of this Contract, active

722 settlement discussions are underway in NRDC v. Patterson between Friant Division water service  
723 contractors, representatives of the Contracting Officer, and the plaintiffs in NRDC v. Patterson. The mutual  
724 goals of the parties to those discussions are (i) to expeditiously evaluate and implement, on a mutually  
725 acceptable basis, instream and related measures that will restore ecological functions and hydrologic and  
726 geomorphologic processes of the San Joaquin River below Friant Dam to a level that restores and maintains  
727 fish populations in good condition, including but not limited to naturally-reproducing, self-sustaining  
728 populations of chinook salmon and (ii) to accomplish these restoration goals while not adversely impacting  
729 the overall sufficiency, reliability and cost of water supplies to Friant Division water users. The Contractor  
730 has been actively participating, and intends to continue to participate in such settlement discussions. Except  
731 as provided in this Contract, this Contract does not add to the obligations of the parties, if any, relating to  
732 the San Joaquin River. This Contract does not limit or detract from the obligations of the parties, if any,  
733 relating to the San Joaquin River.

734 WATER AND AIR POLLUTION CONTROL

735 15. The Contractor, in carrying out this Contract, shall comply with all applicable water and air  
736 pollution laws and regulations of the United States and the State of California, and shall obtain all required  
737 permits or licenses from the appropriate Federal, State, or local authorities.

738 QUALITY OF WATER

739 16. (a) Project facilities used to deliver Project Water to the Contractor pursuant to this  
740 Contract shall be operated and maintained to enable the United States to deliver Project Water to the  
741 Contractor in accordance with the water quality standards specified in subsection 2(b) of the Act of August  
742 26, 1937 (50 Stat. 865), as added by Section 101 of the Act of October 27, 1986 (100 Stat. 3050) or

743 other existing Federal laws. The United States is under no obligation to construct or furnish water treatment  
744 facilities to maintain or to improve the quality of Water Delivered to the Contractor

745 pursuant to this Contract. The United States does not warrant the quality of Water Delivered to the  
746 Contractor pursuant to this Contract.

747 (b) The Operation and Maintenance of Project facilities shall be performed in such  
748 manner as is practicable to maintain the quality of raw water made available through such facilities at the  
749 highest level reasonably attainable as determined by the Contracting Officer. The Contractor shall be  
750 responsible for compliance with all State and Federal water quality standards applicable to surface and  
751 subsurface agricultural drainage discharges generated through the use of Federal or Contractor facilities or  
752 Project Water provided by the Contractor within the Contractor's Service Area.

753 WATER ACQUIRED BY THE Contractor  
754 OTHER THAN FROM THE UNITED STATES

755 17. (a) Omitted.

756 (b) Water or water rights now owned or hereafter acquired by the Contractor, other  
757 than from the United States or adverse to the Project or its Contractors (i.e., non-Project Water), may be  
758 stored, conveyed and/or diverted through Project facilities, subject to the completion of appropriate  
759 environmental documentation, with the approval of the Contracting Officer and the execution of any contract  
760 determined by the Contracting Officer to be necessary, consistent with the following provisions:

761 (1) The Contractor may introduce non-Project Water into Project facilities and

762 deliver said water to lands within the Subcontractor, subject to payment to the United States and/or to any  
763 applicable Operating Non-Federal Entity of an appropriate rate as determined by the CVP Ratesetting  
764 Policy and the Reclamation Reform Act of 1982, each as amended, modified or superseded from time to  
765 time. In addition, if electrical power is required to pump non-Project Water  
766 through the facilities, the Contractor shall be responsible for obtaining the necessary power and paying the  
767 necessary charges therefor.

768 (2) Delivery of such non-project water in and through Project facilities shall only  
769 be allowed to the extent such deliveries do not: (i) interfere with other Project purposes as determined by  
770 the Contracting Officer; (ii) reduce the quantity or quality of water available to other Project water service  
771 Contractors; (iii) interfere with the delivery of contractual water entitlements to any other Project water  
772 service Contractors; or (iv) interfere with the physical maintenance of the Project facilities.

773 (3) Neither the United States nor the Operating Non-Federal Entity shall be  
774 responsible for control, care or distribution of the non-Project Water before it is introduced into or after it is  
775 delivered from the Project facilities. The Contractor hereby releases and agrees to defend and indemnify the  
776 United States and the Operating Non-Federal Entity, and their respective officers, agents, and employees,  
777 from any claim for damage to persons or property, direct or indirect, resulting from Contractor's diversion  
778 or extraction of non-Project Water from any source.

779 (4) Diversion of such non-project water into Project facilities shall be consistent  
780 with all applicable laws, and if involving groundwater, consistent with any groundwater management plan for  
781 the area from which it was extracted.

782 (5) After Project purposes are met, as determined by the Contracting Officer,



783 the United States and the Contractor shall share priority to utilize the remaining capacity of the facilities  
784 declared to be available by the Contracting Officer for conveyance and transportation of  
785 non-Project Water prior to any such remaining capacity being made available to non-Project Contractors.

786 OPINIONS AND DETERMINATIONS

787 18. (a) Where the terms of this Contract provide for actions to be based upon the opinion  
788 or determination of either party to this Contract, said terms shall not be construed as permitting such action  
789 to be predicated upon arbitrary, capricious, or unreasonable opinions or determinations. Both parties,  
790 notwithstanding any other provisions of this Contract, expressly reserve the right to seek relief from and  
791 appropriate adjustment for any such arbitrary, capricious, or unreasonable opinion or determination. Each  
792 opinion or determination by either party shall be provided in a timely manner. Nothing in subdivision (a) of  
793 Article 18 of this Contract is intended to or shall affect or alter the standard of judicial review applicable  
794 under federal law to any opinion or determination implementing a specific provision of federal law embodied  
795 in statute or regulation.

796 (b) The Contracting Officer shall have the right to make determinations necessary to  
797 administer this Contract that are consistent with the provisions of this Contract, the laws of the United States  
798 and of the State of California, and the rules and regulations promulgated by the Secretary of the Interior.  
799 Such determinations shall be made in consultation with the Contractor to the extent reasonably practicable.

800 COORDINATION AND COOPERATION

801 19. (a) In order to further their mutual goals and objectives, the Contracting Officer and the  
802 Contractor shall communicate, coordinate, and cooperate with each other, and with other affected Project

803 Contractors, in order to improve the operation and management of the Project. The communication,  
804 coordination, and cooperation regarding operations and management shall include, but not be limited to, any  
805 action which will or may materially affect the quantity or quality of Project Water supply, the allocation of  
806 Project Water supply, and Project financial matters including, but not limited to, budget issues. The  
807 communication, coordination, and cooperation provided for hereunder shall extend to all provisions of this  
808 Contract. Each party shall retain exclusive decision making authority for all actions, opinion, and  
809 determinations to be made by the respective party.

810 (b) Within one-hundred twenty (120) days following the effective date of this Contract,  
811 the Contractor, other affected Project Contractors, and the Contracting Officer shall arrange to meet with  
812 interested Project Contractors to develop a mutually agreeable, written Project-wide process, which may be  
813 amended as necessary separate and apart from this Contract. The goal of this process shall be to provide,  
814 to the extent practicable, the means of mutual communication and interaction regarding significant decisions  
815 concerning Project operation and management on a  
816 real-time basis.

817 (c) In light of the factors referred to in subdivision (b) of Article 3 of this Contract, it is  
818 the intent of the Secretary to improve water supply reliability. To carry out this intent:

819 (1) The Contracting Officer will, at the request of the Contractor, assist in the  
820 development of integrated resource management plans for the Contractor. Further, the Contracting Officer  
821 will, as appropriate, seek authorizations for implementation of partnerships to improve water supply, water  
822 quality, and reliability.

823 (2) The Secretary will, as appropriate, pursue program and project  
824 implementation and authorization in coordination with Project Contractors to improve the water supply,

825 water quality, and reliability of the Project for all Project purposes.

826 (3) The Secretary will coordinate with Project Contractors and the State of  
827 California to seek improved water resource management.

828 (4) The Secretary will coordinate actions of agencies within the Department of  
829 the Interior that may impact the availability of water for Project purposes.

830 (5) The Contracting Officer shall periodically, but not less than annually, hold  
831 division level meetings to discuss Project operations, division level water management activities, and other  
832 issues as appropriate.

833 (d) Without limiting the contractual obligations of the Contracting Officer hereunder,  
834 nothing in this Contract shall be construed to limit or constrain the Contracting Officer's ability to  
835 communicate, coordinate, and cooperate with the Contractor or other interested stakeholders or to make  
836 decisions in a timely fashion as needed to protect health, safety, physical integrity of structures or facilities, or  
837 the Contracting Officer's ability to comply with applicable laws.

838 CHARGES FOR DELINQUENT PAYMENTS

839 20. (a) The Contractor shall be subject to interest, administrative and penalty charges on  
840 delinquent installments or payments. When a payment is not received by the due date, the Contractor shall  
841 pay an interest charge for each day the payment is delinquent beyond the due date. When a payment  
842 becomes sixty (60) days delinquent, the Contractor shall pay an administrative charge to cover additional  
843 costs of billing and processing the delinquent payment. When a payment is delinquent ninety (90) days or  
844 more, the Contractor shall pay an additional penalty charge of six (6%) percent per year for each day the  
845 payment is delinquent beyond the due date. Further, the Contractor shall pay any fees incurred for debt  
846 collection services associated with a delinquent payment.

847 (b) The interest charge rate shall be the greater of the rate prescribed quarterly in the  
848 Federal Register by the Department of the Treasury for application to overdue payments, or the interest rate

849 of one-half of one (0.5%) percent per month prescribed by Section 6 of the Reclamation Project Act of  
850 1939 (Public Law 76-260). The interest charge rate shall be determined as of the due date and remain  
851 fixed for the duration of the delinquent period.

852 (c) When a partial payment on a delinquent account is received, the amount received  
853 shall be applied, first to the penalty, second to the administrative charges, third to the accrued interest, and  
854 finally to the overdue payment.

855 EQUAL OPPORTUNITY

856 21. During the performance of this Contract, the Contractor agrees as follows:

857 (a) The Contractor will not discriminate against any employee or applicant for  
858 employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative  
859 action to ensure that applicants are employed, and that employees are treated during employment, without  
860 regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to,  
861 the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff  
862 or termination, rates of payment or other forms of compensation; and selection for training, including  
863 apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants  
864 for employment, notices to be provided by the Contracting Officer setting forth the provisions of this  
865 nondiscrimination clause.

866 (b) The Contractor will, in all solicitations or advertisements for employees placed by or  
867 on behalf of the Contractor, state that all qualified applicants will receive consideration for employment  
868 without discrimination because of race, color, religion, sex, or national origin.

869 (c) The Contractor will send to each labor union or representative of workers with  
870 which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided  
871 by the Contracting Officer, advising the said labor union or workers' representative of the Contractor's  
872 commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies  
873 of the notice in conspicuous places available to employees and applicants for employment.

874 (d) The Contractor will comply with all provisions of Executive Order  
875 No. 11246 of September 24, 1965, as amended, and of the rules, regulations, and relevant orders of the  
876 Secretary of Labor.

877 (e) The Contractor will furnish all information and reports required by said amended  
878 Executive Order and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto,  
879 and will permit access to its books, records, and accounts by the Contracting Officer and the Secretary of  
880 Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

881 (f) In the event of the Contractor's noncompliance with the nondiscrimination clauses of  
882 this Contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated,  
883 or suspended, in whole or in part, and the Contractor may be declared ineligible for further Government  
884 contracts in accordance with procedures authorized in said amended Executive Order, and such other  
885 sanctions may be imposed and remedies invoked as provided in said Executive Order, or by rule, regulation,  
886 or order of the Secretary of Labor, or as otherwise provided by law.

887 (g) The Contractor will include the provisions of paragraphs (a) through (g) in every  
888 subcontract or purchase order unless exempted by the rules, regulations, or orders of the Secretary of  
889 Labor issued pursuant to Section 204 of said amended Executive Order, so that such provisions will be  
890 binding upon each subcontractor or vendor. The Contractor will take such action with respect to any  
891 subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such  
892 provisions, including sanctions for noncompliance: Provided, however, That in the event the Contractor  
893 becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such  
894 direction, the Contractor may request the United States to enter into such litigation to protect the interests of  
895 the United States.

896 GENERAL OBLIGATION--BENEFITS CONDITIONED UPON PAYMENT

897 22. (a) The obligation of the Contractor to pay the United States as provided in this  
898 Contract is a general obligation of the Contractor notwithstanding the manner in which the obligation may be  
899 distributed among the Contractor's water users and notwithstanding the default of individual water users in  
900 their obligations to the Contractor.

901 (b) The payment of charges becoming due hereunder is a condition precedent to  
902 receiving benefits under this Contract. The United States shall not make water available to the Contractor  
903 through Project facilities during any period in which the Contractor may be in arrears in the advance  
904 payment of water rates due the United States. The Contractor shall not furnish water made available  
905 pursuant to this Contract for lands or parties which are in arrears in the advance payment of water rates  
906 levied or established by the Contractor.

907 (c) With respect to subdivision (b) of this Article, the Contractor shall have no  
908 obligation to require advance payment for water rates which it levies.

909 COMPLIANCE WITH CIVIL RIGHTS LAWS AND REGULATIONS

910 23. (a) The Contractor shall comply with Title VI of the Civil Rights Act of 1964 (42  
911 U.S.C. 2000d), Section 504 of the Rehabilitation Act of 1975 (P.L. 93-112, as amended), the Age

912 Discrimination Act of 1975 (42 U.S.C. 6101, et seq.) and any other applicable civil rights laws, as well as  
913 with their respective implementing regulations and guidelines imposed by the U.S. Department of the Interior  
914 and/or Bureau of Reclamation.

915 (b) These statutes require that no person in the United States shall, on the grounds of  
916 race, color, national origin, handicap, or age, be excluded from participation in, be denied the benefits of, or  
917 be otherwise subjected to discrimination under any program or activity receiving financial assistance from the  
918 Bureau of Reclamation. By executing this Contract, the Contractor agrees to immediately take any  
919 measures necessary to implement this obligation, including permitting officials of the United States to inspect  
920 premises, programs, and documents.

921 (c) The Contractor makes this agreement in consideration of and for the purpose of  
922 obtaining any and all Federal grants, loans, contracts, property discounts, or other Federal financial  
923 assistance extended after the date hereof to the Contractor by the Bureau of Reclamation, including  
924 installment payments after such date on account of arrangements for Federal financial assistance which were  
925 approved before such date. The Contractor recognizes and agrees that such Federal assistance will be  
926 extended in reliance on the representations and agreements made in this Article, and that the United States  
927 reserves the right to seek judicial enforcement thereof.

928 PRIVACY ACT COMPLIANCE

929 24. Omitted.

930 CONTRACTOR TO PAY CERTAIN MISCELLANEOUS COSTS

931 25. In addition to all other payments to be made by the Contractor pursuant to this Contract, the  
932 Contractor shall pay to the United States, within sixty (60) days after receipt of a bill and detailed statement  
933 submitted by the Contracting Officer to the Contractor for such specific items of direct cost incurred by the  
934 United States for work requested by the Contractor associated with this Contract plus indirect costs in  
935 accordance with applicable Bureau of Reclamation policies and procedures. All such amounts referred to in  
936 this Article shall not exceed the amount agreed to in  
937 writing in advance by the Contractor. This Article shall not apply to costs for routine contract  
938 administration.

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WATER CONSERVATION

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26. (a) Prior to the delivery of water provided from or conveyed through Federally

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constructed or Federally financed facilities pursuant to this Contract, the Contractor shall be implementing an

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effective water conservation and efficiency program based on the Contractor's water conservation plan that

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has been determined by the Contracting Officer to meet the conservation and efficiency criteria for

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evaluating water conservation plans established under Federal law. The water conservation and efficiency

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program shall contain definite water conservation objectives, appropriate economically feasible water

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conservation measures, and time schedules for meeting those objectives. Continued Project Water delivery

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pursuant to this Contract shall be contingent upon the Contractor's continued implementation of such water

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conservation program. In the event the Contractor's water conservation plan or any revised water

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conservation plan completed pursuant to subdivision (d) of Article 26 of this Contract have not yet been

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determined by the Contracting Officer to meet such criteria, due to circumstances which the Contracting

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Officer determines are beyond the control of the Contractor, water deliveries shall be made under this

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Contract so long as the Contractor diligently works with the Contracting Officer to obtain such

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determination at the earliest practicable date, and thereafter the Contractor immediately begins implementing

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its water conservation and efficiency program in accordance with the time schedules therein.

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(b) Should the amount of M&I Water delivered pursuant to subdivision (a) of Article 3

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of this Contract equal or exceed two thousand (2,000) acre-feet per Year, the Contractor shall implement

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the Best Management Practices identified by the time frames issued by the California Urban Water

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Conservation Council for such M&I Water unless any such practice is determined by the Contracting

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Officer to be inappropriate for the Contractor.

960 (c) The Contractor shall submit to the Contracting Officer a report on the status of its  
961 implementation of the water conservation plan on the reporting dates specified in the then existing  
962 conservation and efficiency criteria established under Federal law.

963 (d) At five (5) -year intervals, the Contractor shall revise its water conservation plan to  
964 reflect the then current conservation and efficiency criteria for evaluating water conservation plans  
965 established under Federal law and submit such revised water management plan to the Contracting Officer  
966 for review and evaluation. The Contracting Officer will then determine if the water conservation plan meets  
967 Reclamation's then current conservation and efficiency criteria for evaluating water conservation plans  
968 established under Federal law.

969 (e) If the Contractor is engaged in direct groundwater recharge, such activity shall be  
970 described in the Contractor's water conservation plan.

971 EXISTING OR ACQUIRED WATER OR WATER RIGHTS

972 27. Except as specifically provided in Article 17 of this Contract, the provisions of this Contract  
973 shall not be applicable to or affect non-project water or water rights now owned or hereafter acquired by  
974 the Contractor or any user of such water within the Contractor's Service Area. Any such water shall not be  
975 considered Project Water under this Contract. In addition, this Contract shall not be construed as limiting or  
976 curtailing any rights which the Contractor or any water user within the Contractor's Service Area acquires or  
977 has available under any other contract pursuant to Federal Reclamation law.

978 OPERATION AND MAINTENANCE BY NON-FEDERAL ENTITY

979 28. (a) The Operation and Maintenance of a portion of the Project facilities which serve the



980 Contractor, and responsibility for funding a portion of the costs of such Operation and Maintenance, have  
981 been transferred to the Operating Non-Federal Entity by separate agreement

982 between the United States and the Operating Non-Federal Entity. That separate agreement shall not  
983 interfere with or affect the rights or obligations of the Contractor or the United States hereunder.

984 (b) The Contracting Officer has previously notified the Contractor in writing that the  
985 Operation and Maintenance of a portion of the Project facilities which serve the Contractor has been  
986 transferred to the Operating Non-Federal Entity, and therefore, the Contractor shall pay directly to the  
987 Operating Non-Federal Entity, or to any successor approved by the Contracting Officer under the terms  
988 and conditions of the separate agreement between the United States and the Operating Non-Federal Entity  
989 described in subdivision (a) of this Article, all rates, charges or assessments of any kind, including any  
990 assessment for reserve funds, which the Operating Non-Federal Entity or such successor determines, sets or  
991 establishes for (i) the Operation and Maintenance of the portion of the Project facilities operated and  
992 maintained by the Operating Non-Federal Entity or such successor, or (ii) the Friant Division's share of the  
993 operation, maintenance and replacement costs for physical works and appurtenances associated with the  
994 Tracy Pumping Plant, the Delta-Mendota Canal, the O'Neill Pumping/Generating Plant, the federal share of  
995 the O'Neill Forebay, the Mendota Pool, and the federal share of San Luis Unit joint use conveyance and  
996 conveyance pumping facilities. Such direct payments to the Operating Non-Federal Entity or such  
997 successor shall not relieve the Contractor of its obligation to pay directly to the United States the  
998 Contractor's share of the Project Rates, Charges, and Tiered Pricing Components except to the extent the  
999 Operating Non-Federal Entity collects payments on behalf of the United States in accordance with the

1000 separate agreement identified in subdivision (a) of this Article.

1001 (c) For so long as the Operation and Maintenance of any portion of the Project facilities  
1002 serving the Contractor is performed by the Operating Non-Federal Entity, or any successor thereto, the  
1003 Contracting Officer shall adjust those components of the Rates for Water Delivered under this Contract  
1004 representing the cost associated with the activity being performed by the Operating Non-Federal Entity or  
1005 its successor.

1006 (d) In the event the Operation and Maintenance of the Project facilities operated and  
1007 maintained by the Operating Non-Federal Entity is re-assumed by the United States during the term of this  
1008 Contract, the Contracting Officer shall so notify the Contractor, in writing, and present to the Contractor a  
1009 revised Exhibit "B" which shall include the portion of the Rates to be paid by the Contractor for Project  
1010 Water under this Contract representing the Operation and Maintenance costs of the portion of such Project  
1011 facilities which have been re-assumed. The Contractor shall, thereafter, in the absence of written notification  
1012 from the Contracting Officer to the contrary, pay the Rates, Charges, and Tiered Pricing Component(s)  
1013 specified in the revised Exhibit "B" directly to the United States in compliance with Article 7 of this Contract.

1014 CONTINGENT ON APPROPRIATION OR ALLOTMENT OF FUNDS

1015 29. The expenditure or advance of any money or the performance of any obligation of the  
1016 United States under this Contract shall be contingent upon appropriation or allotment of funds. Absence of  
1017 appropriation or allotment of funds shall not relieve the Contractor from any obligations under this Contract.  
1018 No liability shall accrue to the United States in case funds are not appropriated or allotted.

1019 BOOKS, RECORDS, AND REPORTS

1020           30.   (a)    The Contractor shall establish and maintain accounts and other books and records  
1021           pertaining to administration of the terms and conditions of this Contract, including: the Contractor's financial  
1022           transactions, water supply data, and Project land and right-of-way agreements; water use data; and other  
1023           matters that the Contracting Officer may require. Reports thereon shall be furnished to the Contracting  
1024           Officer in such form and on such date or dates as the Contracting Officer may require. Subject to  
1025           applicable Federal laws and regulations, each party to this Contract shall have the right during office hours to  
1026           examine and make copies of the other party's books and records relating to matters covered by this  
1027           Contract.

1028                   (b)    Notwithstanding the provisions of subdivision (a) of this Article, no books, records,  
1029           or other information shall be requested from the Contractor by the Contracting Officer unless such books,  
1030           records, or information are reasonably related to the administration or performance of this Contract. Any  
1031           such request shall allow the Contractor a reasonable period of time within which to provide the requested  
1032           books, records, or information.

1033                   (c)    At such time as the Contractor provides information to the Contracting Officer  
1034           pursuant to subdivision (a) of this Article, a copy of such information shall be provided to the Operating  
1035           Non-Federal Entity.

1036                                   ASSIGNMENT LIMITED--SUCCESSORS AND ASSIGNS OBLIGATED

1037           31.   (a)    The provisions of this Contract shall apply to and bind the successors and assigns of  
1038           the parties hereto, but no assignment or transfer of this Contract or any right or interest therein shall be valid  
1039           until approved in writing by the Contracting Officer.

1040                   (b)    The assignment of any right or interest in this Contract by either party shall not  
1041           interfere with the rights or obligations of the other party to this Contract absent the written concurrence of  
1042           said other party.

1043                   (c)    The Contracting Officer shall not unreasonably condition or withhold approval of  
1044           any proposed assignment.

1045

SEVERABILITY

1046

32. In the event that a person or entity who is neither (i) a party to a Project contract, nor (ii) a

1047

person or entity that receives Project Water from a party to a Project contract, nor (iii) an association or

1048

other form of organization whose primary function is to represent parties to Project contracts, brings an

1049

action in a court of competent jurisdiction challenging the legality or enforceability of a provision included in

1050

this Contract and said person, entity, association, or organization obtains a final court decision holding that

1051

such provision is legally invalid or unenforceable and the Contractor has not intervened in that lawsuit in

1052

support of the plaintiff(s), the parties to this Contract shall use their best efforts to (i) within thirty (30) days

1053

of the date of such final court decision identify by mutual agreement the provisions in this Contract which

1054

must be revised and (ii) within three (3) months thereafter promptly agree on the appropriate revision(s).

1055

The time periods specified above may be extended by mutual agreement of the parties. Pending the

1056

completion of the actions designated above, to the extent it can do so without violating any applicable

1057

provisions of law, the United States shall continue to make the quantities of Project Water specified in this

1058

Contract available to the Contractor pursuant to the provisions of this Contract which were not found to be

1059

legally invalid or unenforceable in the final court decision.

1060

RESOLUTION OF DISPUTES

1061

33. Should any dispute arise concerning any provisions of this Contract, or the parties' rights

1062

and obligations thereunder, the parties shall meet and confer in an attempt to resolve the dispute. Prior to

1063

the Contractor commencing any legal action, or the Contracting Officer referring any matter to Department

1064

of Justice, the party shall provide to the other party thirty (30) days' written notice of the intent to take such

1065 action; Provided, That such notice shall not be required where a delay in commencing an action would  
1066 prejudice the interests of the party that intends to file suit. During the thirty (30) -day notice period, the  
1067 Contractor and the Contracting Officer shall meet and confer in

1068 an attempt to resolve the dispute. Except as specifically provided, nothing herein is intended to waive or  
1069 abridge any right or remedy that the Contractor or the United States may have.

1070 OFFICIALS NOT TO BENEFIT

1071 34. No Member of or Delegate to Congress, Resident Commissioner, or official of the  
1072 Contractor shall benefit from this Contract other than as a water user or landowner in the same manner as  
1073 other water users or landowners.

1074 CHANGES IN CONTRACTOR'S SERVICE AREA

1075 35. (a) While this Contract is in effect, no change may be made in the Contractor's Service  
1076 Area or boundaries, by inclusion or exclusion of lands, dissolution, consolidation, merger, or otherwise,  
1077 except upon the Contracting Officer's written consent.

