



# Kernville Raw Water Intake Upgrade Project

## Initial Study – Mitigated Negative Declaration

*prepared for*

**State Water Resources Control Board**  
1001 I Street  
Sacramento, California 95814

*prepared by*

**California Water Service**  
Kern River Valley District  
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**March 2025**



RINCON CONSULTANTS, INC. SINCE 1994

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# Initial Study

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## 1. Project Title

Kernville Raw Water Intake Upgrade Project

## 2. CEQA Lead Agency Name and Address

Wendy Pierce  
(916) 449-5178  
State Water Resources Control Board (State Water Board)  
1001 I Street  
Sacramento, California 95814

## 3. Project Sponsor Name and Address

California Water Service  
Kern River Valley District  
7138 Lake Isabella Boulevard  
Lake Isabella, California 93240

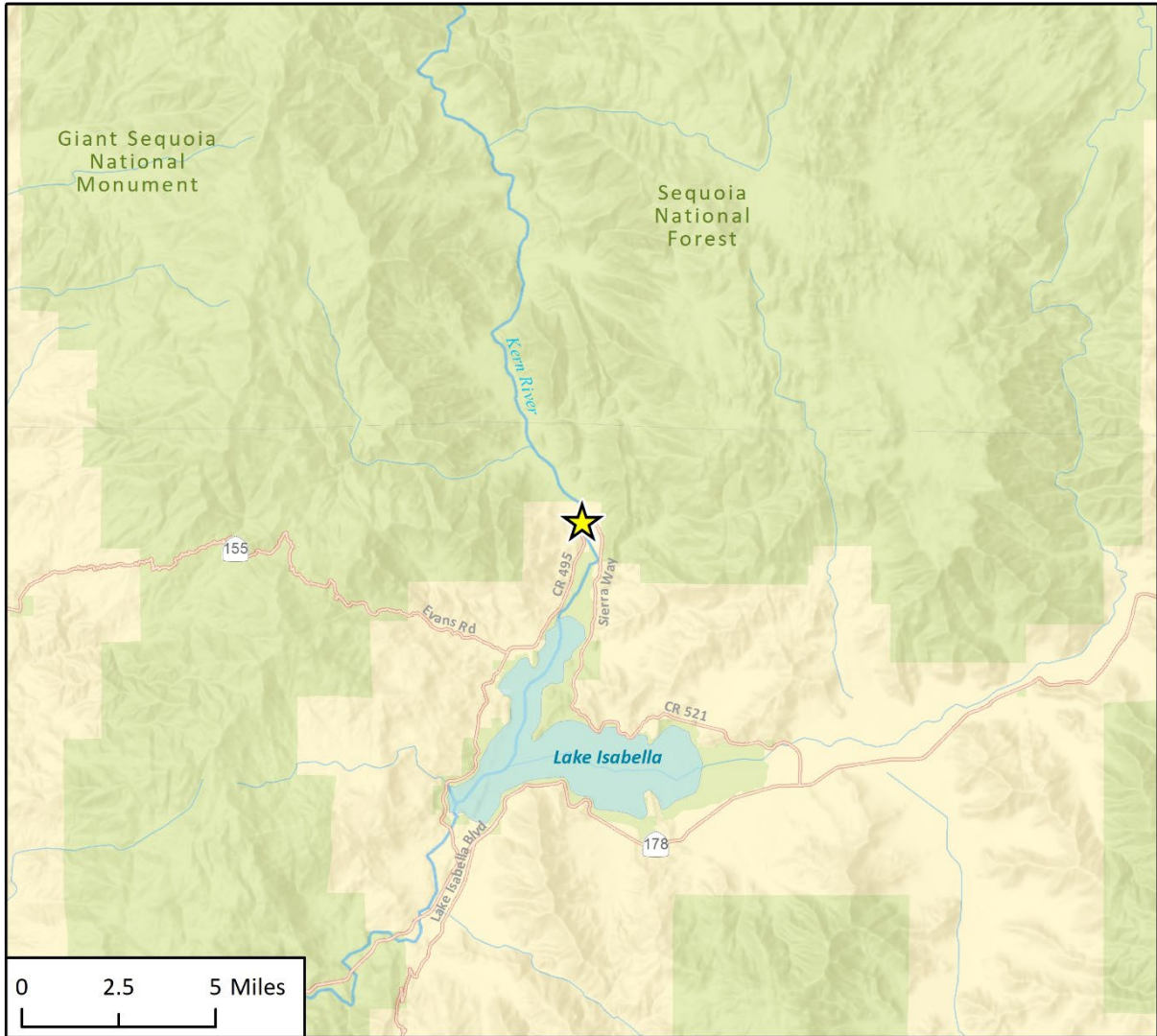
Kellen Boyce, Operations Manager  
California Water Services  
(661) 595-5609  
kboyce@calwater.com

## 4. Project Location

The approximately 0.53-acre project site is located in the census-designated town of Kernville in Kern County, California. The project site is located along the western riverbank of the Kern River, approximately 100 feet northeast of the Sirretta Street and Kernville Road intersection. The project site is located within an approximately 2.6-acre parcel identified as Assessor's Parcel Number (APN) 082-030-06. Access and staging areas may extend to the adjacent parcel identified as APN 082-030-05.

Local access to the project site is provided by Kernville Road, and regional access is provided by Sierra Way and Burlando Road. Specifically, the project site is accessed from a driveway located on the northern side of Kernville Road, southwest of the project site. Figure 1 depicts the regional location of the project site and Figure 2 depicts the project site in its local context as well as the location of individual Kernville Raw Water Intake Upgrade Project (herein referred to as "project" or "proposed project") components.

Figure 1 Regional Location



Basemap provided by Esri and its licensors © 2022.