1078 (b) Within thirty (30) days of receipt of a request for such a change, the Contracting  
1079 Officer will notify the Contractor of any additional information required by the Contracting Officer for  
1080 processing said request, and both parties will meet to establish a mutually agreeable schedule for timely  
1081 completion of the process. Such process will analyze whether the proposed change is likely to: (i) result in  
1082 the use of Project Water contrary to the terms of this Contract; (ii) impair the ability of the Contractor to pay  
1083 for Project Water furnished under this Contract or to pay for any Federally-constructed facilities for which  
1084 the Contractor is responsible; and (iii) have an impact on any Project Water rights applications, permits, or  
1085 licenses. In addition, the Contracting Officer shall comply with the National Environmental Policy Act and

1086 the Endangered Species Act. The Contractor will be responsible for all costs incurred by the Contracting  
1087 Officer in this process, and such costs will be paid in accordance with Article 25 of this Contract.

1088

1089

FEDERAL LAWS

1090 36. By entering into this Contract, the Contractor does not waive its rights to contest the validity  
1091 or application in connection with the performance of the terms and conditions of this Contract of any Federal  
1092 law or regulation; Provided, That the Contractor agrees to comply with the terms and conditions of this  
1093 Contract unless and until relief from application of such Federal law or regulation to the implementing  
1094 provision of the Contract is granted by a court of competent jurisdiction.

1095

NOTICES

1096 37. Any notice, demand, or request authorized or required by this Contract shall be deemed to  
1097 have been given, on behalf of the Contractor, when mailed, postage prepaid, or delivered to the Area  
1098 Manager, South-Central California Area Office, 1243 "N" Street, Fresno, California 93721, and on behalf  
1099 of the United States, when mailed, postage prepaid, or delivered to the Board of Directors of the Fresno  
1100 County Waterworks District No. 18, PO Box 92, Friant, California 93626. The designation of the  
1101 addressee or the address may be changed by notice given in the same manner as provided in this Article for  
1102 other notices.

1103

CONFIRMATION OF CONTRACT

1104 38. The Contractor, after the execution of this Contract, shall promptly seek to secure a decree  
1105 of a court of competent jurisdiction of the State of California, confirming the execution of this Contract. The  
1106 Contractor shall furnish the United States a certified copy of the final decree, the validation proceedings, and  
1107 all pertinent supporting records of the court approving and confirming this Contract, and decreeing and  
1108 adjudging it to be lawful, valid, and binding on the Contractor.

1109 IN WITNESS WHEREOF, the parties hereto have executed this Contract as of the day and  
1110 year first above written.

THE UNITED STATES OF AMERICA

By: /s/ William H. Luce, Jr.  
Acting Regional Director, Mid-Pacific Region  
Bureau of Reclamation

(SEAL)

FRESNO COUNTY WATER WORKS  
DISTRICT NO. 18

By: /s/ Dan Pearce  
President of the Board of Directors

Attest:

By: /s/ Georgie Betitor  
Secretary of the Board of Directors

(I:Fres18.wpd)

Contract No. 14-06-200-5904-LTR1

EXHIBIT A

[Map or Description of Service Area]



Contract No. 14-06-200-5904-LTR1

**EXHIBIT B**  
[Initial Rates and Charges]

**APPENDIX C**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION  
Central Valley Project, California

LONG-TERM RENEWAL CONTRACT BETWEEN THE UNITED STATES  
LOWER TULE RIVER IRRIGATION DISTRICT  
PROVIDING FOR PROJECT WATER SERVICE  
FROM FRIANT DIVISION

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1 UNITED STATES  
2 DEPARTMENT OF THE INTERIOR  
3 BUREAU OF RECLAMATION  
4 Central Valley Project, California

5 LONG-TERM RENEWAL CONTRACT BETWEEN THE UNITED STATES  
6 AND  
7 LOWER TULE RIVER IRRIGATION DISTRICT  
8 PROVIDING FOR PROJECT WATER SERVICE  
9 FROM FRIANT DIVISION

10 THIS CONTRACT, made this 20<sup>th</sup> day of January, 2001, in pursuance generally  
11 of the Act of June 17, 1902 (32 Stat. 388), and acts amendatory or supplementary thereto, including, but  
12 not limited to, the Acts of August 26, 1937 (50 Stat. 844), as amended and supplemented, August 4, 1939  
13 (53 Stat. 1187), as amended and supplemented, July 2, 1956 (70 Stat. 483), June 21, 1963 (77 Stat. 68),  
14 October 12, 1982 (96 Stat. 1262), October 27, 1986 (100 Stat. 3050), as amended, and Title XXXIV of  
15 the Act of October 30, 1992 (106 Stat. 4706), all collectively hereinafter referred to as Federal  
16 Reclamation law, between THE UNITED STATES OF AMERICA, hereinafter referred to as the United  
17 States, and LOWER TULE RIVER IRRIGATION DISTRICT, hereinafter referred to as the Contractor, a  
18 public agency of the State of California, duly organized, existing, and acting pursuant to the laws thereof,  
19 with its principal place of business in California;

20 WITNESSETH, That:

21 EXPLANATORY RECITALS

22 [1<sup>st</sup>] WHEREAS, the United States has constructed and is operating the Central Valley Project,  
23 California, for diversion, storage, carriage, distribution and beneficial use, for flood control, irrigation,

24 municipal, domestic, industrial, fish and wildlife mitigation, protection and restoration, generation and  
25 distribution of electric energy, salinity control, navigation and other beneficial uses, of waters of the  
26 Sacramento River, the American River, the Trinity River, and the San Joaquin River and their tributaries; and

27 [2<sup>nd</sup>] WHEREAS, the United States constructed Friant Dam (thereby creating Millerton Lake)  
28 and the Friant-Kern and Madera Canals, hereinafter collectively referred to as the Friant Division facilities,  
29 which will be used in part for the furnishing of water to the Contractor pursuant to the terms of this Contract;  
30 and

31 [3<sup>rd</sup>] WHEREAS, pursuant to Section 8 of the Act of June 17, 1902 (32 Stat. 388), the United  
32 States has acquired water rights and other rights to the flows of the San Joaquin River, including without  
33 limitation the permits issued as the result of Decision 935 by the California State Water Resource Control  
34 Board and the contracts described in subdivision (n) of Article 3 of this Contract, pursuant to which the  
35 Contracting Officer develops, diverts, stores and delivers Project Water stored or flowing through Millerton  
36 Lake in accordance with State and Federal law for the benefit of Project Contractors in the Friant Division;  
37 and

38 [3.1] WHEREAS, the water supplied to the Contractor pursuant to this Contract is Project Water  
39 developed through the exercise of the rights described in the third (3rd) Explanatory Recital of this Contract;  
40 and

41 [4<sup>th</sup>] WHEREAS, the Contractor and the United States entered into Contract No. I75r-2771, as  
42 amended, which established terms for the delivery to the Contractor of Project Water from the Friant  
43 Division from May 5, 1951, to February 28, 1991; and

44 [5<sup>th</sup>] WHEREAS, the Contractor and the United States entered into Renewal Contract  
45 No. I75r-2771R, which provided for continued water service to the Contractor from the Friant Division  
46 from March 1, 1991, through February 28, 2029, but, in light of the Ninth Circuit Court of Appeals Opinion  
47 in the lawsuit entitled Natural Resources Defense Council, et al. v. Roger Patterson, et al., that contract was  
48 replaced by Interim Renewal Contract No. I75r-2771-IR1, dated July 10, 1998, which provides for  
49 continued water service to the Contractor from the Friant Division from September 14, 1998, through  
50 February 28, 2001; and

51 [6<sup>th</sup>] WHEREAS, Section 3404(c) of the CVPIA provides for long-term renewal of interim and  
52 existing long-term Project Water service contracts following completion of appropriate environmental  
53 documentation, including a programmatic environmental impact statement (PEIS) pursuant to the National  
54 Environmental Policy Act analyzing the direct and indirect impacts and benefits of implementing the CVPIA  
55 and the potential renewal of all existing contracts for Project Water; and

56 [7<sup>th</sup>] WHEREAS, the United States has completed the PEIS and all other appropriate  
57 environmental review necessary to provide for long-term renewal of the Existing Contract; and

58 [8<sup>th</sup>] WHEREAS, the Contractor has requested the long-term renewal of the Existing Contract,  
59 pursuant to the terms of the Existing Contract, Federal Reclamation law, and the laws of the State of  
60 California, for water service from the Central Valley Project; and

61 [9<sup>th</sup>] WHEREAS, the United States has determined that the Contractor has fulfilled all of its  
62 obligations under the Existing Contract; and

63 [10<sup>th</sup>] WHEREAS, the Contractor has demonstrated to the satisfaction of the Contracting Officer  
64 that the Contractor has utilized the Project Water supplies available to it for reasonable and beneficial use  
65 and/or has demonstrated projected future demand for water use such that the Contractor has the capability  
66 and expects to utilize fully for reasonable and beneficial use the quantity of Project Water to be made  
67 available to it pursuant to this Contract; and

68 [11<sup>th</sup>] WHEREAS, water obtained from the Central Valley Project has been relied upon by urban  
69 and agricultural areas within California for more than fifty (50) years, and is considered by the Contractor as  
70 an essential portion of its water supply; and

71 [12<sup>th</sup>] WHEREAS, the economies of regions within the Central Valley Project, including the  
72 Contractor's, depend upon the continued availability of water, including water service from the Central  
73 Valley Project; and

74 [13<sup>th</sup>] WHEREAS, the Secretary intends through coordination, cooperation, and partnerships to  
75 pursue measures to improve water supply, water quality, and reliability of the Project for all Project  
76 purposes; and

77 [14<sup>th</sup>] WHEREAS, the mutual goals of the United States and the Contractor include: to provide  
78 for reliable Project Water supplies; to control costs of those supplies; to achieve repayment of the Central  
79 Valley Project as required by law; to guard reasonably against Project Water shortages; to achieve a  
80 reasonable balance among competing demands for use of Project Water; and to comply with all applicable  
81 environmental statutes, all consistent with the legal obligations of the United States relative to the Central  
82 Valley Project; and



83 [15<sup>th</sup>] Omitted;

84 [15.1] WHEREAS, during Uncontrolled Seasons, Friant Division Project Contractors utilize  
85 undependable Class 2 Water in their service areas to, among other things, assist in the management and  
86 alleviation of groundwater overdraft in the Friant Division service area, provide opportunities for  
87 environmental enhancement, including restoration of the San Joaquin River below Friant Dam, minimize  
88 flooding along the San Joaquin River, encourage optimal water management, and maximize the reasonable  
89 and beneficial use of the water; and

90 [15.2] WHEREAS, the parties desire and intend that this Contract not provide a disincentive to  
91 the Friant Division Project Contractors continuing to carry out the beneficial activities set out in the  
92 Explanatory Recital immediately above; and

93 [16<sup>th</sup>] WHEREAS, the United States and the Contractor are willing to enter into this Contract  
94 pursuant to Federal Reclamation law on the terms and conditions set forth below;

95 NOW, THEREFORE, in consideration of the mutual and dependent covenants herein contained, it  
96 is hereby mutually agreed by the parties hereto as follows:

97 DEFINITIONS

98 1. When used herein unless otherwise distinctly expressed, or manifestly incompatible with the  
99 intent of the parties as expressed in this Contract, the term:

100 (a) "Calendar Year" shall mean the period January 1 through December 31, both dates  
101 inclusive;

102 (b) "Charges" shall mean the payments required by Federal Reclamation law in addition

103 to the Rates and Tiered Pricing Components specified in this Contract as determined annually by the  
104 Contracting Officer pursuant to this Contract;

105 (b2) "Class 1 Water" shall mean that supply of water stored in or flowing through  
106 Millerton Lake which, subject to the contingencies hereinafter described in Articles 3, 11, and 12 of this  
107 Contract, will be available for delivery from Millerton Lake and the Friant-Kern and Madera Canals as a  
108 dependable water supply during each Year;

109 (b3) "Class 2 Water" shall mean that supply of water which can be made available  
110 subject to the contingencies hereinafter described in Articles 3, 11, and 12 of this Contract for delivery from  
111 Millerton Lake and the Friant-Kern and Madera Canals in addition to the supply of Class 1 Water.  
112 Because of its uncertainty as to availability and time of occurrence, such water will be undependable in  
113 character and will be furnished only if, as, and when it can be made available as determined by the  
114 Contracting Officer;

115 (c) "Condition of Shortage" shall mean a condition respecting the Project during any  
116 Year such that the Contracting Officer is unable to deliver sufficient water to meet the Contract Total;

117 (d) "Contracting Officer" shall mean the Secretary of the Interior's duly authorized  
118 representative acting pursuant to this Contract or applicable Reclamation law or regulation;

119 (e) "Contract Total" shall mean the maximum amount of Class 1 Water, plus the  
120 maximum amount of Class 2 Water to which the Contractor is entitled under subdivision (a) of Article 3 of  
121 this Contract;

122 (f) "Contractor's Service Area" shall mean the area to which the Contractor is

123 permitted to provide Project Water under this Contract as described in Exhibit “A” attached hereto,

124 which may be modified from time to time in accordance with Article 35 of this Contract without amendment  
125 of this Contract;

126 (g) “CVPIA” shall mean the Central Valley Project Improvement Act, Title XXXIV of  
127 the Act of October 30, 1992 (106 Stat. 4706);

128 (h) “Eligible Lands” shall mean all lands to which Irrigation Water may be delivered in  
129 accordance with Section 204 of the Reclamation Reform Act of October 12, 1982 (96 Stat. 1263), as  
130 amended, hereinafter referred to as RRA;

131 (i) “Excess Lands” shall mean all lands in excess of the limitations contained in Section  
132 204 of the RRA, other than those lands exempt from acreage limitation under Federal Reclamation law;

133 (j) “Full Cost Rate” shall mean that water rate described in Sections 205(a)(3) or  
134 202(3) of the RRA, whichever is applicable;

135 (k) “Ineligible Lands” shall mean all lands to which Irrigation Water may not be  
136 delivered in accordance with Section 204 of the RRA;

137 (l) “Irrigation Full Cost Water Rate” shall have the same meaning as “full cost” as that  
138 term is used in paragraph (3) of Section 202 of the RRA;

139 (m) “Irrigation Water” shall mean water made available from the Project that is used  
140 primarily in the production of agricultural crops or livestock, including domestic use incidental thereto, and  
141 watering of livestock. Irrigation Water shall not include water used for purposes such as the watering of

142 landscaping or pasture for animals (e.g., horses) which are kept for personal enjoyment or water delivered  
143 to landholdings operated in units of less than five (5) acres unless the Contractor establishes to the  
144 satisfaction of the Contracting Officer that the use of water delivered to any such landholding is a use  
145 described in this subdivision of this Article;

146 (n) "Landholder" shall mean a party that directly or indirectly owns or leases nonexempt  
147 land, as provided in 43 CFR 426.2;

148 (n2) "Long Term Historic Average" shall mean the average of the final forecast of Water  
149 Made Available to the Contractor pursuant to this Contract and the contracts referenced in the fourth (4<sup>th</sup>)  
150 and fifth (5<sup>th</sup>) Explanatory Recitals of this Contract;

151 (o) Omitted;

152 (p) "Municipal and Industrial (M&I) Full Cost Water Rate" shall mean the annual rate,  
153 which, as determined by the Contracting Officer, shall amortize the expenditures for construction allocable to  
154 Project M&I facilities in service, including, O&M deficits funded, less payments, over such periods as may  
155 be required under Federal Reclamation law with interest accruing from the dates such costs were first  
156 incurred plus the applicable rate for the O&M of such Project facilities. Interest rates used in the calculation  
157 of the M&I Full Cost Rate shall comply with the Interest Rate methodology contained in Section 202 (3)  
158 (B) and (C) of the RRA;

159 (q) "Operation and Maintenance" or "O&M" shall mean normal and reasonable care,  
160 control, operation, repair, replacement (other than Capital replacement), and maintenance of Project  
161 facilities;

162 (r) "Operating Non-Federal Entity" shall mean the Friant Water Users Authority, a  
163 Non-Federal entity which has the obligation to operate and maintain all or a portion of the Friant  
164 Division facilities pursuant to an agreement with the United States, and which may have funding obligations  
165 with respect thereto;

166 (r2) "Other Water" shall mean water from the Project other than Irrigation Water as  
167 described in subdivision (l) of this Article, which is used for a purpose that is considered to be an irrigation  
168 use pursuant to State law such as the watering of landscaping or pasture for animals (e.g., horse) which are  
169 kept for the personal enjoyment. For purposes of this Contract, Other Water shall be paid for the Rates  
170 and Charges identical to those established for municipal and industrial water pursuant to the then current  
171 Municipal and Industrial (M&I) Ratesetting Policy.

172 (s) "Project" shall mean the Central Valley Project owned by the United States and  
173 managed by the Department of the Interior, Bureau of Reclamation;

174 (t) "Project Contractors" shall mean all parties who have water service contracts for  
175 Project Water from the Project with the United States pursuant to Federal Reclamation law;

176 (u) "Project Water" shall mean all water that is developed, diverted, stored, or  
177 delivered by the Secretary in accordance with the statutes authorizing the Project and in accordance with the  
178 terms and conditions of water rights acquired pursuant to California law;

179 (v) "Rates" shall mean the payments determined annually by the Contracting Officer in  
180 accordance with the then current applicable water ratesetting policies for the Project, as described in  
181 subdivision (a) of Article 7 of this Contract;

182 (w) Omitted;

183 (x) "Secretary" shall mean the Secretary of the Interior, a duly appointed successor, or  
184 an authorized representative acting pursuant to any authority of the Secretary and through any agency of the  
185 Department of the Interior;

186 (y) "Tiered Pricing Component" shall be the incremental amount to be paid for each  
187 acre-foot of Water Delivered as described in subdivision (j) of Article 7 of this Contract;

188 (z) "Water Delivered" or "Delivered Water" shall mean Project Water diverted for use  
189 by the Contractor at the point(s) of delivery approved by the Contracting Officer;

190 (aa) "Water Made Available" shall mean the estimated amount of Project Water that can  
191 be delivered to the Contractor for the upcoming Year as declared by the Contracting Officer, pursuant to  
192 subdivision (a) of Article 4 of this Contract;

193 (bb) "Water Scheduled" shall mean Project Water made available to the Contractor for  
194 which times and quantities for delivery have been established by the Contractor and Contracting Officer,  
195 pursuant to subdivision (b) of Article 4 of this Contract; and

196 (cc) "Year" shall mean the period from and including March 1 of each Calendar Year  
197 through the last day of February of the following Calendar Year.

198 TERM OF CONTRACT

199 2. (a) This Contract shall be effective March 1, 2001, through February 28, 2026. In the  
200 event the Contractor wishes to renew the Contract beyond February 28, 2026, the Contractor shall submit  
201 a request for renewal in writing to the Contracting Officer no later than two (2) years prior to the date this

202 Contract expires. The renewal of this Contract insofar as it pertains to the furnishing of Irrigation Water to  
203 the Contractor shall be governed by subdivision (b) of this Article.

204 (b) (1) Under terms and conditions of a renewal contract that are mutually  
205 agreeable to the parties hereto, and upon a determination by the Contracting Officer that at the time of  
206 contract renewal the conditions set forth in subdivision (b)(2) of this Article are met, and subject to Federal  
207 and State law, this Contract, insofar as it pertains to the furnishing of Irrigation Water to the Contractor, shall  
208 be renewed for a period of twenty-five (25) years.

209 (2) The conditions which must be met for this Contract to be renewed are: (i)  
210 the Contractor has prepared a water conservation plan that has been determined by the Contracting Officer  
211 in accordance with Article 26 of this Contract to meet the conservation and efficiency criteria for evaluating  
212 such plans established under Federal law; (ii) the Contractor is implementing an effective water conservation  
213 and efficiency program based on the Contractor's water conservation plan as required by Article 26 of this  
214 Contract; (iii) the Contractor is operating and maintaining all water measuring devices and implementing all  
215 water measurement methods as approved by the Contracting Officer pursuant to Article 6 of this Contract;  
216 (iv) the Contractor has reasonably and beneficially used the Project Water supplies made available to it and,  
217 based on projected demands, is reasonably anticipated and expects fully to utilize for reasonable and  
218 beneficial use the quantity of Project Water to be made available to it pursuant to such renewal; (v) the  
219 Contractor is complying with all terms and conditions of this Contract and all legal obligations of the  
220 Contractor, if any, set forth in an enforceable court order, final judgment and/or settlement relating to  
221 restoration of the San Joaquin River; and (vi) the Contractor has the physical and legal ability to deliver

222 Project Water.

223 (3) The terms and conditions of the renewal contract described in subdivision  
224 (b)(1) of this Article and any subsequent renewal contracts shall be developed consistent with the parties'  
225 respective legal rights and obligations, and in consideration of all relevant facts and circumstances, as those  
226 circumstances exist at the time of renewal, including, without limitation, the Contractor's need for continued  
227 delivery of Project Water; environmental conditions affected by implementation of the Contract to be  
228 renewed, and specifically changes in those conditions that occurred during the life of the Contract to be  
229 renewed; the Secretary's progress toward achieving the purposes of the CVPIA as set out in Section 3402  
230 and in implementing the specific provisions of the CVPIA; and current and anticipated economic  
231 circumstances of the region served by the Contractor.

232 (c) This Contract, insofar as it pertains to the furnishing of Other Water to the  
233 Contractor, shall be renewed for a period of twenty-five (25) years and thereafter shall be renewed for  
234 successive periods of up to forty (40) years each, which periods shall be consistent with the then-existing  
235 Reclamation-wide policy, under terms and conditions mutually agreeable to the parties and consistent with  
236 Federal and State law. The present Reclamation-wide policy, dated March 20, 2000, provides that the  
237 term of such contracts shall be no more than twenty-five (25) years each, subject to a variance to allow a  
238 longer term in appropriate circumstances. The Contractor shall be afforded the opportunity to comment to  
239 the Contracting Officer on the proposed adoption and application of any revised Reclamation-wide policy  
240 applicable to the delivery of Project Other Water that would affect the term of any subsequent renewal  
241 contract with the Contractor for the furnishing of Other Water.



242 (d) The Contracting Officer anticipates that by December 31, 2024, all authorized  
243 Project construction expected to occur will have occurred, and on that basis the Contracting Officer agrees  
244 by that date to allocate all costs that are properly assignable to the Contractor, and agrees further that, at  
245 any time after such allocation is made, and subject to satisfaction of the conditions set out in this subdivision  
246 of this Article, this Contract shall, at the request of the Contractor, be converted to a contract under  
247 subsection (c)(1) and (d) of Section 9, of the Reclamation Project Act of 1939, subject to applicable  
248 Federal law and under stated terms and conditions mutually agreeable to the Contractor and the Contracting  
249 Officer. A condition for such conversion to occur shall be a determination by the Contracting Officer that,  
250 account being taken of the amount credited to return by the Contractor as provided for under Reclamation  
251 law, the remaining amount of construction costs assignable for ultimate return by the Contractor can  
252 probably be repaid to the United States within the term of a contract under said subsection 9(c)(1) and (d).  
253 If the remaining amount of costs that are properly assignable to the Contractor cannot be determined by  
254 December 31, 2024, the Contracting Officer shall notify the Contractor, and provide the reason(s) why such  
255 a determination could not be made. Further, the Contracting Officer shall make such a determination as  
256 soon thereafter as possible so as to permit, upon request of the Contractor and satisfaction of the conditions  
257 set out above, conversion to a contract under said subsection 9(c)(1) and (d). In the event such  
258 determination of costs has not been made at a time which allows conversion of this Contract during the term  
259 of this Contract or the Contractor has not requested conversion of this Contract within such term, the parties  
260 shall incorporate in any subsequent renewal contract as described in Articles 2(b) and (c) a provision that  
261 carries forth in substantially identical terms the provisions of this Article 2(d). In the event the Contracting

262 Officer is able to make a determination of the remaining amount of costs that are properly assignable to the  
263 Contractor before December 31, 2024, the Contracting Officer shall do so at the earliest time he/she has  
264 such ability.

265 WATER TO BE MADE AVAILABLE AND DELIVERED TO THE CONTRACTOR

266 3. (a) During each Year, consistent with all applicable State water rights, permits, and  
267 licenses; Federal law; and subject to the provisions set forth in Articles 11 and 12 of this Contract, the  
268 Contracting Officer shall make available for delivery to the Contractor 61,200 acre-feet of Class 1 Water  
269 and 238,000 acre-feet of Class 2 Water, for irrigation purposes. The quantity of Water Delivered to the  
270 Contractor in accordance with this subdivision shall be scheduled and paid for pursuant to the provisions of  
271 Articles 4 and 7 of this Contract.

272 (b) Omitted.

273 (c) The Contractor shall utilize the Project Water in accordance with all applicable legal  
274 requirements.

275 (d) The Contractor shall make reasonable and beneficial use of all Project Water or  
276 other water furnished pursuant to this Contract. Groundwater recharge programs, groundwater banking  
277 programs, surface water storage programs, and other similar programs utilizing Project Water or other water  
278 furnished pursuant to this Contract conducted within the Contractor's Service Area which are consistent  
279 with applicable State law and result in use consistent with Reclamation law will be allowed; Provided, That  
280 any direct recharge program(s) is (are) described in the Contractor's Water Conservation Plan submitted  
281 pursuant to Article 26 of this Contract; Provided, further, That such Water Conservation Plan demonstrates

282 sufficient lawful uses exist in the Contractor's Service Area so that using a long-term average, the quantity of  
283 Delivered Water is demonstrated to be reasonable for such uses and in compliance with Reclamation law.  
284 Groundwater recharge programs, groundwater banking programs, surface water storage programs, and  
285 other similar programs utilizing Project Water or other water furnished pursuant to this Contract conducted  
286 outside the Contractor's Service Area may be permitted upon written approval of the Contracting Officer,  
287 which approval will be based upon environmental documentation, Project Water rights, and Project  
288 operational concerns. The Contracting Officer will address such concerns in regulations, policies, or  
289 guidelines.

290 (e) The Contractor shall comply with requirements applicable to the Contractor in  
291 biological opinion(s) prepared as a result of a consultation regarding the execution of this Contract  
292 undertaken pursuant to Section 7 of the Endangered Species Act of 1973, as amended, that are within the  
293 Contractor's legal authority to implement. The Contractor shall comply with the limitations or requirements  
294 imposed by environmental documentation applicable to the Contractor and within its legal authority to  
295 implement regarding specific activities. Nothing herein shall be construed to prevent the Contractor from  
296 challenging or seeking judicial relief in a court of competent jurisdiction with respect to any biological opinion  
297 or other environmental documentation referred to in this Article.

298 (f) Subject to subdivisions (l) and (n) of Article 3 of this Contract, following the  
299 declaration of Water Made Available under Article 4 of this Contract, the Contracting Officer will make a  
300 determination whether Project Water, or other water available to the Project, can be made available to the  
301 Contractor in addition to the Contract Total under Article 3 of this Contract during the Year without

302 adversely impacting other Project Contractors. At the request of the Contractor, the Contracting Officer  
303 will consult with the Contractor prior to making such a determination. Subject to subdivisions (l) and (n) of  
304 Article 3 of this Contract, if the Contracting Officer determines that Project Water, or other water available  
305 to the Project, can be made available to the Contractor, the Contracting Officer will announce the availability  
306 of such water and shall so notify the Contractor as soon as practical. The Contracting Officer will thereafter  
307 meet with the Contractor and other Project Contractors capable of taking such water to determine the most  
308 equitable and efficient allocation of such water. If the Contractor requests the delivery of any quantity of  
309 such water, the Contracting Officer shall make such water available to the Contractor in accordance with  
310 applicable statutes, regulations, guidelines, and policies.

311 (g) The Contractor may request permission to reschedule for use during the subsequent  
312 Year some or all of the Water Made Available to the Contractor during the current Year referred to as  
313 “carryover.” The Contractor may request permission to use during the current Year a quantity of Project  
314 Water which may be made available by the United States to the Contractor during the subsequent Year  
315 referred to as “preuse.” The Contracting Officer’s written approval may permit such uses in accordance  
316 with applicable statutes, regulations, guidelines, and policies.

317 (h) The Contractor’s right pursuant to Federal Reclamation law and applicable State  
318 law to the reasonable and beneficial use of Water Delivered pursuant to this Contract during the term thereof  
319 and any subsequent renewal contracts, as described in Article 2 of this Contract, during the terms thereof  
320 shall not be disturbed so long as the Contractor shall fulfill all of its obligations under this Contract and any  
321 renewals thereof. Nothing in the preceding sentence shall affect the Contracting Officer’s ability to impose

322 shortages under Article 11 or subdivision (b) of Article 12 of this Contract or applicable provisions of any  
323 subsequent renewal contracts.

324 (i) Project Water furnished to the Contractor pursuant to this Contract may be  
325 delivered for purposes other than those described in subdivisions (m) and (r2) of Article 1 of this Contract  
326 upon written approval by the Contracting Officer in accordance with the terms and conditions of such  
327 approval.

328 (j) The Contracting Officer shall make reasonable efforts to protect the water rights and  
329 other rights described in the third (3rd) Explanatory Recital of this Contract and to provide the water  
330 available under this Contract. The Contracting Officer shall not object to participation by the Contractor, in  
331 the capacity and to the extent permitted by law, in administrative proceedings related to the water rights and  
332 other rights described in the third (3rd) Explanatory Recital of this Contract; Provided, however, That the  
333 Contracting Officer retains the right to object to the substance of the Contractor's position in such a  
334 proceeding.

335 (k) Project Water furnished to the Contractor during any month designated in a  
336 schedule or revised schedule submitted by the Contractor and approved by the Contracting Officer shall be  
337 deemed to have been accepted by the Contractor as Class 1 Water to the extent that Class 1 Water is  
338 called for in such schedule for such month and shall be deemed to have been accepted as Class 2 Water to  
339 the extent Class 2 Water is called for in such schedule for such month. If in any month the Contractor  
340 diverts a quantity of water in addition to the total amount of Class 1 Water and Class 2 Water set forth in  
341 the Contractor's approved schedule or revised schedule for such month, such additional diversions shall be

342 charged first against the Contractor's remaining Class 2 Water supply available in the current Year. To the  
343 extent the Contractor's remaining Class 2 Water supply available in the current Year is not sufficient to  
344 account for such additional diversions, such additional diversions shall be charged against the Contractor's  
345 remaining Class 1 Water supply available in the current Year. To the extent the Contractor's remaining  
346 Class 1 Water and Class 2 Water supplies available in the current Year are not sufficient to account for such  
347 additional diversions, such additional diversions shall be charged first against the Contractor's available  
348 Class 2 Water supply and then against the Contractor's available Class 1 Water supply, both for the  
349 following

350 Year. Payment for all additional diversions of water shall be made in accordance with Article 7 of this  
351 Contract.

352 (l) If the Contracting Officer determines there is a Project Water supply available at  
353 Friant Dam as the result of an unusually large water supply not otherwise storable for Project purposes or  
354 infrequent and otherwise unmanaged flood flows of short duration, such water will be made available to the  
355 Contractor and others under Section 215 of the RRA pursuant to the priorities specified below if the  
356 Contractor enters into a temporary contract with the United States not to exceed one (1) year for the  
357 delivery of such water or, as otherwise provided for in Federal Reclamation law and associated regulations.  
358 Such water may be identified by the Contractor either (i) as additional water to supplement the supply of  
359 Class 1 Water and/or Class 2 Water made available to it pursuant to this Contract or, (ii) upon written  
360 notification to the Contracting Officer, as water to be credited against the Contractor's Class 2 Water supply

361 available pursuant to this Contract. The Contractor shall deliver such water to Eligible Lands, or to Excess  
362 Lands in accordance with this Article. The Contracting Officer shall make water determined to be available  
363 pursuant to this subsection according to the following priorities: first, to long-term contractors for Class 1  
364 Water and/or Class 2 Water within the Friant Division; second, to long-term contractors in the Cross Valley  
365 Division of the Project. The Contracting Officer will consider and seek to accommodate requests from  
366 other parties for Section 215 Water for use within the area identified as the Friant Division service area in  
367 the environmental assessment developed in connection with the execution of this Contract.

368 (m) Nothing in this Contract, nor any action or inaction of the Contractor or Contracting  
369 Officer in connection with the implementation of this Contract, is intended to override, modify, supersede or  
370 otherwise interfere with any term or condition of the water rights and other rights referred in the third (3rd)  
371 Explanatory Recital of this Contract.

372 (n) The rights of the Contractor under this Contract are subject to the terms of the  
373 contract for exchange waters, dated July 27, 1939, between the United States and the San Joaquin and  
374 Kings River Canal and Irrigation Company, Incorporated, et al., (hereinafter referred to as the Exchange  
375 Contractors), Contract No. I1r-1144, as amended. The United States agrees that it will not deliver to the  
376 Exchange Contractors thereunder waters of the San Joaquin River unless and until required by the terms of  
377 said contract, and the United States further agrees that it will not voluntarily and knowingly determine itself  
378 unable to deliver to the Exchange Contractors entitled thereto from water that is available or that may  
379 become available to it from the Sacramento River and its tributaries or the Sacramento-San Joaquin Delta  
380 those quantities required to satisfy the obligations of the United States under said Exchange Contract and

381 under Schedule 2 of the Contract for Purchase of Miller and Lux Water Rights (Contract I1r-1145, dated  
382 July 27, 1939).

383 TIME FOR DELIVERY OF WATER

384 4. (a) On or about February 20 of each Calendar Year, the Contracting Officer shall  
385 announce the Contracting Officer's expected declaration of the Water Made Available. The declaration will  
386 be updated monthly, and more frequently if necessary, based on then-current operational and hydrologic  
387 conditions and a new declaration with changes, if any, to the Water Made Available will be made. The  
388 Contracting Officer shall provide forecasts of Project operations and the basis of the estimate, with relevant  
389 supporting information, upon the written request of the Contractor. Concurrently with the declaration of the  
390 Water Made Available, the Contracting Officer shall provide the Contractor with the updated Long Term  
391 Historic Average. The declaration of Project operations will be expressed in terms of both Water Made  
392 Available and the Long Term Historic Average.

393 (b) On or before each March 1 and at such other times as necessary, the Contractor  
394 shall submit to the Contracting Officer a written schedule, satisfactory to the Contracting Officer, showing  
395 the monthly quantities of Project Water to be delivered by the United States to the Contractor pursuant to  
396 this Contract for the Year commencing on such March 1. The Contracting Officer shall use all reasonable  
397 means to deliver Project Water according to the approved schedule for the Year commencing on such  
398 March 1.

399 (c) The Contractor shall not schedule Project Water in excess of the quantity of Project  
400 Water the Contractor intends to put to reasonable and beneficial use within the Contractor's Service Area,



401 or to sell, transfer or exchange pursuant to Article 9 of this Contract during any Year.

402 (d) Subject to the conditions set forth in subdivision (a) of Article 3 of this Contract, the  
403 United States shall deliver Project Water to the Contractor in accordance with the initial schedule submitted  
404 by the Contractor pursuant to subdivision (b) of this Article, or any written revision(s), satisfactory to the  
405 Contracting Officer, thereto submitted within a reasonable time prior to the date(s) on which the requested  
406 change(s) is/are to be implemented; Provided, That the total amount of water requested in that schedule or  
407 revision does not exceed the quantities announced by the Contracting Officer pursuant to the provisions of  
408 subdivision (a) of Article 3, and the Contracting Officer determines that there will be sufficient capacity  
409 available in the appropriate Friant Division facilities to deliver the water in accordance with that schedule:  
410 Provided, further, That the Contractor shall not schedule the delivery of any water during any period as to  
411 which the Contractor is notified by the Contracting Officer or Operating Non-Federal Entity that Project  
412 facilities required to make deliveries to the Contractor will not be in operation because of scheduled O&M.

413 (e) The Contractor may, during the period from and including November 1 of each  
414 Year through and including the last day of February of that Year, request delivery of any amount of the  
415 Class 1 Water estimated by the Contracting Officer to be made available to it during the following Year.  
416 The Contractor may, during the period from and including January 1 of each Year (or such earlier date as  
417 may be determined by the Contracting Officer) through and including the last day of February of that Year,  
418 request delivery of any amount of Class 2 Water estimated by the Contracting Officer to be made available  
419 to it during the following Year. Such water shall hereinafter be referred to as preuse water. Such request  
420 must be submitted in writing by the Contractor for a specified quantity of preuse and shall be subject to the

421 approval of the Contracting Officer. Payment for preuse water so requested shall be at the appropriate  
422 rate(s) for the following Year in accordance with Article 7 of this Contract and shall be made in advance of  
423 delivery of any preuse water. The Contracting Officer shall deliver such preuse water in accordance with a  
424 schedule or any revision thereof submitted by the Contractor and approved by the Contracting Officer, to  
425 the extent such water is available and to the extent such deliveries will not interfere with the delivery of  
426 Project Water entitlements to other Friant Division contractors or the physical maintenance of the Project  
427 facilities. The quantities of preuse water delivered pursuant to this subdivision shall be deducted from the  
428 quantities of water that the Contracting Officer would otherwise be obligated to make available to the  
429 Contractor during the following Year; Provided, That the quantity of preuse water to be deducted from the  
430 quantities of either Class 1 Water or Class 2 Water to be made available to the Contractor in the following  
431 Year shall be specified by the Contractor at the time the preuse water is requested or as revised in its first  
432 schedule for the following Year submitted in accordance with subdivision (b) of this Article, based on the  
433 availability of the following Year water supplies as determined by the Contracting Officer.

434 POINT OF DIVERSION AND RESPONSIBILITY FOR DISTRIBUTION OF WATER

435 5. (a) Project Water scheduled pursuant to subdivision (b) of Article 4 of this Contract  
436 shall be delivered to the Contractor at a point or points of delivery either on Project facilities  
437 or another location or locations mutually agreed to in writing by the Contracting Officer and the Contractor.

438 (b) The Contracting Officer, the Operating Non-Federal Entity, or other appropriate  
439 entity shall make all reasonable efforts to maintain sufficient flows and levels of water in the Friant-Kern  
440 Canal to deliver Project Water to the Contractor at specific turnouts established pursuant to subdivision (a)

441 of this Article.

442 (c) The Contractor shall deliver Irrigation Water and Other Water in accordance with  
443 any applicable land classification provisions of Federal Reclamation law and the associated regulations. The  
444 Contractor shall not deliver Project Water to land outside the Contractor's Service Area unless approved in  
445 advance by the Contracting Officer.

446 (d) All Water Delivered to the Contractor pursuant to this Contract shall be measured  
447 and recorded with equipment furnished, installed, operated, and maintained by the United States, the  
448 Operating Non-Federal Entity or other appropriate entity as designated by the Contracting Officer  
449 (hereafter "other appropriate entity") at the point or points of delivery established pursuant to subdivision (a)  
450 of this Article. Upon the request of either party to this Contract, the Contracting Officer shall investigate, or  
451 cause to be investigated by the responsible Operating Non-Federal Entity, the accuracy of such  
452 measurements and shall take any necessary steps to adjust any errors appearing therein. For any period of  
453 time when accurate measurements have not been made, the Contracting Officer shall consult with the  
454 Contractor and the responsible Operating Non-Federal Entity prior to making a final determination of the  
455 quantity delivered for that period of time.

456 (e) Neither the Contracting Officer nor any Operating Non-Federal Entity shall be  
457 responsible for the control, carriage, handling, use, disposal, or distribution of Project Water Delivered to  
458 the Contractor pursuant to this Contract beyond the delivery points specified in subdivision (a) of this  
459 Article. The Contractor shall indemnify the United States, its officers, employees, agents, and assigns on  
460 account of damage or claim of damage of any nature whatsoever for which there is legal responsibility,

461 including property damage, personal injury, or death arising out of or connected with the control, carriage,  
462 handling, use, disposal, or distribution of such Project Water beyond such delivery points, except for any  
463 damage or claim arising out of: (i) acts or omissions of the Contracting Officer or any of its officers,  
464 employees, agents, or assigns, including any responsible Operating Non-Federal Entity, with the intent of  
465 creating the situation resulting in any damage or claim; (ii) willful misconduct of the Contracting Officer or  
466 any of its officers, employees, agents, or assigns, including any responsible Operating Non-Federal Entity;  
467 (iii) negligence of the Contracting Officer or any of its officers, employees, agents, or assigns including any  
468 responsible Operating Non-Federal Entity; or (iv) damage or claims resulting from a malfunction of facilities  
469 owned and/or operated by the United States or responsible Operating Non-Federal Entity; Provided, That  
470 the Contractor is not the Operating Non-Federal Entity that owned or operated the malfunctioning  
471 facility(ies) from which the damage claim arose.

472 MEASUREMENT OF WATER WITHIN THE SERVICE AREA

473 6. (a) The Contractor established a measurement program satisfactory to the Contracting  
474 Officer, all surface water delivered for irrigation purposes within the Contractor's Service Area is measured  
475 at each agricultural turnout. The water measuring devices or water measuring methods of comparable  
476 effectiveness must be acceptable to the Contracting Officer. The Contractor shall be responsible for  
477 installing, operating, and maintaining and repairing all such measuring devices and implementing all such  
478 water measuring methods at no cost to the United States. The Contractor shall use the information obtained  
479 from such water measuring devices or water measuring methods to ensure its proper management of the  
480 water, to bill water users for water delivered by the Contractor. Nothing herein contained, however, shall

481 preclude the Contractor from establishing and collecting any charges, assessments, or other revenues  
482 authorized by California law. The Contractor shall include a summary of all its annual surface water  
483 deliveries in the annual report described in subdivision (c) of Article 26 of this Contract.

484 (b) To the extent the information has not otherwise been provided, upon execution of  
485 this Contract, the Contractor shall provide to the Contracting Officer a written report describing the  
486 measurement devices or water measuring methods being used or to be used to implement subdivision (a) of  
487 this Article and identifying the agricultural turnouts or alternative measurement programs approved by the  
488 Contracting Officer, at which such measurement devices or water measuring methods are being used, and, if  
489 applicable, identifying the locations at which such devices and/or methods are not yet being used including a  
490 time schedule for implementation at such locations. The Contracting Officer shall advise the Contractor in  
491 writing within sixty (60) days as to the adequacy of, and necessary modifications, if any, of the measuring  
492 devices or water measuring methods identified in the Contractor's report and if the Contracting Officer does  
493 not respond in such time, they shall be deemed adequate. If the Contracting Officer notifies the Contractor  
494 that the measuring devices or methods are inadequate, the parties shall within sixty (60) days following the  
495 Contracting Officer's response, negotiate in good faith the earliest practicable date by which the Contractor  
496 shall modify said measuring devices and/or measuring methods as required by the Contracting Officer to  
497 ensure compliance with subdivision (a) of this Article.

498 (c) All new surface water delivery systems installed within the Contractor's Service  
499 Area after the effective date of this Contract shall also comply with the measurement provisions described in  
500 subdivision (a) of this Article.

501 (d) The Contractor shall inform the Contracting Officer and the State of California in

502 writing by April 30 of each Year of the monthly volume of surface water delivered within the Contractor's  
503 Service Area during the previous Year.

504 (e) The Contractor shall inform the Contracting Officer and the Operating  
505 Non-Federal Entity on or before the twentieth (20<sup>th</sup>) calendar day of each month of the quantity of Irrigation  
506 and Other Water taken during the preceding month.

507 RATES AND METHOD OF PAYMENT FOR WATER

508 7. (a) The Contractor shall pay the United States as provided in this Article for all  
509 Delivered Water at Rates, Charges, and the Tiered Pricing Component established in accordance with: (i)  
510 the Secretary's ratesetting policy for Irrigation Water adopted in 1988 and the Secretary's then-existing  
511 ratesetting policy for M&I water. Such ratesetting policies shall be amended, modified, or superseded only  
512 through a public notice and comment procedure; (ii) applicable Reclamation law and associated rules and  
513 regulations, or policies; and (iii) other applicable provisions of this Contract. Payments shall be made by  
514 cash transaction, wire, or any other mechanism as may be agreed to in writing by the Contractor and the  
515 Contracting Officer. The Rates, Charges, and Tiered Pricing Components applicable to the Contractor  
516 upon execution of this Contract are set forth in Exhibit "B", as may be revised annually.

517 (b) The Contracting Officer shall notify the Contractor of the Rates, Charges, and  
518 Tiered Pricing Components as follows:

519 (1) Prior to July 1 of each Calendar Year, the Contracting Officer shall provide  
520 the Contractor an estimate of the Charges for Project Water that will be applied to the period October 1, of  
521 the current Calendar Year, through September 30, of the following Calendar Year, and the basis for such

522 estimate. The Contractor shall be allowed not less than two (2) months to review and comment on such  
523 estimates. On or before September 15 of each Calendar Year, the Contracting Officer shall notify the  
524 Contractor in writing of the Charges to be in effect during the period  
525 October 1 of the current Calendar Year, through September 30, of the following Calendar Year, and such  
526 notification shall revise Exhibit "B."

527 (2) Prior to October 1 of each Calendar Year, the Contracting Officer shall  
528 make available to the Contractor an estimate of the Rates and Tiered Pricing Components for Project Water  
529 for the following Year and the computations and cost allocations upon which those Rates are based. The  
530 Contractor shall be allowed not less than two (2) months to review and comment on such computations and  
531 cost allocations. By December 31 of each Calendar Year, the Contracting Officer shall provide the  
532 Contractor with the final Rates and Tiered Pricing Components to be in effect for the upcoming Year, and  
533 such notification shall revise Exhibit "B."

534 (c) At the time the Contractor submits the initial schedule for the delivery of Project  
535 Water for each Year pursuant to subdivision (b) of Article 4 of this Contract, the Contractor shall make an  
536 advance payment to the United States equal to the total amount payable pursuant to the applicable Rate(s)  
537 set under subdivision (a) of this Article, for the Project Water scheduled to be delivered pursuant to this  
538 Contract during the first two (2) calendar months of the Year. Before the end of the first month and before  
539 the end of each calendar month thereafter, the Contractor shall make an advance payment to the United  
540 States, at the Rate(s) set under subdivision (a) of this Article, for the Water Scheduled to be delivered  
541 pursuant to this Contract during the second month immediately following. Adjustments between advance

542 payments for Water Scheduled and payments at Rates due for Water Delivered shall be made before the  
543 end of the following month; Provided, That any revised schedule submitted by the Contractor pursuant to  
544 Article 4 of this Contract which increases the amount of Water Delivered pursuant to this Contract during  
545 any month shall be accompanied with appropriate advance payment, at the Rates then in effect, to assure  
546 that Project Water is not delivered to the Contractor in advance of such payment. In any month in which the  
547 quantity of Water Delivered to the Contractor pursuant to this Contract equals the quantity of Water  
548 Scheduled and paid for by the Contractor, no additional Project Water shall be delivered to the Contractor  
549 unless and until an advance payment at the Rates then in effect for such additional Project Water is made.  
550 Final adjustment between the advance payments for the Water Scheduled and payments for the quantities of  
551 Water Delivered during each Year pursuant to this Contract shall be made as soon as practicable but no  
552 later than April 30th of the following Year, or sixty (60) days after the delivery of Project Water carried  
553 over under subdivision (f) of Article 3 of this Contract if such water is not delivered by the last day of  
554 February.

555 (d) The Contractor shall also make a payment in addition to the Rate(s) in subdivision  
556 (c) of this Article to the United States for Water Delivered, at the Charges and the appropriate Tiered  
557 Pricing Component then in effect, before the end of the month following the month of delivery; Provided,  
558 That the Contractor may be granted an exception from the Tiered Pricing Component pursuant to  
559 subdivision (j)(2) of this Article. The payments shall be consistent with the quantities of Irrigation Water and  
560 Other Water Delivered as shown in the water delivery report for the subject month prepared by the  
561 Operating Non-Federal Entity or, if there is no Operating Non-Federal Entity, by the Contracting Officer.



562 Such water delivery report shall be the basis for payment of Charges and Tiered Pricing Components by the  
563 Contractor, and shall be provided to the Contractor by the Operating Non-Federal Entity or the Contracting  
564 Officer (as applicable) within five (5) days after the end of the month of delivery. The water delivery report  
565 shall be deemed a bill for the payment of Charges and the applicable Tiered Pricing Component for Water  
566 Delivered. Adjustment for overpayment or underpayment of Charges shall be made through the adjustment  
567 of payments due to the United States for Charges for the next month. Any amount to be paid for past due  
568 payment of Charges and the Tiered Pricing Component shall be computed pursuant to Article 20 of this  
569 Contract.

570 (e) The Contractor shall pay for any Water Delivered under subdivision (d), (f), or (g)  
571 of Article 3 of this Contract as determined by the Contracting Officer pursuant to applicable statutes,  
572 associated regulations, any applicable provisions of guidelines or ratesetting policies; Provided, That the  
573 Rate for Water Delivered under subdivision (d) of Article 3 of this Contract shall  
574 be no more than the otherwise applicable Rate for Irrigation Water or Other Water under subdivision (a) of  
575 this Article.

576 (f) Payments to be made by the Contractor to the United States under this Contract  
577 may be paid from any revenues available to the Contractor.

578 (g) All revenues received by the United States from the Contractor relating to the  
579 delivery of Project Water or the delivery of non-project water through Project facilities shall be allocated  
580 and applied in accordance with Federal Reclamation law and the associated rules or regulations, and the  
581 then current Project ratesetting policies for M&I water or Irrigation Water.

582           (h)     The Contracting Officer shall keep its accounts pertaining to the administration of the  
583 financial terms and conditions of its long-term contracts, in accordance with applicable Federal standards, so  
584 as to reflect the application of Project costs and revenues. The Contracting Officer shall, each Year upon  
585 request of the Contractor, provide to the Contractor a detailed accounting of all Project and Contractor  
586 expense allocations, the disposition of all Project and Contractor revenues, and a summary of all water  
587 delivery information. The Contracting Officer and the Contractor shall enter into good faith negotiations to  
588 resolve any discrepancies or disputes relating to accountings, reports, or information.

589           (i)     The parties acknowledge and agree that the efficient administration of this Contract  
590 is their mutual goal. Recognizing that experience has demonstrated that mechanisms, policies, and  
591 procedures used for establishing Rates, Charges, and Tiered Pricing Components, and/or for making and  
592 allocating payments, other than those set forth in this Article may be in the mutual best interest of the parties,  
593 it is expressly agreed that the parties may enter into agreements to modify the mechanisms, policies, and  
594 procedures for any of those purposes while this Contract is in effect without amending this Contract.

595           (j)     (1)     Beginning at such time as the total of the deliveries of Class 1 Water and  
596 Class 2 Water in a Year exceed eighty (80%) percent of the Contract Total, then before the end of the  
597 month following the month of delivery the Contractor shall make an additional payment to the United States  
598 equal to the applicable Tiered Pricing Component. The Tiered Pricing Component for the total of the  
599 deliveries of Class 1 Water and Class 2 Water in excess of eighty (80%) percent of the Contract Total, but  
600 less than or equal to ninety (90%) percent of the Contract Total, shall equal the one-half of the difference

601 between the Rate established under subdivision (a) of Article 7 of this Contract and the Irrigation Full Cost  
602 Water Rate or M&I Full Cost Water Rate, whichever is applicable. The Tiered Pricing Component for the  
603 total of the deliveries of Class 1 Water and Class 2 Water which exceeds ninety (90%) percent of the  
604 Contract Total shall equal the difference between (i) the Rate established under subdivision (a) of Article 7  
605 of this Contract and (ii) the Irrigation Full Cost Water Rate or M&I Full Cost Water Rate, whichever is  
606 applicable.

607 (2) Subject to the Contracting Officer's written approval, the Contractor may  
608 request and receive an exemption from such Tiered Pricing Components for Project Water delivered to  
609 produce a crop which the Contracting Officer determines will provide significant and quantifiable habitat  
610 values for waterfowl in fields where the water is used and the crops are produced; Provided, That the  
611 exemption from the Tiered Pricing Components for Irrigation Water shall apply only if such habitat values  
612 can be assured consistent with the purposes of CVPIA through binding agreements executed with or  
613 approved by the Contracting Officer prior to use of such water.

614 (3) For purposes of determining the applicability of the Tiered Pricing  
615 Components pursuant to this Article, Water Delivered shall include Project Water that the Contractor  
616 transfers to others but shall not include Project Water transferred and delivered to the Contractor.

617 (k) For the term of this Contract, Rates under the respective ratesetting policies will be  
618 established to recover only reimbursable "operation and maintenance" (including any deficits) and capital  
619 costs of the Project, as those terms are used in the then-current Project ratesetting policies, and interest,  
620 where appropriate, except in instances where a minimum Rate is applicable in accordance with the relevant

621 Project ratesetting policy. Changes of significance in practices which implement the Contracting Officer's  
622 ratesetting policies will not be implemented until the Contracting Officer has provided the Contractor an  
623 opportunity to discuss the nature, need, and impact of the proposed change.

624 (l) Except as provided in subsections 3405(a)(1)(B) and 3405(f) of the CVPIA, the  
625 Rates for Project Water transferred by the Contractor shall be the Contractor's Rates adjusted upward or  
626 downward to reflect the changed costs of delivery (if any) of the transferred Project Water to the  
627 transferee's point of delivery in accordance with the then applicable CVP Ratesetting Policy. If the  
628 Contractor is receiving lower Rates and Charges because of inability to pay and is transferring Project  
629 Water to another entity whose Rates and Charges are not adjusted due to inability to pay, the Rates and  
630 Charges for transferred Project Water shall be the Contractor's Rates and Charges unadjusted for ability to  
631 pay.

632 (m) Pursuant to the Act of October 27, 1986 (100 Stat. 3050), the Contracting Officer  
633 is authorized to adjust determinations of ability to pay every five (5) years.

634 NON-INTEREST BEARING OPERATION AND MAINTENANCE DEFICITS

635 8. The Contractor and the Contracting Officer concur that, as of the effective date of this  
636 Contract, the Contractor has no non-interest bearing operation and maintenance deficits and shall have no  
637 further liability therefor.

638 SALES, TRANSFERS, OR EXCHANGES OF WATER

639 9. (a) The right to receive Project Water provided for in this Contract may be sold,  
640 transferred, or exchanged to others for reasonable and beneficial uses within the State of California if such

641 sale, transfer, or exchange is authorized by applicable Federal and State laws, and applicable guidelines or  
642 regulations then in effect. No sale, transfer, or exchange of Project Water under this Contract may take  
643 place without the prior written approval of the Contracting Officer, except as provided for in subdivision (b)  
644 of this Article, and no such sales, transfers, or exchanges shall be approved absent compliance with  
645 appropriate environmental documentation including but not limited to the National Environmental Policy Act  
646 and the Endangered Species Act. Such environmental documentation should include, as appropriate, an  
647 analysis of groundwater impacts and economic and social effects, including environmental justice, of the  
648 proposed water transfers on both the transferor and transferee.

649 (b) In order to facilitate efficient water management by means of water transfers of the  
650 type historically carried out among Project Contractors located within the same geographical area and to  
651 allow the Contractor to participate in an accelerated water transfer program during the term of this Contract,  
652 the Contracting Officer shall prepare, as appropriate, necessary environmental documentation including, but  
653 not limited to, the National Environmental Policy Act and the Endangered Species Act analyzing annual  
654 transfers within such geographical areas and the Contracting Officer shall determine whether such transfers  
655 comply with applicable law. Following the completion of the environmental documentation, such transfers  
656 addressed in such documentation shall be conducted with advance notice to the Contracting Officer, but  
657 shall not require prior written approval by the Contracting Officer. Such environmental documentation and  
658 the Contracting Officer's compliance determination shall be reviewed every five (5) years and updated, as  
659 necessary, prior to the expiration of the then existing five (5) -year period. All subsequent environmental  
660 documentation shall include an alternative to evaluate not less than the quantity of Project Water historically  
661 transferred within the same geographical area.

662 (c) For a water transfer to qualify under subdivision (b) of this Article, such water  
663 transfer must: (i) be for irrigation purposes for lands irrigated within the previous three (3) years, for M&I  
664 use, groundwater recharge, groundwater banking, similar groundwater activities, surface water storage, or  
665 fish and wildlife resources; not lead to land conversion; and be delivered to established cropland, wildlife  
666 refuges, groundwater basins or municipal and industrial use; (ii) occur within a single Year; (iii) occur  
667 between a willing seller and a willing buyer; (iv) convey water through existing facilities with no new  
668 construction or modifications to facilities and be between existing Project Contractors and/or the Contractor  
669 and the United States, Department of the Interior; and  
670 (v) comply with all applicable Federal, State, and local or tribal laws and requirements imposed for  
671 protection of the environment and Indian Trust Assets, as defined under Federal law.

672 APPLICATION OF PAYMENTS AND ADJUSTMENTS

673 10. (a) The amount of any overpayment by the Contractor of the Contractor's O&M,  
674 Capital, and deficit (if any) obligations for the Year shall be applied first to any current liabilities of the  
675 Contractor arising out of this Contract then due and payable. Overpayments of more than One Thousand  
676 Dollars (\$1,000) shall be refunded at the Contractor's request. In lieu of a refund, any amount of such  
677 overpayment at the option of the Contractor, may be credited against amounts to become due to the United  
678 States by the Contractor. With respect to overpayment, such refund or adjustment shall constitute the sole  
679 remedy of the Contractor or anyone having or claiming to have the right to the use of any of the Project  
680 Water supply provided for herein. All credits and refunds of overpayments shall be made within thirty (30)  
681 days of the Contracting Officer obtaining direction as to how to credit or refund such overpayment in  
682 response to the notice to the Contractor that it has finalized the accounts for the Year in which the

683 overpayment was made.

684 (b) All advances for miscellaneous costs incurred for work requested by the Contractor  
685 pursuant to Article 25 of this Contract shall be adjusted to reflect the actual costs when the work has been  
686 completed. If the advances exceed the actual costs incurred, the difference will be refunded to the  
687 Contractor. If the actual costs exceed the Contractor's advances, the Contractor will be billed for the  
688 additional costs pursuant to Article 25 of this Contract.

689 TEMPORARY REDUCTIONS--RETURN FLOWS

690 11. (a) Subject to: (i) the authorized purposes and priorities of the Project and the  
691 requirements of Federal law and (ii) the obligations of the United States under existing contracts, or renewals  
692 thereof, providing for water deliveries from the Project, the Contracting Officer shall make all reasonable  
693 efforts to optimize Project Water deliveries to the Contractor as provided in this Contract.

694 (b) The Contracting Officer or Operating Non-Federal Entity may temporarily  
695 discontinue or reduce the quantity of Water Delivered to the Contractor as herein provided for the purposes  
696 of investigation, inspection, maintenance, repair, or replacement of any of the Project facilities or any part  
697 thereof necessary for the delivery of Project Water to the Contractor, but so far as feasible the Contracting  
698 Officer or Operating Non-Federal Entity will give the Contractor due notice in advance of such temporary  
699 discontinuance or reduction, except in case of emergency, in which case no notice need be given; Provided,  
700 That the United States shall use its best efforts to avoid any discontinuance or reduction in such service.  
701 Upon resumption of service after such reduction or discontinuance, and if requested by the Contractor, the  
702 United States will, if possible, deliver the quantity of Project Water which would have been delivered

703 hereunder in the absence of such discontinuance or reduction.

704 (c) The United States reserves the right to all seepage and return flow water derived  
705 from Water Delivered to the Contractor hereunder which escapes or is discharged beyond the Contractor's  
706 Service Area; Provided, That this shall not be construed as claiming for the United States any right as  
707 seepage or return flow to water being used pursuant to this Contract for surface irrigation or underground  
708 storage either being put to reasonable and beneficial use pursuant to this Contract within the Contractor's  
709 Service Area by the Contractor or those claiming by, through, or  
  
710 under the Contractor. For purposes of this subdivision, groundwater recharge, groundwater banking and all  
711 similar groundwater activities will be deemed to be underground storage.

712 CONSTRAINTS ON THE AVAILABILITY OF WATER

713 12. (a) In its operation of the Project, the Contracting Officer will use all reasonable means  
714 to guard against a Condition of Shortage in the quantity of water to be made available to the Contractor  
715 pursuant to this Contract. In the event the Contracting Officer determines that a Condition of Shortage  
716 appears probable, the Contracting Officer will notify the Contractor of said determination as soon as  
717 practicable.

718 (b) If there is a Condition of Shortage because of errors in physical operations of the  
719 Project, drought, other physical causes beyond the control of the Contracting Officer or actions taken by the  
720 Contracting Officer to meet legal obligations then, except as provided in subdivision (a) of Article 18 of this  
721 Contract, no liability shall accrue against the United States or any of its officers, agents, or employees for



722 any damage, direct or indirect, arising therefrom.

723 (c) The United States shall not execute contracts which together with this Contract, shall  
724 in the aggregate provide for furnishing during the life of this Contract or any renewals hereof Class 1 Water  
725 in excess of 800,000 acre-feet per Year or Class 2 Water in excess of 1,401,475 acre-feet per Year;  
726 Provided, That, subject to subdivision (l) of Article 3 of this Contract, the limitation placed on Class 2 Water  
727 contracts shall not prohibit the United States from entering into temporary contracts of one year or less in  
728 duration for delivery of Project Water to other entities if such water is not necessary to meet the schedules  
729 as may be submitted by all Friant Division  
730 long-term water service contractors entitled to receive Class 1 Water and/or Class 2 Water under their  
731 water service contracts. Nothing in this subdivision shall limit the Contracting Officer's ability to take actions  
732 that result in the availability of new water supplies to be used for Project purposes and allocating such new  
733 supplies; Provided, That the Contracting Officer shall not take such actions until after consultation with the  
734 Friant Division Project Contractors.

735 (d) The Contracting Officer shall not deliver any Class 2 Water pursuant to this or any  
736 other contract for water service heretofore or hereafter entered into any Year unless and until the  
737 Contracting Officer determines that the cumulative total quantity of Class 1 Water specified in subdivision (c)  
738 of this Article will be available for delivery in said Year. If the Contracting Officer determines there is or will  
739 be a shortage in any Year in the quantity of Class 1 Water available for delivery, the Contracting Officer  
740 shall apportion the available Class 1 Water among all contractors entitled to receive such water that will be  
741 made available at Friant Dam in accordance with the following:

742 (1) A determination shall be made of the total quantity of Class 1 Water at  
743 Friant Dam which is available for meeting Class 1 Water contractual commitments, the amount so  
744 determined being herein referred to as the available supply.

745 (2) The total available Class 1 supply shall be divided by the Class 1 Water  
746 contractual commitments, the quotient thus obtained being herein referred to as the Class 1 apportionment  
747 coefficient.

748 (3) The total quantity of Class 1 Water under Article 3 of this Contract shall be  
749 multiplied by the Class 1 apportionment coefficient and the result shall be the quantity of Class 1 Water  
750 required to be delivered by the Contracting Officer to the Contractor for the respective Year, but in no  
751 event shall such amount exceed the total quantity of Class 1 Water specified in subdivision (a) of Article 3 of  
752 this Contract.

753 (e) If the Contracting Officer determines there is less than the quantity of Class 2 Water  
754 which the Contractor otherwise would be entitled to receive pursuant to Article 3 of this Contract, the  
755 quantity of Class 2 Water which shall be furnished to the Contractor by the Contracting Officer will be  
756 determined in the manner set forth in paragraphs (1), (2), and (3), of subdivision (d) of this Article  
757 substituting the term "Class 2" for the term "Class 1."

758 (f) In the event that in any Year there is made available to the Contractor, by reason of  
759 any shortage or apportionment as provided in subdivisions (a), (d) or (e) of this Article, or any  
760 discontinuance or reduction of service as set forth in subdivision (a) of Article 11 of this Contract, less than  
761 the quantity of water which the Contractor otherwise would be entitled to receive hereunder, there shall be  
762 made an adjustment on account of the amounts already paid to the Contracting Officer by the Contractor for

763 Class 1 Water and Class 2 Water for said Year in accordance with Article 10 of this Contract.

764 UNAVOIDABLE GROUNDWATER PERCOLATION

765 13. To the extent applicable, the Contractor shall not be deemed to have delivered Irrigation  
766 Water to Excess Lands or Ineligible Lands within the meaning of this Contract if such lands are irrigated with  
767 groundwater that reaches the underground strata as an unavoidable result of the delivery of Irrigation Water  
768 by the Contractor to Eligible Lands.

769 RULES AND REGULATIONS

770 14. (a) The parties agree that the delivery of Irrigation Water or use of Federal facilities  
771 pursuant to this Contract is subject to Federal Reclamation law, including but not limited to,  
772 the Reclamation Reform Act of 1982 (43 U.S.C.390aa et seq.), as amended and supplemented, and the  
773 rules and regulations promulgated by the Secretary of the Interior under Federal Reclamation law.

774 (b) The terms of this Contract are subject to any enforceable order, judgment and/or  
775 settlement in NRDC v. Patterson, No. CIVS 88-1658-LKK-EM and shall be timely modified as necessary  
776 to effectuate or facilitate any final order, judgment or settlement in said litigation.

777 (c) The parties acknowledge that, as of the effective date of this Contract, active  
778 settlement discussions are underway in NRDC v. Patterson between Friant Division water service  
779 contractors, representatives of the Contracting Officer, and the plaintiffs in NRDC v. Patterson. The mutual  
780 goals of the parties to those discussions are (i) to expeditiously evaluate and implement, on a mutually  
781 acceptable basis, instream and related measures that will restore ecological functions and hydrologic and  
782 geomorphologic processes of the San Joaquin River below Friant Dam to a level that restores and maintains  
783 fish populations in good condition, including but not limited to naturally-reproducing, self-sustaining  
784 populations of chinook salmon and (ii) to accomplish these restoration goals while not adversely impacting

785 the overall sufficiency, reliability and cost of water supplies to Friant Division water users. The Contractor  
786 has been actively participating, and intends to continue to participate in such settlement discussions. Except  
787 as provided in this Contract, this Contract does not add to the obligations of the parties, if any, relating to  
788 the San Joaquin River. This Contract does not limit or detract from the obligations of the parties, if any,  
789 relating to the San Joaquin River.

790 WATER AND AIR POLLUTION CONTROL

791 15. The Contractor, in carrying out this Contract, shall comply with all applicable water and air  
792 pollution laws and regulations of the United States and the State of California, and shall obtain all required  
793 permits or licenses from the appropriate Federal, State, or local authorities.

794 QUALITY OF WATER

795 16. (a) Project facilities used to deliver Project Water to the Contractor pursuant to this  
796 Contract shall be operated and maintained to enable the United States to deliver Project Water to the  
797 Contractor in accordance with the water quality standards specified in subsection 2(b) of the Act of August  
798 26, 1937 (50 Stat. 865), as added by Section 101 of the Act of October 27, 1986 (100 Stat. 3050) or  
799 other existing Federal laws. The United States is under no obligation to construct or furnish water treatment  
800 facilities to maintain or to improve the quality of Water Delivered to the Contractor pursuant to this  
801 Contract. The United States does not warrant the quality of Water Delivered to the Contractor pursuant to  
802 this Contract.

803 (b) The Operation and Maintenance of Project facilities shall be performed in such  
804 manner as is practicable to maintain the quality of raw water made available through such facilities at the  
805 highest level reasonably attainable as determined by the Contracting Officer. The Contractor shall be

806 responsible for compliance with all State and Federal water quality standards applicable to surface and  
807 subsurface agricultural drainage discharges generated through the use of Federal or Contractor facilities or  
808 Project Water provided by the Contractor within the Contractor's Service Area.

809 WATER ACQUIRED BY THE CONTRACTOR  
810 OTHER THAN FROM THE UNITED STATES

811 17. (a) Water or water rights now owned or hereafter acquired by the Contractor other  
812 than from the United States and Irrigation Water furnished pursuant to the terms of this Contract may be  
813 simultaneously transported through the same distribution facilities of the Contractor subject to the following:  
814 (i) if the facilities utilized for commingling Irrigation Water and non-project water were constructed without  
815 funds made available pursuant to Federal Reclamation law, the provisions of Federal Reclamation law will  
816 be applicable only to the Landholders of lands which receive Irrigation Water; (ii) the eligibility of land to  
817 receive Irrigation Water must be established through the certification requirements as specified in the  
818 Acreage Limitation Rules and Regulations (43 CFR  
819 Part 426); (iii) the water requirements of Eligible Lands within the Contractor's Service Area can be  
820 established and the quantity of Irrigation Water to be utilized is less than or equal to the quantity necessary to  
821 irrigate such Eligible Lands. The Contractor and the Contracting Officer concur that, as of the effective date  
822 of this Contract, the Contractor has a distribution system that was constructed without the use of federally  
823 financed funds. The use of this distribution system is not subject to the provisions of this subdivision of this  
824 Article.

825 (b) Water or water rights now owned or hereafter acquired by the Contractor, other  
826 than from the United States or adverse to the Project or its contractors (i.e., non-project water), may be

827 stored, conveyed and/or diverted through Project facilities, subject to the completion of appropriate  
828 environmental documentation, with the approval of the Contracting Officer and the execution of any contract  
829 determined by the Contracting Officer to be necessary, consistent with the following provisions:

830 (1) The Contractor may introduce non-project water into Project facilities and  
831 deliver said water to lands within the Contractor's Service Area, including Ineligible Lands, subject to  
832 payment to the United States and/or to any applicable Operating Non-Federal Entity of an appropriate rate  
833 as determined by the CVP Ratesetting Policy and the RRA, each as amended, modified or superseded from  
834 time to time. In addition, if electrical power is required to pump

835 non-project water through the facilities, the Contractor shall be responsible for obtaining the necessary  
836 power and paying the necessary charges therefor.

837 (2) Delivery of such non-project water in and through Project facilities shall only  
838 be allowed to the extent such deliveries do not: (i) interfere with other Project purposes as determined by  
839 the Contracting Officer; (ii) reduce the quantity or quality of water available to other Project water service  
840 contractors; (iii) interfere with the delivery of contractual water entitlements to any other Project water  
841 service contractors; or (iv) interfere with the physical maintenance of the Project facilities.

842 (3) Neither the United States nor the Operating Non-Federal Entity shall be  
843 responsible for control, care or distribution of the non-project water before it is introduced into or after it is  
844 delivered from the Project facilities. The Contractor hereby releases and agrees to defend and indemnify the  
845 United States and the Operating Non-Federal Entity, and their respective officers, agents, and employees,

846 from any claim for damage to persons or property, direct or indirect, resulting from Contractor's diversion  
847 or extraction of non-project water from any source.

848 (4) Diversion of such non-project water into Project facilities shall be consistent  
849 with all applicable laws, and if involving groundwater, consistent with any groundwater management plan for  
850 the area from which it was extracted.

851 (5) After Project purposes are met, as determined by the Contracting Officer,  
852 the United States and the Contractor shall share priority to utilize the remaining capacity of the facilities  
853 declared to be available by the Contracting Officer for conveyance and transportation of

854 non-project water prior to any such remaining capacity being made available to non-Project contractors.

855 OPINIONS AND DETERMINATIONS

856 18. (a) Where the terms of this Contract provide for actions to be based upon the opinion  
857 or determination of either party to this Contract, said terms shall not be construed as permitting such action  
858 to be predicated upon arbitrary, capricious, or unreasonable opinions or determinations. Both parties,  
859 notwithstanding any other provisions of this Contract, expressly reserve the right to seek relief from and  
860 appropriate adjustment for any such arbitrary, capricious, or unreasonable opinion or determination. Each  
861 opinion or determination by either party shall be provided in a timely manner. Nothing in subdivision (a) of  
862 Article 18 of this Contract is intended to or shall affect or alter the standard of judicial review applicable  
863 under federal law to any opinion or determination implementing a specific provision of federal law embodied  
864 in statute or regulation.

865 (b) The Contracting Officer shall have the right to make determinations necessary to  
866 administer this Contract that are consistent with the provisions of this Contract, the laws of the United States  
867 and of the State of California, and the rules and regulations promulgated by the Secretary of the Interior.  
868 Such determinations shall be made in consultation with the Contractor to the extent reasonably practicable.

869 COORDINATION AND COOPERATION

870 19. (a) In order to further their mutual goals and objectives, the Contracting Officer and the  
871 Contractor shall communicate, coordinate, and cooperate with each other, and with other affected Project  
872 Contractors, in order to improve the operation and management of the Project. The communication,  
873 coordination, and cooperation regarding operations and management shall include, but not be limited to, any  
874 action which will or may materially affect the quantity or quality of Project Water supply, the allocation of  
875 Project Water supply, and Project financial matters including, but not limited to, budget issues. The  
876 communication, coordination, and cooperation provided for hereunder shall extend to all provisions of this  
877 Contract. Each party shall retain exclusive decision making authority for all actions, opinion, and  
878 determinations to be made by the respective party.

879 (b) Within one-hundred twenty (120) days following the effective date of this Contract,  
880 the Contractor, other affected Project Contractors, and the Contracting Officer shall arrange to meet with  
881 interested Project Contractors to develop a mutually agreeable, written Project-wide process, which may be  
882 amended as necessary separate and apart from this Contract. The goal of this process shall be to provide,  
883 to the extent practicable, the means of mutual communication and interaction regarding significant decisions  
884 concerning Project operation and management on a  
885 real-time basis.



886 (c) In light of the factors referred to in subdivision (b) of Article 3 of this Contract, it is  
887 the intent of the Secretary to improve water supply reliability. To carry out this intent:

888 (1) The Contracting Officer will, at the request of the Contractor, assist in the  
889 development of integrated resource management plans for the Contractor. Further, the Contracting Officer  
890 will, as appropriate, seek authorizations for implementation of partnerships to improve water supply, water  
891 quality, and reliability.

892 (2) The Secretary will, as appropriate, pursue program and project  
893 implementation and authorization in coordination with Project Contractors to improve the water supply,  
894 water quality, and reliability of the Project for all Project purposes.

895 (3) The Secretary will coordinate with Project Contractors and the State of  
896 California to seek improved water resource management.

897 (4) The Secretary will coordinate actions of agencies within the Department of  
898 the Interior that may impact the availability of water for Project purposes.

899 (5) The Contracting Officer shall periodically, but not less than annually, hold  
900 division level meetings to discuss Project operations, division level water management activities, and other  
901 issues as appropriate.

902 (d) Without limiting the contractual obligations of the Contracting Officer hereunder,  
903 nothing in this Contract shall be construed to limit or constrain the Contracting Officer's ability to  
904 communicate, coordinate, and cooperate with the Contractor or other interested stakeholders or to make  
905 decisions in a timely fashion as needed to protect health, safety, physical integrity of structures or facilities, or

906 the Contracting Officer's ability to comply with applicable laws.

907 CHARGES FOR DELINQUENT PAYMENTS

908 20. (a) The Contractor shall be subject to interest, administrative and penalty charges on  
909 delinquent installments or payments. When a payment is not received by the due date, the Contractor shall  
910 pay an interest charge for each day the payment is delinquent beyond the due date. When a payment  
911 becomes sixty (60) days delinquent, the Contractor shall pay an administrative charge to cover additional  
912 costs of billing and processing the delinquent payment. When a payment is delinquent ninety (90) days or  
913 more, the Contractor shall pay an additional penalty charge of six (6%) percent per year for each day the  
914 payment is delinquent beyond the due date. Further, the Contractor shall pay any fees incurred for debt  
915 collection services associated with a delinquent payment.

916 (b) The interest charge rate shall be the greater of the rate prescribed quarterly in the  
917 Federal Register by the Department of the Treasury for application to overdue payments, or the interest rate  
918 of one-half of one (0.5%) percent per month prescribed by Section 6 of the Reclamation Project Act of  
919 1939 (Public Law 76-260). The interest charge rate shall be determined as of the due date and remain  
920 fixed for the duration of the delinquent period.

921 (c) When a partial payment on a delinquent account is received, the amount received  
922 shall be applied, first to the penalty, second to the administrative charges, third to the accrued interest, and  
923 finally to the overdue payment.

924 EQUAL OPPORTUNITY

925 21. During the performance of this Contract, the Contractor agrees as follows:

926 (a) The Contractor will not discriminate against any employee or applicant for  
927 employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative  
928 action to ensure that applicants are employed, and that employees are treated during employment, without  
929 regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to,  
930 the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff  
931 or termination, rates of payment or other forms of compensation; and selection for training, including  
932 apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants  
933 for employment, notices to be provided by the Contracting Officer setting forth the provisions of this  
934 nondiscrimination clause.

935 (b) The Contractor will, in all solicitations or advertisements for employees placed by or  
936 on behalf of the Contractor, state that all qualified applicants will receive consideration for employment  
937 without discrimination because of race, color, religion, sex, or national origin.

938 (c) The Contractor will send to each labor union or representative of workers with  
939 which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided  
940 by the Contracting Officer, advising the said labor union or workers' representative of the Contractor's  
941 commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies  
942 of the notice in conspicuous places available to employees and applicants for employment.

943 (d) The Contractor will comply with all provisions of Executive Order  
944 No. 11246 of September 24, 1965, as amended, and of the rules, regulations, and relevant orders of the  
945 Secretary of Labor.

946 (e) The Contractor will furnish all information and reports required by said amended  
947 Executive Order and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto,  
948 and will permit access to its books, records, and accounts by the Contracting Officer and the Secretary of  
949 Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

950 (f) In the event of the Contractor's noncompliance with the nondiscrimination clauses of  
951 this Contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated,  
952 or suspended, in whole or in part, and the Contractor may be declared ineligible for further Government  
953 contracts in accordance with procedures authorized in said amended Executive Order, and such other  
954 sanctions may be imposed and remedies invoked as provided in said Executive Order, or by rule, regulation,  
955 or order of the Secretary of Labor, or as otherwise provided by law.

956 (g) The Contractor will include the provisions of paragraphs (a) through (g) in every  
957 subcontract or purchase order unless exempted by the rules, regulations, or orders of the Secretary of  
958 Labor issued pursuant to Section 204 of said amended Executive Order, so that such provisions will be  
959 binding upon each subcontractor or vendor. The Contractor will take such action with respect to any  
960 subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such  
961 provisions, including sanctions for noncompliance: Provided, however, That in the event the Contractor  
962 becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such  
963 direction, the Contractor may request the United States to enter into such litigation to protect the interests of  
964 the United States.

965 GENERAL OBLIGATION--BENEFITS CONDITIONED UPON PAYMENT

966 22. (a) The obligation of the Contractor to pay the United States as provided in this  
967 Contract is a general obligation of the Contractor notwithstanding the manner in which the obligation may be  
968 distributed among the Contractor's water users and notwithstanding the default of individual water users in  
969 their obligations to the Contractor.

970 (b) The payment of charges becoming due hereunder is a condition precedent to  
971 receiving benefits under this Contract. The United States shall not make water available to the Contractor  
972 through Project facilities during any period in which the Contractor may be in arrears in the advance  
973 payment of water rates due the United States. The Contractor shall not furnish water made available  
974 pursuant to this Contract for lands or parties which are in arrears in the advance payment of water rates  
975 levied or established by the Contractor.

976 (c) With respect to subdivision (b) of this Article, the Contractor shall have no  
977 obligation to require advance payment for water rates which it levies.

978 COMPLIANCE WITH CIVIL RIGHTS LAWS AND REGULATIONS

979 23. (a) The Contractor shall comply with Title VI of the Civil Rights Act of 1964 (42  
980 U.S.C. 2000d), Section 504 of the Rehabilitation Act of 1975 (P.L. 93-112, as amended), the Age  
981 Discrimination Act of 1975 (42 U.S.C. 6101, et seq.) and any other applicable civil rights laws, as well as  
982 with their respective implementing regulations and guidelines imposed by the U.S. Department of the Interior  
983 and/or Bureau of Reclamation.

984 (b) These statutes require that no person in the United States shall, on the grounds of  
985 race, color, national origin, handicap, or age, be excluded from participation in, be denied the benefits of, or  
986 be otherwise subjected to discrimination under any program or activity receiving financial assistance from the  
987 Bureau of Reclamation. By executing this Contract, the Contractor  
988 agrees to immediately take any measures necessary to implement this obligation, including permitting officials  
989 of the United States to inspect premises, programs, and documents.

990 (c) The Contractor makes this agreement in consideration of and for the purpose of  
991 obtaining any and all Federal grants, loans, contracts, property discounts, or other Federal financial  
992 assistance extended after the date hereof to the Contractor by the Bureau of Reclamation, including  
993 installment payments after such date on account of arrangements for Federal financial assistance which were  
994 approved before such date. The Contractor recognizes and agrees that such Federal assistance will be  
995 extended in reliance on the representations and agreements made in this Article, and that the United States  
996 reserves the right to seek judicial enforcement thereof.

997 PRIVACY ACT COMPLIANCE

998 24. (a) The Contractor shall comply with the Privacy Act of 1974 (5 U.S.C. 552a) (the  
999 Act) and the Department of the Interior rules and regulations under the Act (43 CFR 2.45 et seq.) in  
1000 maintaining Landholder acreage certification and reporting records, required to be submitted to the

1001 Contractor for compliance with Sections 206 and 228 of the Reclamation Reform Act of 1982 (96 Stat.  
1002 1266), and pursuant to 43 CFR 426.18.

1003 (b) With respect to the application and administration of the criminal penalty provisions  
1004 of the Act (5 U.S.C. 552a(i)), the Contractor and the Contractor's employees responsible for maintaining  
1005 the certification and reporting records referenced in (a) above are considered to be employees of the  
1006 Department of the Interior. See 5 U.S.C. 552a(m).

1007 (c) The Contracting Officer or a designated representative shall provide the Contractor  
1008 with current copies of the Interior Department Privacy Act regulations and the Bureau of Reclamation  
1009 Federal Register Privacy Act System of Records Notice (Acreage Limitation--Interior, Reclamation-31)  
1010 which govern the maintenance, safeguarding, and disclosure of information contained in the Landholder's  
1011 certification and reporting records.

1012 (d) The Contracting Officer shall designate a full-time employee of the Bureau of  
1013 Reclamation to be the System Manager who shall be responsible for making decisions on denials pursuant to  
1014 43 CFR 2.61 and 2.64 amendment requests pursuant to 43 CFR 2.72. The Contractor is authorized to  
1015 grant requests by individuals for access to their own records.

1016 (e) The Contractor shall forward promptly to the System Manager each proposed  
1017 denial of access under 43 CFR 2.64; and each request for amendment of records filed under  
1018 43 CFR 2.71; notify the requester accordingly of such referral; and provide the System Manager with  
1019 information and records necessary to prepare an appropriate response to the requester. These requirements  
1020 do not apply to individuals seeking access to their own certification and reporting forms  
1021 filed with the Contractor pursuant to 43 CFR 426.18, unless the requester elects to cite the Privacy Act as a  
1022 basis for the request.

1023 CONTRACTOR TO PAY CERTAIN MISCELLANEOUS COSTS

1024 25. In addition to all other payments to be made by the Contractor pursuant to this Contract, the  
1025 Contractor shall pay to the United States, within sixty (60) days after receipt of a bill and detailed statement  
1026 submitted by the Contracting Officer to the Contractor for such specific items of direct cost incurred by the  
1027 United States for work requested by the Contractor associated with this Contract plus indirect costs in  
1028 accordance with applicable Bureau of Reclamation policies and procedures. All such amounts referred to in  
1029 this Article shall not exceed the amount agreed to in writing in advance by the Contractor. This Article shall

1030 not apply to costs for routine contract administration.

1031 WATER CONSERVATION

1032 26. (a) Prior to the delivery of water provided from or conveyed through Federally  
1033 constructed or Federally financed facilities pursuant to this Contract, the Contractor shall be implementing an  
1034 effective water conservation and efficiency program based on the Contractor's water conservation plan that  
1035 has been determined by the Contracting Officer to meet the conservation and efficiency criteria for  
1036 evaluating water conservation plans established under Federal law. The water conservation and efficiency  
1037 program shall contain definite water conservation objectives, appropriate economically feasible water  
1038 conservation measures, and time schedules for meeting those objectives. Continued Project Water delivery  
1039 pursuant to this Contract shall be contingent upon the Contractor's continued implementation of such water  
1040 conservation program. In the event the Contractor's water conservation plan or any revised water  
1041 conservation plan completed pursuant to subdivision (d) of Article 26 of this Contract have not yet been  
1042 determined by the Contracting Officer to meet such criteria, due to circumstances which the Contracting  
1043 Officer determines are beyond the control of the Contractor, water deliveries shall be made under this  
1044 Contract so long as the Contractor diligently works with the Contracting Officer to obtain such  
1045 determination at the earliest practicable date, and thereafter the Contractor immediately begins implementing  
1046 its water conservation and efficiency program in accordance with the time schedules therein.

1047 (b) Omitted.

1048 (c) The Contractor shall submit to the Contracting Officer a report on the status of its  
1049 implementation of the water conservation plan on the reporting dates specified in the then existing  
1050 conservation and efficiency criteria established under Federal law.

1051 (d) At five (5) -year intervals, the Contractor shall revise its water conservation plan to  
1052 reflect the then current conservation and efficiency criteria for evaluating water conservation plans  
1053 established under Federal law and submit such revised water management plan to the Contracting Officer  
1054 for review and evaluation. The Contracting Officer will then determine if the water conservation plan meets  
1055 Reclamation's then current conservation and efficiency criteria for evaluating water conservation plans  
1056 established under Federal law.

1057 (e) If the Contractor is engaged in direct groundwater recharge, such activity shall be  
1058 described in the Contractor's water conservation plan.

1059 EXISTING OR ACQUIRED WATER OR WATER RIGHTS

1060 27. Except as specifically provided in Article 17 of this Contract, the provisions of this Contract  
1061 shall not be applicable to or affect non-project water or water rights now owned or hereafter acquired by  
1062 the Contractor or any user of such water within the Contractor's Service Area. Any such water shall not be  
1063 considered Project Water under this Contract. In addition, this Contract shall not be construed as limiting or  
1064 curtailing any rights which the Contractor or any water user within the Contractor's Service Area acquires or  
1065 has available under any other contract pursuant to Federal Reclamation law.

1066 OPERATION AND MAINTENANCE BY NON-FEDERAL ENTITY

1067 28. (a) The Operation and Maintenance of a portion of the Project facilities which serve the  
1068 Contractor, and responsibility for funding a portion of the costs of such Operation and Maintenance, have  
1069 been transferred to the Operating Non-Federal Entity by separate agreement between the United States and  
1070 the Operating Non-Federal Entity. That separate agreement shall not interfere with or affect the rights or

1071 obligations of the Contractor or the United States hereunder.

1072           (b)     The Contracting Officer has previously notified the Contractor in writing that the  
1073 Operation and Maintenance of a portion of the Project facilities which serve the Contractor has been  
1074 transferred to the Operating Non-Federal Entity, and therefore, the Contractor shall pay directly to the  
1075 Operating Non-Federal Entity, or to any successor approved by the Contracting Officer under the terms  
1076 and conditions of the separate agreement between the United States and the Operating Non-Federal Entity  
1077 described in subdivision (a) of this Article, all rates, charges or assessments of any kind, including any  
1078 assessment for reserve funds, which the Operating Non-Federal Entity or such successor determines, sets or  
1079 establishes for (i) the Operation and Maintenance of the portion of the Project facilities operated and  
1080 maintained by the Operating Non-Federal Entity or such successor, or (ii) the Friant Division's share of the  
1081 operation, maintenance and replacement costs for physical works and appurtenances associated with the  
1082 Tracy Pumping Plant, the Delta-Mendota Canal, the O'Neill Pumping/Generating Plant, the federal share of  
1083 the O'Neill Forebay, the Mendota Pool, and the federal share of San Luis Unit joint use conveyance and  
1084 conveyance pumping facilities. Such direct payments to the Operating Non-Federal Entity or such  
1085 successor shall not relieve the Contractor of its obligation to pay directly to the United States the  
1086 Contractor's share of the Project Rates, Charges, and Tiered Pricing Components except to the extent the  
1087 Operating Non-Federal Entity collects payments on behalf of the United States in accordance with the  
1088 separate agreement identified in subdivision (a) of this Article.

1089           (c)     For so long as the Operation and Maintenance of any portion of the Project facilities  
1090 serving the Contractor is performed by the Operating Non-Federal Entity, or any successor thereto, the



1091 Contracting Officer shall adjust those components of the Rates for Water Delivered under this Contract  
1092 representing the cost associated with the activity being performed by the Operating Non-Federal Entity or  
1093 its successor.

1094 (d) In the event the Operation and Maintenance of the Project facilities operated and  
1095 maintained by the Operating Non-Federal Entity is re-assumed by the United States during the term of this  
1096 Contract, the Contracting Officer shall so notify the Contractor, in writing, and present to the Contractor a  
1097 revised Exhibit "B" which shall include the portion of the Rates to be paid by the Contractor for Project  
1098 Water under this Contract representing the Operation and Maintenance costs of the portion of such Project  
1099 facilities which have been re-assumed. The Contractor shall, thereafter, in the absence of written notification  
1100 from the Contracting Officer to the contrary, pay the Rates,

1101 Charges, and Tiered Pricing Component(s) specified in the revised Exhibit "B" directly to the United States  
1102 in compliance with Article 7 of this Contract.

1103 CONTINGENT ON APPROPRIATION OR ALLOTMENT OF FUNDS

1104 29. The expenditure or advance of any money or the performance of any obligation of the  
1105 United States under this Contract shall be contingent upon appropriation or allotment of funds. Absence of  
1106 appropriation or allotment of funds shall not relieve the Contractor from any obligations under this Contract.  
1107 No liability shall accrue to the United States in case funds are not appropriated or allotted.

1108 BOOKS, RECORDS, AND REPORTS

1109 30. (a) The Contractor shall establish and maintain accounts and other books and records  
1110 pertaining to administration of the terms and conditions of this Contract, including: the Contractor's financial  
1111 transactions, water supply data, and Project land and right-of-way agreements; the water users' land-use  
1112 (crop census), land ownership, land-leasing and water use data; and other matters that the Contracting

1113 Officer may require. Reports thereon shall be furnished to the Contracting Officer in such form and on such  
1114 date or dates as the Contracting Officer may require. Subject to applicable Federal laws and regulations,  
1115 each party to this Contract shall have the right during office hours to examine and make copies of the other  
1116 party's books and records relating to matters covered by this Contract.

1117 (b) Notwithstanding the provisions of subdivision (a) of this Article, no books, records,  
1118 or other information shall be requested from the Contractor by the Contracting Officer unless such books,  
1119 records, or information are reasonably related to the administration or performance of this Contract. Any  
1120 such request shall allow the Contractor a reasonable period of time within which to provide the requested  
1121 books, records, or information.

1122 (c) At such time as the Contractor provides information to the Contracting Officer  
1123 pursuant to subdivision (a) of this Article, a copy of such information shall be provided to the Operating  
1124 Non-Federal Entity.

1125 ASSIGNMENT LIMITED--SUCCESSORS AND ASSIGNS OBLIGATED

1126 31. (a) The provisions of this Contract shall apply to and bind the successors and assigns of  
1127 the parties hereto, but no assignment or transfer of this Contract or any right or interest therein shall be valid  
1128 until approved in writing by the Contracting Officer.

1129 (b) The assignment of any right or interest in this Contract by either party shall not  
1130 interfere with the rights or obligations of the other party to this Contract absent the written concurrence of  
1131 said other party.

1132 (c) The Contracting Officer shall not unreasonably condition or withhold approval of  
1133 any proposed assignment.

1134

SEVERABILITY

1135

32. In the event that a person or entity who is neither (i) a party to a Project contract, nor (ii) a

1136

person or entity that receives Project Water from a party to a Project contract, nor (iii) an association or

1137

other form of organization whose primary function is to represent parties to Project contracts, brings an

1138

action in a court of competent jurisdiction challenging the legality or enforceability of a provision included in

1139

this Contract and said person, entity, association, or organization obtains a final court decision holding that

1140

such provision is legally invalid or unenforceable and the Contractor has not intervened in that lawsuit in

1141

support of the plaintiff(s), the parties to this Contract shall use their best efforts to (i) within thirty (30) days

1142

of the date of such final court decision identify by mutual agreement the provisions in this Contract which

1143

must be revised and (ii) within three (3) months thereafter promptly agree on the appropriate revision(s).

1144

The time periods specified above may be extended by mutual agreement of the parties. Pending the

1145

completion of the actions designated above, to the extent it can do so without violating any applicable

1146

provisions of law, the United States shall continue to make the quantities of Project Water specified in this

1147

Contract available to the Contractor pursuant to the provisions of this Contract which were not found to be

1148

legally invalid or unenforceable in the final court decision.

1149

RESOLUTION OF DISPUTES

1150

33. Should any dispute arise concerning any provisions of this Contract, or the parties' rights

1151

and obligations thereunder, the parties shall meet and confer in an attempt to resolve the dispute. Prior to

1152

the Contractor commencing any legal action, or the Contracting Officer referring any matter to Department

1153

of Justice, the party shall provide to the other party thirty (30) days' written notice of the intent to take such

1154 action; Provided, That such notice shall not be required where a delay in commencing an action would  
1155 prejudice the interests of the party that intends to file suit. During the thirty (30) -day notice period, the  
1156 Contractor and the Contracting Officer shall meet and confer in an attempt to resolve the dispute. Except as  
1157 specifically provided, nothing herein is intended to waive or abridge any right or remedy that the Contractor  
1158 or the United States may have.

1159 OFFICIALS NOT TO BENEFIT

1160 34. No Member of or Delegate to Congress, Resident Commissioner, or official of the  
1161 Contractor shall benefit from this Contract other than as a water user or landowner in the same manner as  
1162 other water users or landowners.

1163 CHANGES IN CONTRACTOR'S SERVICE AREA

1164 35. (a) While this Contract is in effect, no change may be made in the Contractor's Service  
1165 Area or boundaries, by inclusion or exclusion of lands, dissolution, consolidation, merger, or otherwise,  
1166 except upon the Contracting Officer's written consent.

1167 (b) Within thirty (30) days of receipt of a request for such a change, the Contracting  
1168 Officer will notify the Contractor of any additional information required by the Contracting Officer for  
1169 processing said request, and both parties will meet to establish a mutually agreeable schedule for timely  
1170 completion of the process. Such process will analyze whether the proposed change is likely to: (i) result in  
1171 the use of Project Water contrary to the terms of this Contract; (ii) impair the ability of the Contractor to pay  
1172 for Project Water furnished under this Contract or to pay for any Federally-constructed facilities for which  
1173 the Contractor is responsible; and (iii) have an impact on any Project Water rights applications, permits, or  
1174 licenses. In addition, the Contracting Officer shall comply with the National Environmental Policy Act and  
1175 the Endangered Species Act. The Contractor will be responsible for all costs incurred by the Contracting

1176 Officer in this process, and such costs will be paid in accordance with Article 25 of this Contract.

1177 FEDERAL LAWS

1178 36. By entering into this Contract, the Contractor does not waive its rights to contest the validity  
1179 or application in connection with the performance of the terms and conditions of this Contract of any Federal  
1180 law or regulation; Provided, That the Contractor agrees to comply with the terms and conditions of this  
1181 Contract unless and until relief from application of such Federal law or regulation to the implementing  
1182 provision of the Contract is granted by a court of competent jurisdiction.

1183 NOTICES

1184 37. Any notice, demand, or request authorized or required by this Contract shall be deemed to  
1185 have been given, on behalf of the Contractor, when mailed, postage prepaid, or delivered to the Area  
1186 Manager, South-Central California Area Office, 1243 "N" Street, Fresno, California 93721, and on behalf  
1187 of the United States, when mailed, postage prepaid, or delivered to the Board of Directors of the Lower  
1188 Tule River Irrigation District, PO Box 4388, Porterville, California 93258. The designation of the  
1189 addressee or the address may be changed by notice given in the same manner as provided in this Article for  
1190 other notices.

1191 CONFIRMATION OF CONTRACT

1192 38. The Contractor, after the execution of this Contract, shall promptly seek to secure a decree  
1193 of a court of competent jurisdiction of the State of California, confirming the execution of this Contract. The  
1194 Contractor shall furnish the United States a certified copy of the final decree, the validation proceedings, and  
1195 all pertinent supporting records of the court approving and confirming this Contract, and decreeing and  
1196 adjudging it to be lawful, valid, and binding on the Contractor.

1197 IN WITNESS WHEREOF, the parties hereto have executed this Contract as of the day and  
1198 year first above written.

THE UNITED STATES OF AMERICA

By: /s/ William H. Luce, Jr.  
Acting Regional Director, Mid-Pacific Region  
Bureau of Reclamation

(SEAL)

LOWER TULE RIVER IRRIGATION DISTRICT

By: /s/ Robert F. Bowman  
President of the Board of Directors

Attest:

By: /s/ Daniel G. Vink  
Secretary of the Board of Directors

(I:Lowe.wpd)

Contract No. I75r-2771-LTR1

EXHIBIT A

[Map or Description of Service Area]

Contract No. I75r-2771-LTR1

**EXHIBIT B**  
[Initial Rates and Charges]



**APPENDIX D**



WATER  
WASTEWATER  
STREETS & ROADS  
STORM DRAINAGE  
LAND DEVELOPMENT  
IRRIGATION DISTRICTS  
AGRICULTURE  
ENERGY SERVICES

3500 W. Orchard Court  
Visalia, CA 93277-7055  
559 636-1166 FAX 559 636-1177  
e-mail: lsales@ppeng.com

## MEMORANDUM

To: Chad Wegley, David McGlasson  
From: Richard M. Moss  
Subject: Lower Tule River Irrigation District Performance under Letter of Intent with Friant Ranch  
Date: December 14, 2007

I have been asked to clarify how during a time of critical water shortage the current agreement between Lower Tule River Irrigation District (LTRID) and Friant Ranch (FR) would likely function.

LTRID apparently has other obligations to provide water similar to those provided to FR. The attached Figure 1 was taken from correspondence with Dan Vink, General Manager of LTRID listing those other obligations. There apparently is no stated priority as to which of these obligations would be fully or partially met during any year and what source of water would be used to meet them. LTRID has always indicated they would endeavor to meet all of these obligations in all years. Thus, we are left to analyze their ability to meet all of these obligations given what we know of water supplies available to LTRID<sup>1</sup>.

In 1977, the driest year of record in the 60 year history of the Friant Division diversions from the San Joaquin River, LTRID would fall short of having enough Central Valley Project (CVP) Friant Division water supplies to meet all of their existing obligations if all of these obligations were to be met from LTRID's Friant Supplies<sup>2</sup>. This was a year in which 25% Class 1 entitlement was available. In accordance with attached Figure 1, LTRID would be short of making all of the CVP related out-of-district obligations with only their CVP Friant entitlement by some 4,720 acre-feet. LTRID has a history of not making any surface water available to their in-district growers in the driest of years and asks their growers to rely solely on groundwater under such circumstances.

LTRID has at a minimum two other sources of supply under its immediate control: (1) entitlement to the Tule River, and (2) its CVP Cross Valley Canal entitlement. I have

<sup>1</sup> Assuming the LTRID obligations in such a year would be prorated in receiving their share of LTRID's CVP allotment, the shortage to FR would be a 460 acre-feet shortfall out of their 2,000 acre-feet LTRID commitment or providing slightly more than what I understand is 1,500 acre-feet that FR currently projects as their dry year demand.

<sup>2</sup> It is possible for some of LTRID's other obligations to be met directly from the Tule River.

focused primarily on the Tule River supply in my analysis believing that it would be the most likely and secure source of alternative supply that could be used to meet LTRID's obligations.

The Tule River entitlement owned or controlled by LTRID exists in the form of pre-1914 appropriative rights which could be pumped from the Tule River into the Friant-Kern Canal to be exchanged so as to make water available to meet its out-of-district obligations which otherwise would have been met with CVP Friant Division supplies. LTRID's Tule River entitlement in 1977 (the only year in which LTRID's CVP Friant Division supply would not have been sufficient to meet all of its out-of-district obligations) was in excess of 38,000 acre-feet. However, much of this 38,000 acre-feet of entitlement arrived late in the season and thus in 1977 there still may have been a short period of time during the year when demands theoretically may have exceeded available supplies. The instantaneous timing of water availability and demand in a dry year will always be the subject of circumstance and is beyond the resolution required for this analysis.

Other years have been dryer on the Tule River, but not simultaneous with LTRID's inability to access enough CVP Friant Division supplies. Between the two sources of water, LTRID could have met all of their out-of-district obligations in all of the years reviewed. Figure 1. provides an estimate of the yield of the Tule River entitlement under the control of LTRID which potentially could be used to meet its out-of-district obligations under the worst hydrologic conditions experienced in the Friant Division<sup>3</sup>. Figure 2. is a record of CVP Friant Division Class 1 water availability and highlights the driest years of record. Figure 3. provides a summary of LTRID's headgate entitlement for Tule River water by month and by recorded water right over the reviewed period.

LTRID could also endeavor to cover the shortfall with their CVP Cross Valley Canal entitlement of some 31,000 acre-feet (contract maximum). Figure 3 provides an historical summary of Cross Valley Canal entitlement availability to LTRID since 1996.

Conditions in a series of two critically dry years only get marginally worse in that there is little reliance on reservoir surface storage to carry water over from year to year given the limited amount of capacity in these reservoirs and the reservoir space reserved for the flood control function that controls their operations in the winter and spring of each year. This is the case for both the CVP Friant Division's Millerton Lake as well as for Success Reservoir on the Tule River. There could be some diminution of the amount of CVP Friant Division supplies in back to back critically dry years given the allowance of late season releases from upstream power reservoirs in the first year of a critically dry year that likely would not be there in a second consecutive dry year. The LTRID Tule River supplies depend upon the runoff available in each year and thus do not diminish significantly in consecutive dry years. The limitation for the Cross Valley Canal availability is associated with the ability of the federal CVP to pump water out of the Sacramento/San Joaquin River Delta as CVP storage on the Sacramento, Trinity and

---

<sup>3</sup> I have included the worst single year and the worst consecutive two and three year periods. A delivery loss factor of 20 percent was assumed in getting the water transported down the Tule River to the Friant Kern Canal and in the exchange with downstream Friant-Kern Canal water users.

American Rivers is very large and easily capable of withstanding a back-to-back dry year scenario. Delta pumping conditions are very hard to predict given so much of the operation depends upon factors other than tributary hydrology, such as endangered species and water quality issues.

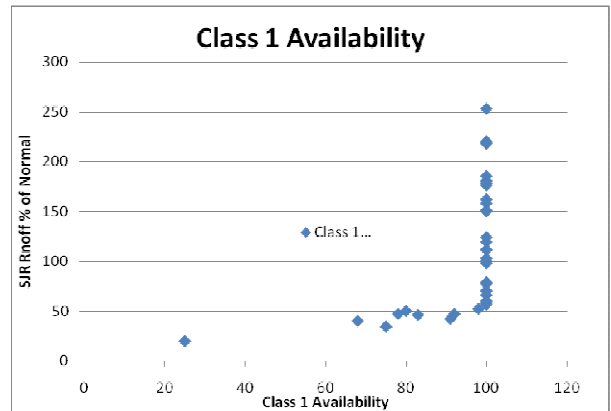
Nonetheless, it would appear that LTRID has enough alternative water supplies available to meet its out-of-district obligations for Friant Division supplies in virtually all conditions, certainly in the conditions which have been experienced to date.

**Figure 1. Analysis of Lower Tule River Irrigation District's Ability to meet Dry Year Commitments**

LTRID Commitments Under Agreement									
City of Orange Cove		2000							
Friant Ranch		1500							
Fresno Co Lower Tule		1500							
Fresno Co DCTRA		770							
DCTRA Internal Use		14250							
<b>Total</b>		<b>20020</b>							
				<b>Friant Class 1 Total Entitlement</b>		<b>800000</b>			
				<b>LTRID Contract Supply</b>		<b>61200</b>			
CVP Dry Year Scenarios	Friant Class 1 Declaration	Friant Class 1 Supply	LTRID Friant Supply		Required Alternate Supply	Tule River Entitlement	Delivery Losses 20%	Net for Exchange	
Driest Single Year of Record 1977	25%	200000	15300		4720	38074	7615	30459	
Two Consecutive Driest Years of Record 1976	75%	600000	45900		0	6072	1214	4858	
1977	25%	200000	15300		4720	38074	7615	30459	
Three Driest Consecutive Years of Record 1988	78%	624000	47736		0	11239	2248	8991	
1989	98%	784000	59976		0	18722	3744	14978	
1990	68%	544000	41616		0	5358	1072	4286	

**Figure 2. CVP Friant Division Water Availability and Dry Year Analysis**

Year	Class 1 Availability		Driest Series	
	Class 1 Availability	SJR % of Normal	Driest 2 Consecutive Years	Driest 3 Consecutive Years
1966	100	70.7		
1967	100	176.1	123	
1968	92	47	112	98
1969	100	220.1	134	148
1970	100	78.8	149	115
1971	100	77.2	78	125
1972	100	56.6	67	71
1973	100	111.5	84	82
1974	100	119.3	115	96
1975	100	97.8	109	110
1976	75	34.3	66	84
1977	25	19.7	27	51
1978	100	185.3	103	80
1979	100	99.7	143	102
1980	100	162	131	149
1981	100	58.2	110	107
1982	100	180.7	119	134
1983	100	252.9	217	164
1984	100	111.3	182	182
1985	100	70	91	145
1986	100	151	111	111
1987	91	42	97	88
1988	78	47.1	45	80
1989	98	52.2	50	47
1990	68	40	46	46
1991	100	66	53	53
1992	83	46	56	51
1993	100	150	98	87
1994	80	50	100	82
1995	100	218	134	139
1996	100	124	171	131
1997	100	158	141	167
1998	100	178	168	153
1999	100	150	164	162
2000	100	103	127	144
2001	100	60	82	104
2002				



94 percent over period of  
36 years

Figure 3. TULE RIVER HEADGATE ENTITLEMENT

*Percentage of Runoff to Entitlement*

March-Feb CVP Contract Year	Below Oettle Bridge	Woods Central Ditch	Porter Slough	Poplar Ditch	Yearly Total	Total Runoff	Percentage of Entitlement to Runoff
	(AF)	(AF)	(AF)	(AF)	(AF)	(AF)	
1975-1976	31,774	8,419	1,883	16,739	58,815	114,004	51.6%
1976-1977	1,156	1,191	0	4,836	7,183	30,745	23.4%
1977-1978	27,923	2,280	3,543	4,328	38,074	80,520	47.3%
1978-1979	71,674	17,654	10,208	25,728	125,264	230,386	54.4%
1979-1980	77,320	10,000	10,995	17,000	115,315	239,543	48.1%
1980-1981	75,756	10,000	7,107	16,903	109,766	199,057	55.1%
1981-1982	28,225	3,515	1,631	13,479	46,850	99,913	46.9%
1982-1983	138,462	9,492	26,288	15,297	189,539	403,013	47.0%
1983-1984	139,868	13,434	42,636	15,671	211,609	511,727	41.4%
1984-1985	36,671	2,321	843	18,527	58,362	113,860	51.3%
1985-1986	45,498	7,139	7,616	16,948	77,201	165,672	46.6%
1986-1987	48,718	8,825	10,442	18,646	86,631	175,054	49.5%
1987-1988	16,953	1,255	502	7,060	25,770	56,667	45.5%
1988-1989	6,917	121	623	3,578	11,239	38,199	29.4%
1989-1990	11,219	296	447	6,760	18,722	49,127	38.1%
1990-1991	2,011	160	0	3,187	5,358	23,664	22.6%
1991-1992	15,769	1,283	1,098	10,786	28,936	69,371	41.7%
1992-1993	24,655	44	2,593	942	28,234	64,980	43.5%
1993-1994	28,956	9,232	1,257	17,297	56,742	108,519	52.3%
1994-1995	26,774	1,248	2,216	6,314	36,552	76,170	48.0%
1995-1996	86,450	10,362	13,739	17,097	127,648	265,281	48.1%
1996-1997	124,107	8,903	21,807	16,545	171,362	381,568	44.9%
1997-1998	60,964	9,343	8,796	19,212	98,315	204,657	48.0%
1998-1999	119,295	11,258	32,957	14,741	178,251	393,582	45.3%
1999-2000	24,621	1,546	2,167	6,553	34,887	81,555	42.8%
2000-2001	30,078	1,950	1,543	12,277	45,848	90,331	50.8%
2001-2002	26,406	766	1,991	4,461	33,624	76,250	44.1%
2002-2003	12,257	23,584	1,224	5,277	42,342	91,288	46.4%
2003-2004	16,215	29,637	1,638	3,370	50,860	104,447	48.7%
2004-2005	22,155	2,546	2,244	5,570	32,515	74,904	43.4%
2005-2006	29,680	15,094	2,862	25,940	73,576	169,034	43.5%
2006-2007	60,636	3,450	12,113	7,889	84,088	183,148	45.9%

**Figure 4. Cross Valley Canal  
Deliveries  
1996-2007**

<u>Year</u>	<u>Declaration</u>	<u>Available Supply</u>
1996	95%	59,094
1997	90%	55,984
1998	90%	55,984
1999	70%	43,543
2000	65%	40,433
2001	49%	30,480
2002	75%	46,653
2003	60%	37,322
2004	70%	43,543
2005	90%	55,984
2006	100%	62,204
2007	50%	31,102





# Lower Tule River

Irrigation District

SINCE 1950

Donald MacMillan  
*President*

Anton G. Simonich  
*Vice President*

Gary Fernandes  
*Director*

Jim Costa  
*Director*

John Roeloffs  
*Director*

Daniel G. Vink  
*General Manager*

Eric Limas  
*Treasurer*

Beth Grote-Lewis  
*Assessor*

Dan Dooley  
*Legal Counsel*

December 14, 2007

Mr. Richard M. Moss  
Provost & Pritchard Engineering Group, Inc.  
3500 W. Orchard Court  
Visalia, CA 93277-7055

Re: Lower Tule River Irrigation District Performance under the Letter of Intent with Friant Ranch

Dear Dick,

I have reviewed the memorandum you prepared to your associates Chad Wegley and David McGlasson dated December 14, 2007, regarding Lower Tule River Irrigation District's (District's) ability to perform under its Letter of Intent (LOI) with Friant Ranch interests.

I believe the memorandum to be a fair representation of the District's ability to perform under the subject LOI and accurately characterizes my understanding of the District's obligations and its various sources of supply.

Please feel free to call me if you have any questions.

Very truly yours,

Daniel G. Vink  
General Manager

357 E. Olive Avenue  
Tipton, CA 93272  
(559) 686-4716  
or (559) 752-5050  
FAX (559) 686-0151  
e-MAIL [ltrid@ltrid.org](mailto:ltrid@ltrid.org)

DGV/cc

**APPENDIX E**

## San Joaquin Valley Groundwater Basin Kings Subbasin

- Groundwater Subbasin Number: 5-22.08
- County: Fresno, Kings, and Tulare
- Surface Area: 976,000 acres (1,530 square miles)

### Subbasin Boundaries and Hydrology

The San Joaquin Valley is surrounded on the west by the Coast Ranges, on the south by the San Emigdio and Tehachapi Mountains, on the east by the Sierra Nevada and on the north by the Sacramento-San Joaquin Delta and Sacramento Valley. The northern portion of the San Joaquin Valley drains toward the Delta by the San Joaquin River and its tributaries, the Fresno, Merced, Tuolumne, and Stanislaus Rivers. The southern portion of the valley is internally drained by the Kings, Kaweah, Tule, and Kern Rivers that flow into the Tulare drainage basin including the beds of the former Tulare, Buena Vista, and Kern Lakes.

The Kings Subbasin is bounded on the north by the San Joaquin River. The northwest corner of the subbasin is formed by the intersection of the east line of the Farmers Water District with the San Joaquin River. The west boundary of the Kings Subbasin is the eastern boundaries of the Delta-Mendota and Westside Subbasins. The southern boundary runs easterly along the northern boundary of the Empire West Side Irrigation District, the southern fork of the Kings River, the southern boundary of Laguna Irrigation District, the northern boundary of the Kings County Water District, the southern boundaries of Consolidated and Alta Irrigation Districts, and the western boundary of Stone Corral Irrigation District. The eastern boundary of the subbasin is the alluvium-granitic rock interface of the Sierra Nevada foothills.

The San Joaquin and Kings Rivers are the two principal rivers within or bordering the subbasin. The Fresno Slough and James Bypass are along the western edge of the subbasin and connect the Kings River with the San Joaquin River. Average annual precipitation values range from seven to 10 inches, increasing eastward.

### Hydrogeologic Information

The San Joaquin Valley represents the southern portion of the Great Central Valley of California. The San Joaquin Valley is a structural trough up to 200 miles long and 70 miles wide. It is filled with up to 32,000 feet of marine and continental sediments deposited during periodic inundation by the Pacific Ocean and by erosion of the surrounding mountains, respectively. Continental deposits shed from the surrounding mountains form an alluvial wedge that thickens from the valley margins toward the axis of the structural trough. This depositional axis is below to slightly west of the series of rivers, lakes, sloughs, and marshes, which mark the current and historic axis of surface drainage in the San Joaquin Valley.

### ***Water Bearing Formations***

The Kings Subbasin groundwater aquifer system consists of unconsolidated continental deposits. These deposits are an older series of Tertiary and Quaternary age overlain by a younger series of deposits of Quaternary age. The Quaternary age deposits are divided into older alluvium, lacustrine and marsh deposits, younger alluvium, and flood-basin deposits.

The older alluvium is an important aquifer in the subbasin. It consists of intercalated lenses of clay, silt, silty and sandy clay, clayey and silty sand, sand, gravel, cobbles, and boulders. It is, generally, fine grained near the trough of the valley. Lacustrine and marsh deposits are interbedded with the older alluvium in the western portion of the subbasin.

The younger alluvium is a sedimentary deposit of fluvial arkosic beds that overlies the older alluvium and is interbedded with the flood-basin deposits. Its lithology is similar to the underlying older alluvium. Beneath river channels, the younger alluvium is highly permeable. Beneath flood plains, it may be of poor permeability. The flood-basin deposits occur along the Fresno Slough and James Bypass. They consist of sand, silt, and clay.

The continental deposits of Tertiary and Quaternary age crop out beneath the extreme southeastern part of the subbasin and yield small amounts of water to wells. The deposits of Quaternary age are exposed over most of the area and yield more than 90 percent of the water pumped from wells (Page and LeBlanc 1969).

Page and LeBlanc (1969) indicate that the specific yields in the subbasin range from a low of 0.2 percent to 36 percent. To calculate storage capacity in the 10 to 200 foot depth range, Davis and others (1959) used a range of specific yields from approximately six percent to 18 percent. Williamson and others (1989) used an average specific yield of 11.3 percent in the area of the subbasin for computer modeling purposes.

### ***Restrictive Structures***

The lacustrine and marsh deposits contain silts and clays and restrict the vertical movement of water. The Corcoran Clay (E-clay) member of the Tulare formation is the most extensive of these deposits and occupies the western one-quarter to one-third of the subbasin. Its depth ranges from about 250-550 feet (DWR 1981) although much of the information shown on the map is indicated as inferred. The A-clay and C-clay are less extensive and lie above the Corcoran Clay. These clay layers cause confined groundwater conditions beneath them.

### ***Recharge Areas***

Groundwater recharge occurs from river and stream seepage, deep percolation of irrigation water, canal seepage, and intentional recharge. The Cities of Fresno and Clovis, Fresno Irrigation District, and Fresno Metropolitan Flood Control District have a cooperative effort to utilize individually owned facilities to recharge water in the greater urban area. Fresno Irrigation District, Consolidated Irrigation District, and others have

recharge efforts in the subbasin. The Fresno-Clovis metropolitan area uses a regional sewage treatment facility that disposes of water in percolation ponds southwest of Fresno.

### **Groundwater Level Trends**

Groundwater flow is generally to the southwest. Two notable groundwater depressions exist. One is centered in Fresno-Clovis urban area. The other is centered approximately 20 miles southwest of Fresno (DWR 2000) in the Raisin City Water District.

Most well water levels indicated a response to the 1976-77 drought. After the 1987-92 drought, wells in the northeast showed water levels from 10 to 40 feet below pre-1976-77 drought water levels. Water levels in the western subbasin experienced declines of 10 to 50 feet during the 1987-92 drought and are in various stages of recovery to mid-1980s levels. Water levels in the southeast have, generally, recovered to mid-1980s levels.

### **Groundwater Storage**

Groundwater in Storage.

Williamson (1989) indicates that the groundwater in storage was 93,000,000 af in 1961. This estimate was to a depth of 1,000 feet or less.

### **Groundwater Budget (Type C)**

The potential for subsurface flows south and westward exists. Depending upon groundwater conditions in the Westside Subbasin, subsurface flows may occur in that direction. The potential for groundwater flow in either direction along the southern boundary exists. Groundwater depressions on either side of the boundary and groundwater mounding from recharge along the Kings River complicate flow patterns in the area.

### **Groundwater Quality**

**Characterization.** The groundwater is predominantly of bicarbonate type. The major cations are calcium, magnesium, and sodium. Sodium appears higher in the western portion of the subbasin where some chloride waters are also found (Page and LeBlanc 1969).

Page and LeBlanc (1969) noted that the TDS of groundwater in the Fresno area seldom exceeds 600 mg/L although at greater depths, 2,000 mg/L groundwater has been encountered. A typical range of groundwater quality in the basin is 200 to 700 mg/L.

DHS data indicates an average TDS of 240 mg/L from 414 samples from Title 22 water supply wells. These samples ranged from 40 to 570 mg/L.

**Impairments.** Dibromochloropropane (DBCP), a soil fumigant nematicide, and nitrates can be found in groundwater along the eastern side of the subbasin. Shallow brackish groundwater can be found along the western portion of the subbasin. Elevated concentrations of fluoride, boron, and sodium can be found in localized areas of the subbasin.

### Water Quality in Public Supply Wells

Constituent Group <sup>1</sup>	Number of wells sampled <sup>2</sup>	Number of wells with a concentration above an MCL <sup>3</sup>
Inorganics – Primary	457	8
Radiological	443	24
Nitrates	463	23
Pesticides	495	105
VOCs and SVOCs	468	17
Inorganics – Secondary	457	41

<sup>1</sup> A description of each member in the constituent groups and a generalized discussion of the relevance of these groups are included in *California's Groundwater – Bulletin 118* by DWR (2003).

<sup>2</sup> Represents distinct number of wells sampled as required under DHS Title 22 program from 1994 through 2000.

<sup>3</sup> Each well reported with a concentration above an MCL was confirmed with a second detection above an MCL. This information is intended as an indicator of the types of activities that cause contamination in a given basin. It represents the water quality at the sample location. It does not indicate the water quality delivered to the consumer. More detailed drinking water quality information can be obtained from the local water purveyor and its annual Consumer Confidence Report.

### Well Characteristics

	Well yields (gal/min)	
Municipal/Irrigation	Range: – 20-3,000 (Page And LeBlanc 1969)	Average: 500-1,500
	Total depths (ft)	
Domestic	Range: - Not determined	Average: Not determined
Municipal/Irrigation	Range: - 100-500 (Page and LeBlanc 1969 Table 14)	Average: 210

### Active Monitoring Data

Agency	Parameter	Number of wells /measurement frequency
DWR and Cooperating Agencies	Groundwater levels	909 Semi-annually
Local Agencies	Miscellaneous water quality	Varies
Department of Health Services and Cooperators	Title 22 Water quality	722 Varies

## Basin Management

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Groundwater management: The County of Fresno has an adopted groundwater management ordinance. The following entities have adopted AB3030 management plans: Alta Irrigation District, Consolidated Irrigation District, County of Fresno, Fresno Irrigation District, James Irrigation District, Kings River Conservation District, Kings River Water District, Liberty Canal Company, Liberty Water District, Liberty Mill Race Company, Mid Valley Water District, Orange Cove Irrigation District, Raisin City Water District, and Riverdale Irrigation District.

### Water agencies

Public	City of Fresno, City of Clovis, Alta I.D., Consolidated I.D., Fresno I.D., Hills Valley I.D., James I.D., Kings River Conservation District, Kings River Water District, Laguna I.D., Liberty Water District, Mid-Valley W.D., Orange Cove I.D., Raisin City W.D., Riverdale I.D., and Tri-Valley I.D.
Private	California Water Service Co., Bakman Water Company

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## References Cited

- California Department of Water Resources (DWR), San Joaquin District. 000. *Spring 1999, Lines of Equal Elevation of Water in Wells, Unconfined Aquifer*. 1:253,440 scale map.
- Davis, G. H., J. H. Green, S. H. Olmstead, and D. W. Brown. 1959. *Ground Water Conditions and Storage Capacity in the San Joaquin Valley, California*. U.S. Geological Survey. Water Supply Paper No. 1469. 287p.
- Page, R. W., and R. A. LeBlanc. 1969. *Geology, Hydrology, and Water Quality in the Fresno Area, California*. USGS. Open-File Report.
- Williamson, A. K., D. E. Prudic, and L. A. Swain. 1989. *Ground-Water Flow in the Central Valley, California*. USGS. Professional Paper 1401-D. 127p.

## Additional References

- California Department of Water Resources (DWR). 1994. Bulletin 160-93, *California Water Plan Update*. Volume 1.
- \_\_\_\_\_. 1980. *Ground Water Basins in California*, Bulletin 118-80.
- \_\_\_\_\_. 1999. *Groundwater Management in California A Report to the Legislature Pursuant to Senate Bill 1245 (1997)*.
- California Department of Water Resources (DWR), San Joaquin District. UNPUBLISHED-Land and Water Use Data.
- \_\_\_\_\_. 1995. INTERNAL-computer spreadsheet for 1990 normal computation of net water demand used in preparation of DWR Bulletin 160-93.
- Consolidated Irrigation District. 1995. Written correspondence.
- Ireland, R. L., J. F. Poland, and F. S. Riley. 1984. *Land Subsidence in the San Joaquin Valley, California as of 1980*. USGS. Professional Paper 437-I.
- Muir, K. S. 1977. *Ground Water in the Fresno Area, California*. USGS. Water-Resources Investigation 77-59.
- Page, R.W. 1973. *Base of Fresh Ground Water (approximately 3,000 micromhos) in the San Joaquin Valley, California*. USGS. Hydrologic Investigations Atlas HA-489.

\_\_\_\_\_. 1976. *Geology of the Fresh Ground-Water Basin of the Central Valley, California, with Texture Maps and Sections*. USGS. Professional Paper 1401-C. 54 p.

## Errata

Updated groundwater management information and added hotlinks to applicable websites.  
(1/20/06)



## **Tulare Lake Hydrologic Region**

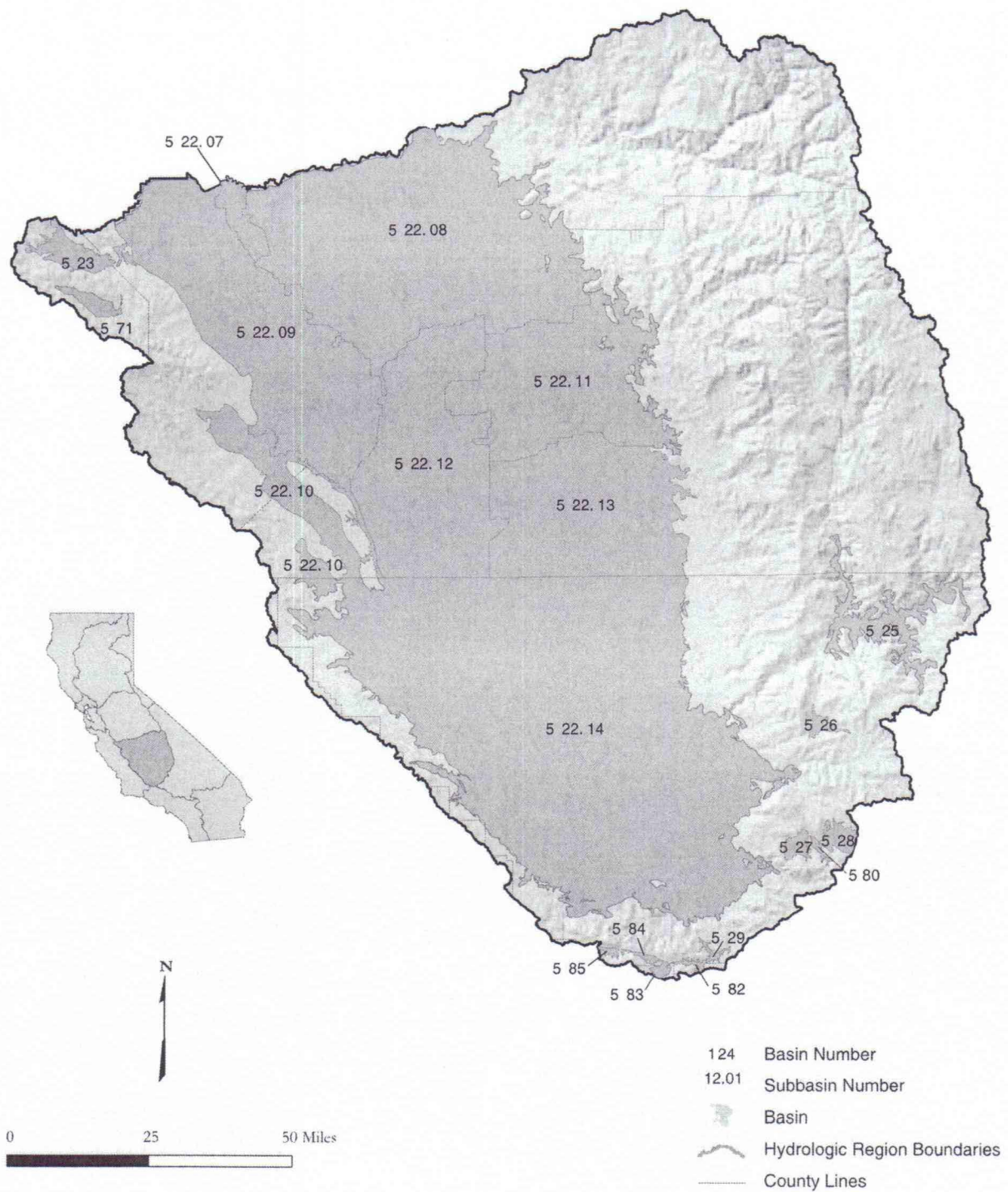


Figure 37 Tulare Lake Hydrologic Region

## Basins and Subbasins of Tulare Lake Hydrologic Region

Basin/subbasin	Basin name
5-22	San Joaquin Valley
5-22.08	Kings
5-22.09	Westside
5-22.10	Pleasant Valley
5-22.11	Kaweah
5-22.12	Tulare Lake
5-22.13	Tule
5-22.14	Kern County
5-23	Panoche Valley
5-25	Kern River Valley
5-26	Walker Basin Creek Valley
5-27	Cummings Valley
5-28	Tehachapi Valley West
5-29	Castaic Lake Valley
5-71	Vallecitos Creek Valley
5-80	Brite Valley
5-82	Cuddy Canyon Valley
5-83	Cuddy Ranch Area
5-84	Cuddy Valley
5-85	Mil Potrero Area

## Description of the Region

The Tulare Lake HR covers approximately 10.9 million acres (17,000 square miles) and includes all of Kings and Tulare counties and most of Fresno and Kern counties (Figure 37). The region corresponds to approximately the southern one-third of RWQCB 5. Significant geographic features include the southern half of the San Joaquin Valley, the Temblor Range to the west, the Tehachapi Mountains to the south, and the southern Sierra Nevada to the east. The region is home to more than 1.7 million people as of 1995 (DWR, 1998). Major population centers include Fresno, Bakersfield, and Visalia. The cities of Fresno and Visalia are entirely dependent on groundwater for their supply, with Fresno being the second largest city in the United States reliant solely on groundwater.

## Groundwater Development

The region has 12 distinct groundwater basins and 7 subbasins of the San Joaquin Valley Groundwater Basin, which crosses north into the San Joaquin River HR. These basins underlie approximately 5.33 million acres (8,330 square miles) or 49 percent of the entire HR area.

Groundwater has historically been important to both urban and agricultural uses, accounting for 41 percent of the region's total annual supply and 35 percent of all groundwater use in the State. Groundwater use in the region represents about 10 percent of the State's overall supply for agricultural and urban uses (DWR 1998).

The aquifers are generally quite thick in the San Joaquin Valley subbasins with groundwater wells commonly exceeding 1,000 feet in depth. The maximum thickness of freshwater-bearing deposits (4,400 feet) occurs at the southern end of the San Joaquin Valley. Typical well yields in the San Joaquin Valley range from 300 gpm to 2,000 gpm with yields of 4,000 gpm possible. The smaller basins in the mountains surrounding the San Joaquin Valley have thinner aquifers and generally lower well yields averaging less than 500 gpm.

The cities of Fresno, Bakersfield, and Visalia have groundwater recharge programs to ensure that groundwater will continue to be a viable water supply in the future. Extensive groundwater recharge programs are also in place in the south valley where water districts have recharged several million acre-feet for future use and transfer through water banking programs.

The extensive use of groundwater in the San Joaquin Valley has historically caused subsidence of the land surface primarily along the west side and south end of the valley.

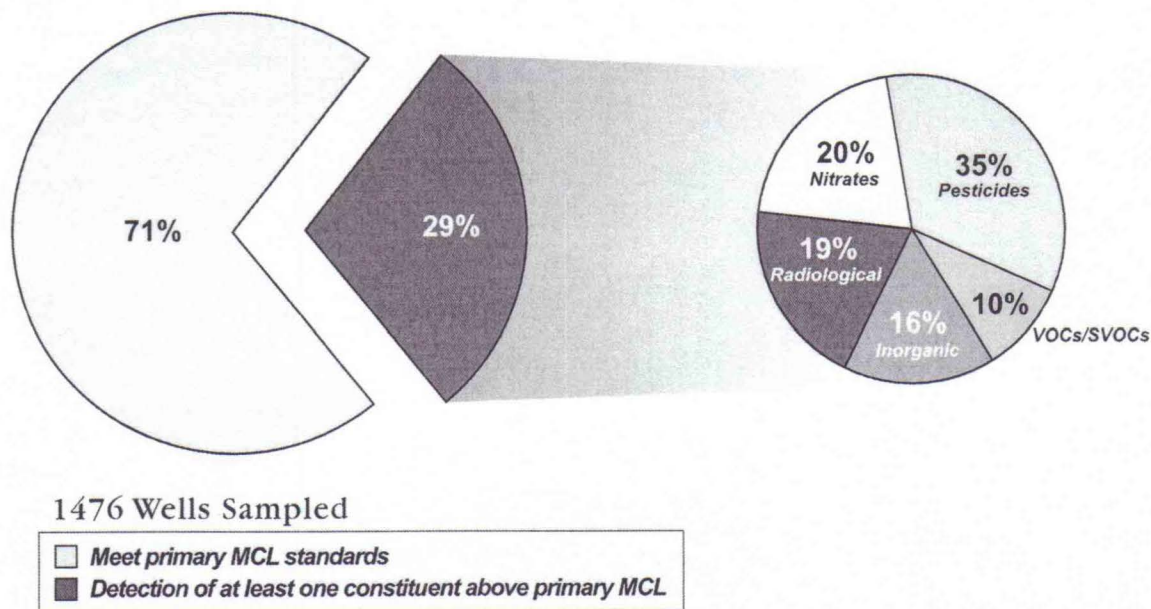
### **Groundwater Quality**

In general, groundwater quality throughout the region is suitable for most urban and agricultural uses with only local impairments. The primary constituents of concern are high TDS, nitrate, arsenic, and organic compounds.

The areas of high TDS content are primarily along the west side of the San Joaquin Valley and in the trough of the valley. High TDS content of west-side water is due to recharge of stream flow originating from marine sediments in the Coast Range. High TDS content in the trough of the valley is the result of concentration of salts because of evaporation and poor drainage. In the central and west-side portions of the valley, where the Corcoran Clay confining layer exists, water quality is generally better beneath the clay than above it. Nitrates may occur naturally or as a result of disposal of human and animal waste products and fertilizer. Areas of high nitrate concentrations are known to exist near the town of Shafter and other isolated areas in the San Joaquin Valley. High levels of arsenic occur locally and appear to be associated with lakebed areas. Elevated arsenic levels have been reported in the Tulare Lake, Kern Lake and Buena Vista Lake bed areas. Organic contaminants can be broken into two categories, agricultural and industrial. Agricultural pesticides and herbicides have been detected throughout the valley, but primarily along the east side where soil permeability is higher and depth to groundwater is shallower. The most notable agricultural contaminant is DBCP, a now-banned soil fumigant and known carcinogen once used extensively on grapes. Industrial organic contaminants include TCE, DCE, and other solvents. They are found in groundwater near airports, industrial areas, and landfills.

### ***Water Quality in Public Supply Wells***

From 1994 through 2000, 1,476 public supply water wells were sampled in 14 of the 19 groundwater basins and subbasins in the Tulare Lake HR. Evaluation of analyzed samples shows that 1,049 of the wells, or 71 percent, met the state primary MCLs for drinking water. Four-hundred-twenty-seven wells, or 29 percent, exceeded one or more MCL. Figure 38 shows the percentages of each contaminant group that exceeded MCLs in the 427 wells.



**Figure 38 MCL exceedances by contaminant group in public supply wells in the Tulare Lake Hydrologic Region**

Table 31 lists the three most frequently occurring contaminants in each of the six contaminant groups and shows the number of wells in the HR that exceeded the MCL for those contaminants.

**Table 31 Most frequently occurring contaminants by contaminant group in the Tulare Lake Hydrologic Region**

Contaminant group	Contaminant - # of wells	Contaminant - # of wells	Contaminant - # of wells
Inorganics - Primary	Fluoride – 32	Arsenic – 16	Aluminum – 13
Inorganics - Secondary	Iron – 155	Manganese – 82	TDS – 9
Radiological	Gross Alpha – 74	Uranium – 24	Radium 228 – 8
Nitrates	Nitrate(as NO <sub>3</sub> ) – 83	Nitrate + Nitrite – 14	Nitrite(as N) – 3
Pesticides	DBCP – 130	EDB – 24	Di(2-Ethylhexyl)phthalate – 7
VOCs/SVOCs	TCE – 17	PCE – 16	Benzene – 6 MTBE – 6

DBCP = Dibromochloropropane  
 EDB = Ethylenedibromide  
 TCE = Trichloroethylene  
 PCE = Tetrachloroethylene  
 VOC = Volatile organic compound  
 SVOC = Semivolatile organic compound

### Changes from Bulletin 118-80

There are no newly defined basins since Bulletin 118-80. However, the subbasins of the San Joaquin Valley, which were delineated as part of the 118-80 update, are given their first numeric designation in this report (Table 32).

**Table 32 Modifications since Bulletin 118-80 of groundwater basins and subbasins in Tulare Lake Hydrologic Region**

Subbasin name	New number	Old number
Kings	5-22.08	5-22
Westside	5-22.09	5-22
Pleasant Valley	5-22.10	5-22
Kaweah	5-22.11	5-22
Tulare Lake	5-22.12	5-22
Tule	5-22.13	5-22
Kern County	5-22.14	5-22
Squaw Valley	deleted	5-24
Cedar Grove Area	deleted	5-72
Three Rivers Area	deleted	5-73
Springville Area	deleted	5-74
Templeton Mountain Area	deleted	5-75
Manache Meadow Area	deleted	5-76
Sacator Canyon Valley	deleted	5-77
Rockhouse Meadows Valley	deleted	5-78
Inns Valley	deleted	5-79
Bear Valley	deleted	5-81

Several basins have been deleted from the Bulletin 118-80 report. In Squaw Valley (5-24) all 118 wells are completed in hard rock. Cedar Grove Area (5-72) is a narrow river valley in Kings Canyon National Park with no wells. Three Rivers Area (5-73) has a thin alluvial terrace deposit but 128 of 130 wells are completed in hard rock. Springville Area (5-74) is this strip of alluvium adjacent to Tule River and all wells are completed in hard rock. Templeton Mountain Area (5-75), Manache Meadow Area (5-76), and Sacator Canyon Valley (5-77) are all at the crest of mountains with no wells. Rockhouse Meadows Valley (5-78) is in wilderness with no wells. Inns Valley (5-79) and Bear Valley (5-81) both have all wells completed in hard rock.

**Table 33 Tulare Lake Hydrologic Region groundwater data**

Basin/Subbasin	Basin Name	Area (acres)	Groundwater Budget Type	Well Yields (gpm)		Types of Monitoring			TDS (mg/L)	
				Maximum	Average	Levels	Quality	Title 22	Average	Range
5-22	SAN JOAQUIN VALLEY									
5-22.08	KINGS	976,000	C	3,000	500-1,500	909	-	722	200-700	40-2000
5-22.09	WESTSIDE	640,000	C	2,000	1,100	960	-	50	520	220-35,000
5-22.10	PLEASANT VALLEY	146,000	B	3,300	-	151	-	2	1,500	1000-3000
5-22.11	KAWEAH	446,000	B	2,500	1,000-2,000	568	-	270	189	35-580
5-22.12	TULARE LAKE	524,000	B	3,000	300-1,000	241	-	86	200-600	200-40,000
5-22.13	TULE	467,000	B	3,000	-	459	-	150	256	200-30,000
5-22.14	KERN COUNTY	1,950,000	A	4,000	1,200-1,500	2,258	249	476	400-450	150-5000
5-23	PANOCH VALLEY	33,100	C	-	-	48	-	-	1,300	394-3530
5-25	KERN RIVER VALLEY	74,000	C	3,650	350	-	-	92	378	253-480
5-26	WALKER BASIN CREEK VALLEY	7,670	C	650	-	-	-	1	-	-
5-27	CUMMINGS VALLEY	10,000	A	150	56	51	-	15	344	-
5-28	TEHACHAPI VALLEY WEST	14,800	A	1,500	454	64	-	19	315	280-365
5-29	CASTAC LAKE VALLEY	3,600	C	400	375	-	-	3	583	570-605
5-71	VALLECITOS CREEK VALLEY	15,100	C	-	-	-	-	0	-	-
5-80	BRITE VALLEY	3,170	A	500	50	-	-	-	-	-
5-82	CUDDY CANYON VALLEY	3,300	C	500	400	-	-	3	693	695
5-83	CUDDY RANCH AREA	4,200	C	300	180	-	-	4	550	480-645
5-84	CUDDY VALLEY	3,500	A	160	135	3	-	3	407	325-645
5-85	MIL POTRERO AREA	2,300	C	3,200	240	7	-	7	460	372-657

gpm - gallons per minute  
 mg/L - milligram per liter  
 TDS -total dissolved solids

In some basins or subbasins, groundwater levels declined steadily over a number of years as agricultural or urban use of groundwater increased. In response, managing agencies developed surface water import projects to provide expanded water supplies to alleviate the declining groundwater levels. Increasing groundwater levels, or refilling of the aquifer, demonstrate the effectiveness of this approach in long-term water supply planning. In some areas of the State, the past overdraft is now being used to advantage. When the groundwater storage capacity that is created through historical overdraft is used in coordination with surface water supplies in a conjunctive management program, local and regional water supplies can be augmented.

In 1978 DWR was directed by the legislature to develop a definition of critical overdraft and to identify basins that were in a condition of critical overdraft (Water Code § 12924). The process that was followed and the basins that were deemed to be in a condition of critical overdraft are discussed in Box O, “Critical Conditions of Overdraft.” This update to Bulletin 118 did not include similar direction from the legislature, nor funding to undertake evaluation of the State’s groundwater basins to determine whether they are in a state of overdraft.

**Box O Critical Conditions of Overdraft**

In 1978 DWR was directed by the legislature to develop a definition of critical overdraft and to identify those basins in a critical condition of overdraft (Water Code §12924). DWR held public workshops around the state to obtain public and water managers’ input on what the definition should include, and which basins were critically overdrafted. Bulletin 118-80, *Ground Water Basins in California* was published in 1980 with the results of that local input. The definition of critical overdraft is:

*A basin is subject to critical conditions of overdraft when continuation of present water management practices would probably result in significant adverse overdraft-related environmental, social, or economic impacts.*

No time is specified in the definition. Definition of the time frame is the responsibility of the local water managers, as is the definition of significant adverse impacts, which would be related to the local agency’s management objectives.

Eleven basins were identified as being in a critical condition of overdraft. They are:

- |                       |                                  |
|-----------------------|----------------------------------|
| Pajaro Basin          | Cuyama Valley Basin              |
| Ventura Central Basin | Eastern San Joaquin County Basin |
| Chowchilla Basin      | Madera Basin                     |
| Kings Basin           | Kaweah Basin                     |
| Tulare Lake Basin     | Tule Basin                       |
| Kern County Basin     |                                  |

The task was not identified by the Legislature, nor was the funding for this update (2003) sufficient to consult with local water managers and fully re-evaluate the conditions of the 11 critically overdrafted basins. Funding and duration were not sufficient to evaluate additional basins with respect to conditions of critical overdraft.



**APPENDIX F**

**Friant Division - CVP Water Supplies in Acre-feet**

<b>USBR Water Year</b>	<b>San Joaquin River % Supply</b>	<b>CLASS I Actual %</b>	<b>CLASS II Actual %</b>	<b>FCWWD 18 Contract</b>	<b>LTRID Contract</b>	<b>LTRID Water to FCWWD 18</b>
1966	71	100	23	150	61,200	2,000
1967	176	100	100	150	61,200	2,000
1968	47	92	0	138	56,304	2,000
1969	220	100	100	150	61,200	2,000
1970	79	100	29	150	61,200	2,000
1971	77	100	35	150	61,200	2,000
1972	57	100	4	150	61,200	2,000
1973	112	100	77	150	61,200	2,000
1974	119	100	82	150	61,200	2,000
1975	98	100	60	150	61,200	2,000
1976	34	75	0	113	45,900	2,000
<b>1977</b>	20	25	0	<b>38</b>	<b>15,300</b>	<b>1,500</b>
1978	185	100	100	150	61,200	2,000
1979	100	100	63	150	61,200	2,000
1980	162	100	100	150	61,200	2,000
1981	58	100	22	150	61,200	2,000
1982	181	100	100	150	61,200	2,000
1983	253	100	100	150	61,200	2,000
1984	111	100	50	150	61,200	2,000
1985	70	100	14	150	61,200	2,000
1986	151	100	100	150	61,200	2,000
1987	42	91	0	137	55,692	2,000
1988	47	78	0	117	47,736	2,000
1989	52	98	0	147	59,976	2,000
1990	40	68	0	102	41,616	2,000
1991	66	100	0	150	61,200	2,000
1992	46	83	0	125	50,796	2,000
1993	150	100	90	150	61,200	2,000
1994	50	80	0	120	48,960	2,000
1995	218	100	100	150	61,200	2,000
1996	124	100	58	150	61,200	2,000
1997	158	100	55	150	61,200	2,000
1998	178	100	50	150	61,200	2,000
1999	150	100	55	150	61,200	2,000
2000	103	100	60	150	61,200	2,000
2001	60	100	5	150	61,200	2,000
2002	60	100	8	150	61,200	2,000
2003	73	100	5	150	61,200	2,000
2004	60	100	8	150	61,200	2,000
2005	149	100	40	150	61,200	2,000
2006	182	100	45	150	61,200	2,000

Notes:

(1) Class I and II percent supply data provided by the USBR.

(2) LTRID to FCWWD 18 column indicates the quantity of water LTRID would have been able to deliver in each year tabulated, had the proposed agreement been in place at the time.

**APPENDIX G**



## **FRESNO COUNTY WATERWORKS #18**

"Serving the Friant Community"  
P.O. Box 92 3726 Fleming St.  
FRIANT, CALIFORNIA 93626  
(209) 822-2533

### **RESOLUTION 06 – 06**

**AUTHORIZING DISTRICT MANAGER'S  
EXECUTION OF REIMBURSEMENT AGREEMENT WITH FRIANT RANCH,  
A LIMITED PARTNERSHIP FOR PROCESSING AND CONSIDERATION OF  
PROPOSED ANNEXATION, PROPOSED WATER TRANSFER WITH LOWER  
TULE RIVER IRRIGATION DISTRICT, PROPOSED WASTEWATER  
TREATMENT PLANT, PROPOSED WATER TREATMENT PLANT  
EXPANSION AND RELATED INFRASTRUCTURE IMPROVEMENTS**

**WHEREAS**, Fresno County Waterworks District #18, a county waterworks district formed pursuant to California Water Code Section 55000 et seq. (the "District"), is responsible for providing a safe and reliable water supply to the residential and commercial customers located within its service area, which generally comprises the unincorporated community of Friant, County of Fresno, State of California and is authorized to construct, maintain and operate sewage collection and treatment facilities; and

**WHEREAS**, Friant Ranch, a Limited Partnership ("Friant Ranch") is working with the County of Fresno to entitle and develop a master planned residential community containing an active adult retirement village consisting of approximately 2,500 units of age restricted single family housing, and a commercial and retail village ("Proposed Project") on approximately 1,129 acres in Fresno County, located immediately adjacent to the service area of the District; and

**WHEREAS**, Friant Ranch must locate and acquire a water supply for the Proposed Project and, to that end, Friant Ranch and the Lower Tule River Irrigation District (“LTRID”) have entered into a letter of intent which proposes the long term transfer of water provided by the Friant Division of the Central Valley Project consisting of up to 2,000 acre-feet of water annually from LTRID to a specific zone of benefit within the District for the primary benefit of providing a safe and reliable water supply for the residents of Friant Ranch (the “Proposed Transfer”); and

**WHEREAS**, the District will process and consider the creation of a proposed zone of benefit within its service area, which zone will include only the boundaries of the Proposed Project, for purposes of receiving water pursuant to the Proposed Transfer and creating the requisite infrastructure therefore (“Proposed Zone”); and

**WHEREAS**, Friant Ranch has requested that the District serve the water and wastewater needs for the Proposed Project ( the “Water and Wastewater Service Request”) and the District intends to consider Friant Ranch’s request to include the Proposed Project in its service area and to provide water and wastewater services to the Proposed Project; and

**WHEREAS**, in order to implement the Water and Wastewater Service Request, the District will be required to take various actions, obtain various approvals and conduct environmental review and compliance as required by law, including, but not limited to, the following: (1) obtain approvals from USBR and, as necessary, USFWS for the Proposed

Transfer and the annexation of the Friant Ranch into the District (the “Proposed Annexation”); (2) prepare a SB 610 Water Supply Assessment and SB 221 Verification of Water Supply for the Proposed Project; (3) comply with CEQA for District approval of the Proposed Transfer and Proposed Annexation; (4) cooperate with Friant Ranch in designing and preparing plans for the proposed wastewater treatment plant (the “Proposed WWTP”); (5) process Regional Board and DHS approvals for the Proposed WWTP; (6) process District approval and coordinate environmental review for the Proposed WWTP; (7) ensure appropriate NEPA and NHPA compliance for the USBR approval of the Proposed Transfer, the Proposed Annexation and the WTP Expansion; (8) cooperate with Friant Ranch in designing and preparing plans for the proposed water treatment plant expansion (“WTP Expansion”) and any necessary modifications to the water supply facilities located at Friant Dam; (9) process DHS approval of the Proposed WTP Expansion; (10) process and coordinate environmental review for the Proposed WTP Expansion; (11) obtain LAFCO approval for the annexation of the Proposed Project lands into the District; (12) process and consider the creation of the Proposed Zone within the District, comprised only of the Proposed Project; (13) obtain and prepare any other approvals(s) studies, reports, plans, and/or designs that the Parties hereafter mutually consent to undertake in connection with the Proposed Annexation, Proposed Zone, Proposed Transfer, Proposed WWTP, Proposed WTP Expansion, SB 610 Water Supply Assessment, and SB 221 Verification of Water Supply; and

**WHEREAS**, in order to consider the Proposed Transfer, the United States Bureau of Reclamation (“USBR”) has requested that the District execute and deliver a Letter of Agreement with the USBR, a copy of which is attached hereto as Exhibit A, whereby the

District agrees to pay all costs associated with the consideration of the Propose Transfer by USBR; and

**WHEREAS**, in order to consider and process the Water and Wastewater Service Request, Friant Ranch has presented to the District for its review and approval a form of Reimbursement Agreement, a copy of which is attached hereto as Exhibit B, which sets forth the various actions and approvals which will be required from the District in order for the District to provide water and wastewater services to the Proposed Project and which provides that Friant Ranch will reimburse the District for all of its costs and expenses incurred in connection with Water and Wastewater Service Request; and

**WHEREAS**, in order to fully implement the proposed relationship between the District and Friant Ranch as proposed in the Water and Wastewater Service Request, the District and Friant Ranch will need to negotiate one or more agreements pertaining to the Proposed Transfer, the Proposed Zone, the Proposed Project, the Proposed Annexation and the other specific entitlements described above and listed in the Reimbursement Agreement ("Water and Wastewater Service Agreements"); and

**WHEREAS**, this Board of Directors believes it is in the best interest of the District:

- (i) that the District commence the process to determine whether it may serve the water and wastewater needs of Friant Ranch;
- (ii) that the District execute and deliver the Letter of Agreement with Friant Ranch;
- (iii) that the District execute and deliver the Letter of Agreement with USBR;
- (iv) that the District perform all actions as set forth in and contemplated by the Reimbursement Agreement; and
- (v) that the District negotiate with

Friant Ranch concerning the terms and conditions for the Water and Wastewater Service Agreements.

**NOW, THEREFORE BE IT RESOLVED:**

A. The Board of Directors hereby approves the commencement of the process to determine whether it may serve the water and wastewater needs of Friant Ranch;

B. The board of Directors hereby approves the terms and conditions of the Reimbursement Agreement and the Letter of Agreement provided that Friant Ranch shall reimburse the District for all of its costs and expenses incurred in connection with Water and Wastewater Service Request.

C. The Board of Directors hereby affirms and states that it does not by this Resolution grant any entitlement, approve the annexation of new lands, or authorize execution of any water transfer or service agreement, but rather the District hereby authorizes the consideration of the Water and Wastewater Service Request and the reimbursement of expenses incurred by the District in considering the Water and Wastewater Service Request and the performance of environmental review as necessary to inform any such decisions in the future;

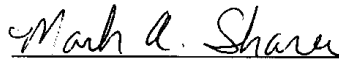
D. The board of Directors hereby authorizes and directs the District's General Manager to: (i) execute, deliver and perform the Reimbursement Agreement with Friant Ranch; (ii) execute, deliver and perform the Letter of Agreement with USBR;




(iii) perform all actions as set forth in and contemplated by the Reimbursement Agreement with Friant Ranch; (iv) negotiate with Friant Ranch concerning the terms and conditions for the Water and Wastewater Service Agreements; and (v) do any other acts on behalf of the District that are necessary or convenient to carry out the purpose of this Resolution.

**THE FOREGOING RESOLUTION WAS PASSED AND ADOPTED** at a regular meeting of the Board of Directors of the Fresno County Waterworks District #18 on the 24<sup>th</sup> day of October 2006, by the following vote:

AYES: 4  
NOES: 0  
ABSENT: 1  
ABSTAIN: 0

  
\_\_\_\_\_  
Mark A. Sharer, President  
Board of Directors  
Fresno County Waterworks District #18

ATTESTED:

  
\_\_\_\_\_  
Darlene Storm, Clerk to the  
Board of Directors

**Attached Exhibits**

- "A" Letter of Agreement of USBR
- "B" Reimbursement Agreement with Friant Ranch

**APPENDIX H**



## **FRESNO COUNTY WATERWORKS #18**

"Serving the Friant Community"  
P.O. Box 92 3726 Fleming St.  
FRIANT, CALIFORNIA 93626  
(209) 822-2533

### **REIMBURSEMENT AGREEMENT**

This reimbursement Agreement ("Agreement") is made and entered into this 24 day of October, 2006, by and between Fresno County Waterworks District #18, a county waterworks district formed pursuant to California Water Code Section 55000 et seq. ("WW#18") and Friant Ranch, a Limited Partnership, a California Limited Partnership ("Friant Ranch") collectively ("the Parties").

### **RECITALS**

**WHEREAS**, WWD #18 has an entitlement to 150 acre-feet of Class 1 Water from the United States Bureau of Reclamation ("USBR") pursuant to the "Long-Term Renewal Contract between the United States and Fresno County Waterworks District #18 Providing for Project Water Service From Friant Division" dated January 20, 2001, M&I Contract No. 13-06-200-5904-LTR1, as amended and renewed from time to time for delivery of water from the Friant division of the Central Valley Project ("Bureau Contract"); and

**WHEREAS**, WWD #18 is responsible for providing a safe and reliable water supply to the residential and commercial customers located within its service area,

**COPY**

which generally comprises the unincorporated community of Friant, County of Fresno, State of California; and

**WHEREAS**, Friant Ranch is working with the County of Fresno to entitle and develop a master planned residential community containing an active adult retirement village consisting of approximately 2,500 units of age restricted single family housing, and a commercial retail village ("Proposed Project") on approximately 1,129 acres in Fresno County, located immediately adjacent to the service area of WWD #18; and

**WHEREAS**, Friant Ranch desires to locate and acquire a water supply for the Proposed Project, and to that end, Friant Ranch and LTRID have entered into a letter of intent which provides the preliminary terms for the long term transfer of water provided by the Friant Division of the Central Valley Project consisting of up to 2,000 acre-feet of water annually from LTRID to a specified zone of benefit within WWD #18 for the primary benefit of the Proposed Project ("the Proposed Transfer"). A copy of the letter of intent between Friant Ranch and LTRID is attached hereto as Exhibit A and incorporated by reference herein ("Letter of Intent"); and

**WHEREAS**, WWD #18 seeks to provide a safe and reliable water supply for the Proposed Project and accordingly has agreed to pursue the appropriate approvals for the Proposed Transfer; and

**WHEREAS**, to implement the Proposed Transfer and facilitate water service to the Proposed Project, WWD #18 has agreed to pursue the annexation of the Proposed

Project lands into its service area (“Proposed Annexation”), which requires approvals from the Fresno County Local Agency Formation Commission (“LAFCO”) and the USBR; and

**WHEREAS**, WWD #18 will process and consider the creation of a proposed zone of benefit within the WWD #18 service area, comprised only of the Proposed Project, for purposes of receiving water pursuant to the Proposed Transfer and creating the requisite infrastructure therefore (“Proposed Zone”); and

**WHEREAS**, WWD #18’s approval of the Proposed Transfer, Proposed Zone, and Proposed Annexation will require environmental analysis in accordance with the California Environmental Quality Act, Pub. Resources Code §§ 21000 et seq., (“CEQA”); and

**WHEREAS**, as the potential water purveyor for the Proposed Project, WWD #18 must coordinate; (i) the preparation of a water supply assessment for the Proposed Project pursuant to Water Code, §§ 10910-10915 (“SB 610 Water Supply Assessment”) and (ii) the verification of the water supply under Government Code, § 66473.8(a) (“SB 221 Verification of Water Supply”); and

**WHEREAS**, Friant Ranch desires to assist WWD #18 in its efforts to obtain approvals from USBR and, as necessary, the United States Fish and Wildlife Service (“USFWS”) for the Proposed Transfer and Proposed Annexation; and

**WHEREAS**, the USBR approval of the Proposed Transfer and Proposed Annexation will require the completion of the appropriate National Environmental Policy Act, 42 U.S.C. §§ 4321-4347, (“NEPA”) and the National Historic Preservation Act, 16 U.S.C. § 470 (“NHPA”) analysis; and

**WHEREAS**, WWD #18 has executed a Letter of Agreement with USBR for reimbursement of costs associated with the administrative processing and environmental review for the Proposed Annexation and the Proposed Transfer (“Letter of Agreement”), which is attached hereto as Exhibit B and hereby incorporated by reference; and

**WHEREAS**, the Parties desire to design and construct a wastewater treatment plant for WWD #18 to accommodate the Proposed Project and improve the wastewater capacity for the unincorporated community of Friant (“Proposed WWTP”); and

**WHEREAS**, the Proposed WWTP will require certain approvals from WWD #18, the Central Valley Regional Water Quality Control Board (“Regional Board”) and Department of Health Services (“DHS”) which approvals will require environmental review under CEQA; and

**WHEREAS**, the Parties desire to expand WWD #18’s existing water treatment plant and water supply facilities located at Friant Dam to accommodate the Proposed Project and improve the safety and reliability of the water supply for the unincorporated community of Friant (“Proposed WTP Expansion”); and

**WHEREAS**, the Proposed WTP Expansion will require certain approvals from WWD #18 and DHS and USBR, which approvals will require environmental review under CEQA; and

**WHEREAS**, WWD #18, Friant Ranch and LTRID are negotiating the terms and conditions of one or more agreements pertaining to the Proposed Transfer, the Proposed Project, the Proposed Annexation and the other specific entitlements described above and listed in Section 2 of this Agreement (“Water and Wastewater Service Agreements”); and

**WHEREAS**, the Parties recognize that the Proposed Transfer, Proposed Annexation, Proposed WWTP, Proposed WTP Expansion, Proposed Zone, and the SB 610 Water Supply Assessment will be included within the Environmental Impact Report (“EIR”) currently under preparation by the County of Fresno in its capacity as the CEQA lead agency for the Proposed Project, and WWD #18 will review and approve the pertinent analysis of the EIR as a CEQA responsible agency; and

**WHEREAS**, Friant Ranch desires to reimburse WWD #18 for the amounts paid by WWD #18 to USBR under the Letter of Agreement and for expenses incurred by WWD #18 in pursuing the various approvals related to the Proposed Project as set forth in this Agreement.

**NOW THEREFORE**, in consideration of the above recitals and the mutual covenants and conditions contained herein, WWD #18 and Friant Ranch agree as follows:

## AGREEMENT

1. Term. Upon execution, this Agreement shall remain in effect until either party elects to terminate this Agreement pursuant to the terms and conditions herein.
2. Services. WWD #18 through its staff, general counsel and such other consultants as may be reasonably necessary, will in good faith use its best efforts to assist Friant Ranch in connection with efforts to: (1) obtain approvals from USBR and, as necessary, USFWS for the Proposed Transfer and Proposed Annexation; (2) prepare a SB 610 Water Supply Assessment and SB 221 Verification of Water Supply for the Proposed Project; (3) comply with CEQA for WWD #18 approval of the Proposed Transfer and Proposed Annexation; (4) cooperate with Friant Ranch in designing and preparing plans for the Proposed WWTP; (5) process Regional Board and DHS approvals for the Proposed WWTP; (6) process WWD #18 approval and coordinate environmental review for the Proposed WWTP; (7) ensure appropriate NEPA and NHPA compliance for the USBR approval of the Proposed Transfer, the Proposed Annexation and the Proposed WTP Expansion; (8) cooperate with Friant Ranch in designing and preparing plans for WTP Expansion; (9) process DHS approval of the Proposed WTP Expansion; (10) process and coordinate environmental review for the Proposed WTP Expansion; (11) obtain LAFCO approval for the annexation of the Proposed Project lands into WWD #18; (12) process and consider the creation of the Proposed Zone; and (13) obtain or prepare any other approval(s), studies, reports, plans, and/or designs that the Parties hereafter mutually consent to undertake in connection with the Proposed Annexation, Proposed Transfer, Proposed Zone, Proposed WWTP, Proposed WTP Expansion, SB 610 Water Supply Assessment and SB 221 Verification of Water Supply. The



assistance of WWD #18's staff and general counsel in these efforts will be limited to activities specifically requested by Friant Ranch or as reasonably deemed necessary by WWD #18 and as time may reasonably allow in light of other time commitments and obligations. WWD #18 may hire consultant(s) upon receipt of Friant Ranch's written approval selected consultant(s) and scope of work, as necessary to undertake any of the above listed tasks so long as Friant Ranch approves of the consultant(s) selected by WWD #18.

3. Compensation and Reimbursement. Friant Ranch shall reimburse WWD #18 for all of WWD #18's out-of-pocket expenditures incurred as a result of WWD #18's performance of the services described in Section 2 of this Agreement. These out-of-pocket expenditures shall include but are not limited to: (1) WWD #18' payments to its general counsel for legal services and fees incurred as a result of WWD #18's performance of services requested by Friant Ranch under Section 2 of this Agreement; (2) WWD #18 staff time expended as a result of WWD #18's performance of services requested by Friant Ranch under Section 2 of this Agreement, the reimbursement for which time shall be at the rate of \$15.00 per hour (clerical) and \$50.00 per hour (Manager) of work performed under this Agreement; (3) all expenses incurred as a result of the Letter of Agreement, including but not limited to the \$3,000 upfront payment, processing of USBR's NHPA and NEPA compliance and all future payments made to USBR under the Letter of Agreement; (4) expenses incurred by WWD #18 for the preparation of a SB 610 Water Supply Assessment and SB 221 Verification of Water Supply for the Proposed Project; (5) expenses incurred by WWD #18 for the Regional Board and DHS approval processing and environmental review of the Proposed WWTP; (6) expenses incurred by WWD #18 for the processing of DHS

approval and environmental review for the WTP Expansion; and (7) expenses incurred for outside consultants pursuant to contracts approved by Friant Ranch. Costs and expenses of WWD #18 reflected to in this paragraph shall be paid as they are incurred or, upon presentation of an estimate of expected costs or expenses.

4. Termination. Either party shall have the right to terminate this Agreement upon written notice to the other party. In the event that WWD #18 or Friant Ranch give written notice of termination or USBR denies the approval or otherwise refuses to process the Proposed Transfer as provided for in the Letter of Agreement; (1) WWD #18 shall immediately cease rendering services upon receipt of such written notice; (2) WWD #18 shall immediately provide to Friant Ranch all work product related to this Agreement without further cost to Friant Ranch, including but not limited to all originals and drafts of any and all reports, plans, specifications, assessments, studies, applications, correspondence, notes, designs, resolutions, notices, approvals, documents prepared for CEQA compliance, SB 610 Water Supply Assessments and SB 221 Verification of Water Supply; and (3) Friant Ranch shall be required to reimburse WWD #18 for all time spent and out-of-pocket expenses incurred up to the date of termination. Nothing herein constitutes a waiver by the Parties from recovery of any and all damages authorized by law.

5. Hold Harmless and Indemnification. Each party agrees to protect, defend, indemnify and hold harmless the other Party, its directors, officers, agents, servants, employees and consultants from and against any and all losses, claims liens, demands and causes of action of every kind and character as may be brought by any non-party to this Agreement, without limitation by enumeration, occurring or in any way incident to,

connected with, or arising directly or indirectly out of the performance or non-performance by the indemnifying party hereunder.

6. Assignment. This Agreement may be assigned by Friant Ranch upon written consent of WWD #18. WWD #18 shall not unreasonably withhold or delay consent to assignment of this Agreement. WWD #18 shall not be entitled to assign its obligations under this Agreement.

7. Partial Invalidity. The invalidity or unenforceability of any provision of this Agreement shall in no way affect the validity or enforceability of any other provision of this Agreement.

8. Waiver. Failure to insist upon strict compliance with any provision of this Agreement shall not be deemed to be a waiver of such provision or any other provision; waiver of breach of any provision of this Agreement shall not be deemed to be a waiver of any other provision or of any subsequent breach of such provision.

9. Binding Effect. This Agreement shall be binding upon, and inure to the benefit of any successors-in-interest or permitted assigns of the Parties.

10. Entire Agreement. This Agreement between WWD #18 and Friant Ranch constitutes the entire agreement between WWD #18 and Friant Ranch as it relates to services performed hereunder. Except for the Letter of Agreement, Letter of Intent and Principles of Agreement incorporated herein by reference, this Agreement supersedes

all prior and contemporaneous agreements, understandings and representations between the parties, whether written or oral. No supplement, modification or amendment of this Agreement shall be binding unless executed in writing by WWD #18 and Friant Ranch.

11. Applicable Law. This Agreement shall be governed by the laws of the State of California except to the extent that federal law governs.

12. Notices.

(a) All notices provided for in this Agreement shall be sent or delivered by registered or certified mail to the parties, return receipt requested, with a copy forwarded to each of their respective attorneys and designated representatives by the same method, at the addresses set forth below or at such other addresses as the parties shall designate to each other in writing:

WWD #18

Waterworks District #18  
c/o Dan Pearce  
P.O. Box 92  
Friant, CA 93626-0092  
Telephone: (559) 822-3566  
Facsimile: (559) 822-3577

With copy to:

Neal E. Costanzo  
Hargrove & Costanzo  
575 E. Locust Ave., Suite 115  
Fresno, CA 93720  
Telephone: (559) 261-0163  
Facsimile: (559) 2361-0706

Friant Ranch

Friant Ranch, a Limited Partnership

c/o Bryan N. Wagner  
1322 E. Shaw Ave., Suite 340  
Fresno, CA 93710  
Telephone: (559) 224-0871  
Facsimile: (559) 224-0885

With copy to:

Martin & Associates  
c/o Dennis Bacopulos  
201 Shipyard Way, Cabin 1  
Newport Beach, CA 92663  
Telephone: (949) 673-4474  
Facsimile: (949) 760-9728

Jacqueline L. McDonald  
Stomach, Simmons & Dunn  
813 Sixth Street, Third Floor  
Sacramento, CA 95814  
Telephone: (916) 446-7979  
Facsimile: (916) 446-8199

(b) Any notice or demand so given, delivered or made by United States mail shall be deemed so given, delivered or made on the second business day after the same is deposited in the United States mail registered or certified matter, addressed as above provided, with postage thereon prepaid. Any such notice, demand or document not given, delivered or made by registered or certified mail as aforesaid shall be deemed to be given, delivered or made upon receipt of the same by the party to whom the same is to be given, delivered or made.

(c) WWD #18 and Friant Ranch may from time to time notify the other of changes with respect to where and to whom notices should be sent by sending notification of such changes pursuant to this section.

**IN WITNESS WHEREOF**, the Parties have executed this Agreement effective

as of the date first written above.

FRESNO COUNTY WATERWORKS DISTRICT #18

By: Mark A. Sharer  
Mark A. Sharer, President

FRIANT RANCH, A LIMITED PARTNERSHIP

By: SWD Investments – Friant Ranch, Inc.,  
General Partner

By: Bryan N. Wagner  
Bryan N. Wagner, Secretary

**APPENDIX I**

## WATER INFRASTRUCTURE COST ESTIMATE

### PHASE 1

#### Phase 1 (1800 EDU System Capacity)

Acquire water Rights	1	LS	\$3,000,000.00	\$3,000,000.00
Treatment Additions- WWD 18 WTP:				
Added Capacity (Building & initial filters)	350,000	GPD	\$5.25	\$1,837,500.00
Added Storage at WTP	1,000,000	GAL	\$1.00	\$1,000,000.00
New 20" Main- WTP to FR	6,000	LF	\$80.00	\$480,000.00
Irrigation (Use Raw/ Reclaimed water)	25,000	LF	\$20.00	\$500,000.00

**PHASE 1 TOTAL: \$6,817,500.00**

### PHASE 2

#### Phase 2 (3720 EDU System Capacity)

Treatment Additions - Filters for Capacity	550,000	GPD	\$0.75	\$412,500.00
Storage at FR (For later phases)	1,000,000	GAL	\$1.10	\$1,100,000.00
Pumping at FR (For later phases)	1	LS	\$250,000.00	\$250,000.00
Irrigation (Use Raw/ Reclaimed water)	25,000	LF	\$20.00	\$500,000.00

**PHASE 2 TOTAL: \$2,262,500.00**

**GRAND TOTAL: \$9,080,000.00**



**APPENDIX J**



## FRESNO COUNTY WATERWORKS #18

"Serving the Friant Community"  
P.O. Box 92 3726 Fleming St.  
FRIANT, CALIFORNIA 93626  
(209) 822-2533

The following sections are the District's Conservation Rules adopted by the Board of Directors June 26, 2007 for less than normal water allotment for the District.

Due to an allocation of only 60% of water allocation for the District this year by the U.S. Bureau of Reclamation the following rules will apply from this date forward:

1. Water utilized for the irrigation of lawns or other outdoor planting shall be applied so there is no excess runoff. All outdoor sprinklers and hoses must be equipped with automatic shutoff devices and drip irrigation is recommended.
2. From this day forward, until notified otherwise, watering shall only be done between the hours of 10:00 p.m. and 4:00 a.m.
3. Watering during these periods shall be done according to address. Even numbered addresses waters on Monday, Wednesday and Saturday. Odd numbered addresses water on Tuesday, Thursday and Sunday.
4. It is recommended that all new construction or expansion of landscaping be done using drought tolerant plants.
5. There shall be no exchanging of water in swimming pools. All fountains or ponds shall use internally recirculated water.
6. Water saving devices shall be incorporated into all interior plumbing fixtures and other installations of any new construction within the District.
7. No washing of autos, boats or other vehicles will be permitted without the use of automatic shutoff devices on hoses.
8. Construction water used for consolidation of backfill, dust control and other non-essential uses shall be taken from other sources first, utilizing backwash water if possible. Water used for such purposes will be charged at three times the normal rate for overage.
9. Penalties for violation of these regulations are:
  - 1<sup>st</sup> offense.....Verbal Warning
  - 2<sup>nd</sup> offense.....Written Warning
  - 3<sup>rd</sup> offense.....Fine of \$50.00
  - 4<sup>th</sup> offense.....Fine of \$100.00
  - 5<sup>th</sup> offense and all others....\$250.00 per violation.

It is the intent of the District to urge conservation of all water but to especially urge restraint in non-essential uses in light of the current 60% allocation.

**THANK YOU FOR YOUR HELP IN CONSERVING!**



**FRESNO COUNTY WATERWORKS #18**

"Serving the Friant Community"  
P.O. Box 92 3726 Fleming St.  
FRIANT, CALIFORNIA 93626  
(209) 822-2533

**RESOLUTION 07 - 05**

**FRESNO COUNTY WATERWORKS # 18  
ADOPTING CONSERVATION RULES FOR DISTRICT**

.....

**WHEREAS**, the Board of Directors of Fresno County Waterworks District #18 adopted Conservation Rules for the District on June 21, 1996; and

**WHEREAS**, Fresno County Waterworks District #18 has been allocated 60% of water allotment from the United States Bureau of Reclamation for the fiscal year 2007-08; and

**WHEREAS**, the Board of Directors has determined that it is necessary to conserve water within the District; and

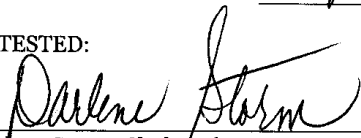
**WHEREAS**, the Board of Directors has determined that the rules adopted previously concerning conserving water has been approved by the United States Bureau of Reclamation, the Board has determined that with placement of added conservation measures it should adopt the updated rules.

**NOW, THEREFORE BE IT RESOLVED**, that the Board of Directors on this date has determined that it is in the best interest of the community of Friant to adopt the attached rules of water conservation and hereby adopts the Conservation Rules for the District and implements the same.

The foregoing Resolution was passed and adopted at a regular meeting of the Board of Directors of the Fresno County Waterworks District #18 on the 26<sup>th</sup> day of June, 2007, by the following vote:

Ayes:	3	Board Members: Carlton, Tipton and Hiner
Noes:	0	Board Members:
Absent:	2	Board Members: Sharer and Stotts

  
\_\_\_\_\_  
Mark A. Sharer, President

ATTESTED:  
  
\_\_\_\_\_  
Darlene Storm, Clerk to the Board of Directors

**APPENDIX J**



## **FRESNO COUNTY WATERWORKS #18**

"Serving the Friant Community"  
P.O. Box 92 3726 Fleming St.  
FRIANT, CALIFORNIA 93626  
(209) 822-2533

### **RESOLUTION 08 – 02**

**ADOPTING WATER SUPPLY ASSESSMENT – EVALUATING THE ABILITY OF FRESNO COUNTY WATERWORKS DISTRICT #18 TO MEET WATER SUPPLY DEMANDS ASSOCIATED WITH THE PROPOSED FRIANT RANCH DEVELOPMENT, IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 10910, ET SEQ, OF THE CALIFORNIA WATER CODE.**

**WHEREAS**, Fresno County Waterworks District #18, a county waterworks district formed pursuant to California Water Code Section 55000 et seq. (the "District"), is responsible for providing a safe and reliable water supply to the residential and commercial customers located within its service area, which generally comprises the unincorporated community of Friant, County of Fresno, State of California and is authorized to construct, maintain and operate sewage collection and treatment facilities; and

**WHEREAS**, the Water Supply Assessment evaluates the ability of Fresno County Waterworks District #18 to meet water supply demands associated with the construction of a mixed use development through the proposed Friant Ranch Specific Plan in accordance with the requirements of Section 10910, et seq, of the California Water Code; and

**WHEREAS**, Friant Ranch, a Limited Partnership (“Friant Ranch”) is working with the County of Fresno to entitle and develop a master planned residential community containing approximately 2,996 residential units, which include 2,683 units of age-restricted (55 years of age and older) single family housing, 83 age-restricted (55 years of age and older) multi-family units and 180 non-age restricted multi-family units. The Project also proposes a village center on approximately 21.3 acres, comprising 250,000 square feet of retail and commercial uses, along with 50 non-age restricted residential units in Fresno County, located immediately adjacent to the service area of the District; and

**WHEREAS**, Fresno County Waterworks District #18 is required by SB 610 to prepare and adopt a Water Supply Assessment prior to consideration of annexation of Friant Ranch; and

**WHEREAS**, Friant Ranch must locate and acquire a water supply for the Proposed Project and, to that end, Friant Ranch and the Lower Tule River Irrigation District (“LTRID”) have entered into a letter of intent which proposes the long term transfer of water provided by the Friant Division of the Central Valley Project consisting of up to 2,000 acre-feet of water annually from LTRID to a specific zone of benefit within the Waterworks District #18 for the primary benefit of providing a safe and reliable water supply for the residents of Friant Ranch (the “Proposed Transfer”); and

**WHEREAS**, the District will process and consider the creation of a proposed zone of benefit within its service area, which zone will include only the boundaries of the Proposed Project, for purposes of receiving water pursuant to the Proposed Transfer and creating the requisite infrastructure therefore (“Proposed Zone”); and

**WHEREAS**, Friant Ranch has requested that the District serve the water and wastewater needs for the Proposed Project and the District intends to consider Friant Ranch's request to include the Proposed Project in its service area and to provide water and wastewater services to the Proposed Project; and

**WHEREAS**, the District as justified through the Water Supply Assessment, has identified sufficient future water supplies currently available to satisfy the projected 20-year demands for the Friant Ranch Project, in addition to the District's existing and planned future uses, during normal, critical dry and multiple-dry years; and

**WHEREAS**, the Project water supply includes the use of reclaimed water for outdoor landscaping uses, subject to review by the Central Valley Regional Water Quality Control Board; and

**WHEREAS**, the District does not currently have the water supply infrastructure or water rights to serve the Friant Ranch Project or other planned future growth within the District, the Water Supply Assessment explains the requisite steps the District is taking to acquire and develop the identified water supplies to serve the Project; and

**WHEREAS**, the Water Supply Assessment also explains potential uncertainties related to the water supply and the District's plan for addressing such uncertainties, which relate to the identified Project water supply; and

**WHEREAS**, the District and Lower Tule River Irrigation District contract with the United States Bureau of Reclamation for class 1 water supply and those contracts are set to expire in 2026. However, the contracts provide for a 25-year renewal so long as certain conditions are met. The USBR will consider the contractors' written requests for a renewal, subject to Endangered Species Act, 16 U.S.C. §1536 et seq (ESA) and National Environmental Policy Act, 42 U.S.C. § 4321 et seq (NEPA) compliance.

**NOW, THEREFORE BE IT RESOLVED THAT:**

The District hereby approves and adopts the Water Supply Assessment for Fresno County Waterworks District #18 and the Board of Directors hereby affirms and states that it does not by this Resolution grant any entitlement, approve the annexation of new lands, or authorize execution of any water transfer or service agreement.



**THE FOREGOING RESOLUTION WAS PASSED AND ADOPTED** at a regular meeting of the Board of Directors of the Fresno County Waterworks District #18 on the 29<sup>th</sup> day of January 2008, by the following vote:

AYES: 5 BOARD MEMBERS: Sharer, Carlton, Tipton, Hiner & Stotts  
NOES: BOARD MEMBERS:  
ABSENT: BOARD MEMBERS:  
ABSTAIN: BOARD MEMBERS:

*Mark A. Sharer*

Mark A. Sharer, President  
Board of Directors  
Fresno County Waterworks District #18

ATTESTED:

*Darlene Storm*

Darlene Storm, Clerk to the Board of Directors

## Attachment 2

**FIRST AMENDMENT TO OPTION AND  
LONG TERM WATER TRANSFER AGREEMENT**

**THIS FIRST AMENDMENT TO OPTION AND LONG TERM WATER TRANSFER AGREEMENT** is made this 21<sup>st</sup> day of September, 2016, by and between the Lower Tule River Irrigation District, a California irrigation district organized under Division 11 of the California Water Code (“LTRID”), and Fresno County Waterworks District 18, a county waterworks district formed pursuant to the County Waterworks District Law contained in California Water Code Section 55000 et seq. (“WWD 18”) (collectively, the “Parties”) with reference to the facts set forth below. Capitalized terms used herein shall have the meaning given them in the Transfer Agreement unless otherwise stated in this Amendment.

**RECITALS:**

WHEREAS, the Parties hereto entered into that certain Option and Long Term Water Transfer Agreement dated April 13, 2011 (the “Transfer Agreement”) which provides for the long-term purchase of the right to receive up to 2,000 acre-feet of LTRID Class 1 Water Entitlement (referred to herein as the “Water Supply”) from LTRID to WWD 18 in order to provide a safe and reliable long term water supply for the residents within the Friant Ranch Specific Plan development and within the existing Friant Community (the “WWD 18 Service Area”);

WHEREAS, the Transfer Agreement states that LTRID has an entitlement of 61,200 acre feet of Class 1 Water Entitlement from the United States Bureau of Reclamation (the “USBR”) for delivery of water from the Friant Division of the Central Valley Project and that WWD 18 shall have the right to the Water Supply from LTRID for so long as the LTRID has the right to receive Friant Division CVP water;

WHEREAS, by Letter of Agreement dated May 23, 2014, the USBR consented to the long term water transfer between LTRID and WWD 18 as set forth in the Transfer Agreement;

WHEREAS, as a result of exceptional drought conditions in 2014, the USBR determined, for the first time in the history of the Central Valley Project and again in 2015, that the Friant Division of the Central Valley Project would receive a zero percent allocation of water for the holders of Class 1 Water Entitlement; and

WHEREAS, in order to insure a safe and reliable long term water supply for the residents within the WWD 18 Service Area, the Parties desire to amend the Transfer Agreement on the terms and conditions provided herein to provide for a carryover supply of LTRID water available to satisfy the Water Supply rights under the Transfer Agreement.

**AGREEMENT:**

NOW, THEREFORE, in consideration of the foregoing recitals which are hereby incorporated in this Agreement and in consideration of the mutual promises, obligations and covenants contained herein, the Parties hereby agree as follows:

**1. Back-Up Water Supply.**

a. On or before the end of each Water Year, LTRID shall request that the USBR reschedule to the subsequent Water Year an amount of LTRID Class 1 Water Entitlement for that year that is equal to two times the amount of Water Supply that as of that Water Year has been purchased under the Transfer Agreement (“Carryover Water”). The Carryover Water shall be held in Millerton Lake as a supply to meet any of LTRID’s water supply needs for the subsequent water year, including, if necessary WWD 18 demands under the Transfer Agreement.

b. WWD 18 shall reimburse LTRID the full amount of any rates or charges charged by USBR for rescheduling LTRID water as required by Section 1.a. above. Such reimbursement requirement shall be considered an additional component of the Cost of Water as

defined in Section 5.2 of the Transfer Agreement. To the extent the Carryover Water is used by LTRID or used to meet other obligations of LTRID, WWD 18 will be reimbursed for the portion of the USBR rescheduling costs associated with such water.

c. In the event that LTRID is unable to reschedule and deliver Carryover Water pursuant to section a. above, LTRID will take such further action as is necessary to deliver to WWD 18 the Water Supply that has been purchased by WWD 18. LTRID hereby represents and warrants that it owns or controls various hydrologic resources which can be used to allow it to deliver the Water Supply provided for in the Transfer Agreement in the event of a critical dry year shortfall. Subject to its final determination, LTRID will use its best efforts to cause the Water Supply to be delivered to WWD 18 including, but not limited to, pumping the water generated by its pre-1914 water rights on the Tule River into the Friant Kern Canal so as to meet a portion of its commitments downstream thereby making available Class 1 Entitlement in Millerton Lake which can be delivered to WWD 18.

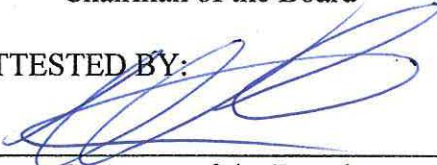
2. **Priority Access to Carryover Water.** LTRID hereby represents and warrants that the Carryover Water held by LTRID pursuant to Section 1.a. above shall be available to WWD 18 on a first priority basis under the Transfer Agreement. Pursuant to such priority, LTRID may use Carryover Water to satisfy its own water supply demands or to satisfy other contractual obligations, but only after Carryover Water is first used to satisfy obligations under the Transfer Agreement, if necessary.

3. **Reaffirmation.** Except as amended hereby, the parties hereby reaffirm each and every term and provision of the Transfer Agreement.

IN WITNESS WHEREOF, the Parties have executed this First Amendment to Option and Long Term Water Transfer Agreement dated April 13, 2011 on the date set forth above.

LOWER TULE RIVER IRRIGATION DISTRICT  
a California irrigation district organized under  
Division 11 of the California Water Code

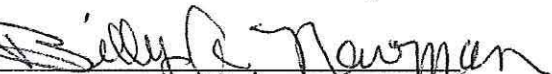
By:   
Chairman of the Board


ATTESTED BY:  
  
Secretary of the Board

APPROVED AS TO FORM:


By:   
Counsel for Lower Tule River Ranch

FRESNO COUNTY WATER WORKS DISTRICT  
18, a county waterworks district formed pursuant to  
the County Waterworks District Law in California  
Water Code Section 55000 et seq.

By:   
Chairman of the Board

ATTESTED BY:  
  
Secretary of the Board

APPROVED AS TO FORM:

By:   
Counsel for the Fresno County Waterworks  
District 18