★ Project Location



Fig. 1. Regional Location



Figure 2 Project Site Location



Imagery provided by Microsoft Bing and its licensors © 2024.

21-12210 CH  
Figure 2 APE Map\_REV

## 5. General Plan Designation

The eastern portion of the project site has a Kern County General Plan land use designation of Residential 5.2 (which allows a maximum of 16 units/net acre). The eastern portion of the project site (along the Kern River) has a land use designation of Resource Reserve 8.2 (which has a minimum of 20- or 80- acre parcel size) (Kern County 2009a; Kern County 2022).

## 6. Zoning

The majority of the project site is zoned Highway Commercial (CH). The Zoning Ordinance states the CH zone is designed for areas located adjacent to or in close proximity to major highways and is intended to promote traveler-oriented uses. A small portion of the southwestern tip of the project site is zoned Neighborhood Commercial (C-1) (Kern County 2022). Kern County's Zoning Ordinance states the C-1 zone is designed for areas with low-intensity commercial activities oriented to serving nearby residential areas.

## 7. Surrounding Land Uses

Land uses surrounding the project site include commercial and residential uses across the intersection of Kernville Road and Sirretta Street, residential uses to the west and northwest, the Kern River to the east, and the Camp Kernville recreational campground to the north. The Riverview Lodge, a visitor-serving hotel, is located directly west of the driveway leading from Kernville Road to the project site. Surrounding land uses are consistent with Kern County land use designations of Major Commercial 6.1 (encompassing the area across the intersection of Kernville Road and Sirretta Street), Residential 5.2 (encompassing the area west and northwest of the project site), Resource Reserve 8.2 (encompassing the Kern River) and Resource Management 8.5 (encompassing the Camp Kernville campground) (Kern County 2022).

## 8. Description of Project

California Water Service (Cal Water) is proposing to replace an existing raw water intake system, which diverts water from the north fork of the Kern River to the Kernville Water Treatment Plant (WTP). The project components are discussed in more detail below. The information provided below is from the Preliminary Design Report prepared for the proposed project by Water Works Engineers (WWE) on January 7, 2022, as well as information provided by WWE in November 2022, March 2024, and May 2024. The State Water Board is the CEQA Lead Agency for the proposed project.

### **Existing Intake System**

Cal Water owns and operates the Kernville WTP, located approximately 1,200 feet northwest of the project site. Cal Water is permitted to withdraw up to 1,000 acre-feet per year (AFY) of water from the Kern River. The project would not change Cal Water's permitted water allocation.

The Kernville WTP currently utilizes surface water from the north fork of the Kern River as the primary raw water source. Water is pumped from the Kern River to a 400,000-gallon storage tank at the Kernville WTP, where it is treated to potable standards and distributed to approximately 5,900 customers through approximately 4,300 service connections in Cal Water's North Region service area, including through the Kernville, Arden, Mountain Shadows, Ponderosa Pines, and Country Woods systems. The total maximum daily demand on the Kernville WTP is 1,000 gallons per minute (gpm).

The existing raw water intake system is located on the west side of the Kernville River, just upriver of the Kernville Road Bridge at Cal Water's Kernville Station 003 (see Figure 3). The existing raw water intake system, comprised of an infiltration gallery<sup>1</sup> and one 50-horsepower (hp) submersible pump, was designed with a capacity of 1,050 gpm. However, capacity has been limited to 100-400-gpm due to operational constraints. The existing raw water intake system requires frequent flushing of air to scour and clean the system. Once air is flushed, the existing raw water intake system provides a maximum flow of approximately 200-gpm, which is further reduced when the water level in Kern River is low. Due to the limited operational capacity of the intake system, an auxiliary (i.e., emergency) raw water intake system, which utilizes a surface water intake (12-inch piping) with wire mesh intake screen and has a pumping capacity of 600 to 700 gpm, was installed approximately 100 feet upriver of the primary intake system to provide additional water supply during the non-winter months and low-flow periods during the winter months (see Figure 3). This auxiliary system is susceptible to damage and was only intended as a temporary solution to meet water demands. While the existing raw water intake system and auxiliary raw water intake system together can achieve total maximum daily demand, these systems require substantial routine maintenance.

## Proposed Intake System

### *Raw Water Intake Structure*

To restore the Kern River water supply capacity, Cal Water is proposing to remove the auxiliary raw water intake system and install a single, reliable 1,000-gpm raw water intake system to replace the existing raw water intake system and auxiliary intake system. The existing raw water intake system would remain in place as a backup system. The existing raw water intake system requires frequent scouring and provides low flow (200-gpm), and the auxiliary raw water intake system is susceptible to damage and was intended as a temporary solution to meet water demands. The intent of the proposed project is to provide a more reliable system that meets the design demand of 1,000-gpm. The proposed raw water intake system would be located downstream from the existing auxiliary intake system. The proposed raw water intake system would consist of an in-channel concrete intake structure, a self-cleaning cone screen, and two 50-hp submersible vertical turbine pumps (one primary pump and one backup pump). The conceptual design of the raw water intake system is shown in Figure 4. The site layout of the new system is shown in Appendix H.

Water from the Kern River would enter and flow through the concrete intake structure, through the self-cleaning cone screen, through a 12-inch pipe to the two parallel submersible vertical turbine pumps and tie into the existing 6-inch raw water piping at the Kernville Station 003. Raw water would then be conveyed to the Kernville WTP. The concrete intake structure would be a precast concrete structure approximately 5 feet in depth with sides 8 feet in width and 8 feet in length. The self-cleaning cone screen would be located in the intake structure to prevent fish and smaller debris from entering the turbine pumps. A stainless-steel trash rack with 4-inch openings would be located at the inlet of the intake structure to prevent large debris from entering the intake structure and to protect the cone screen from damage.

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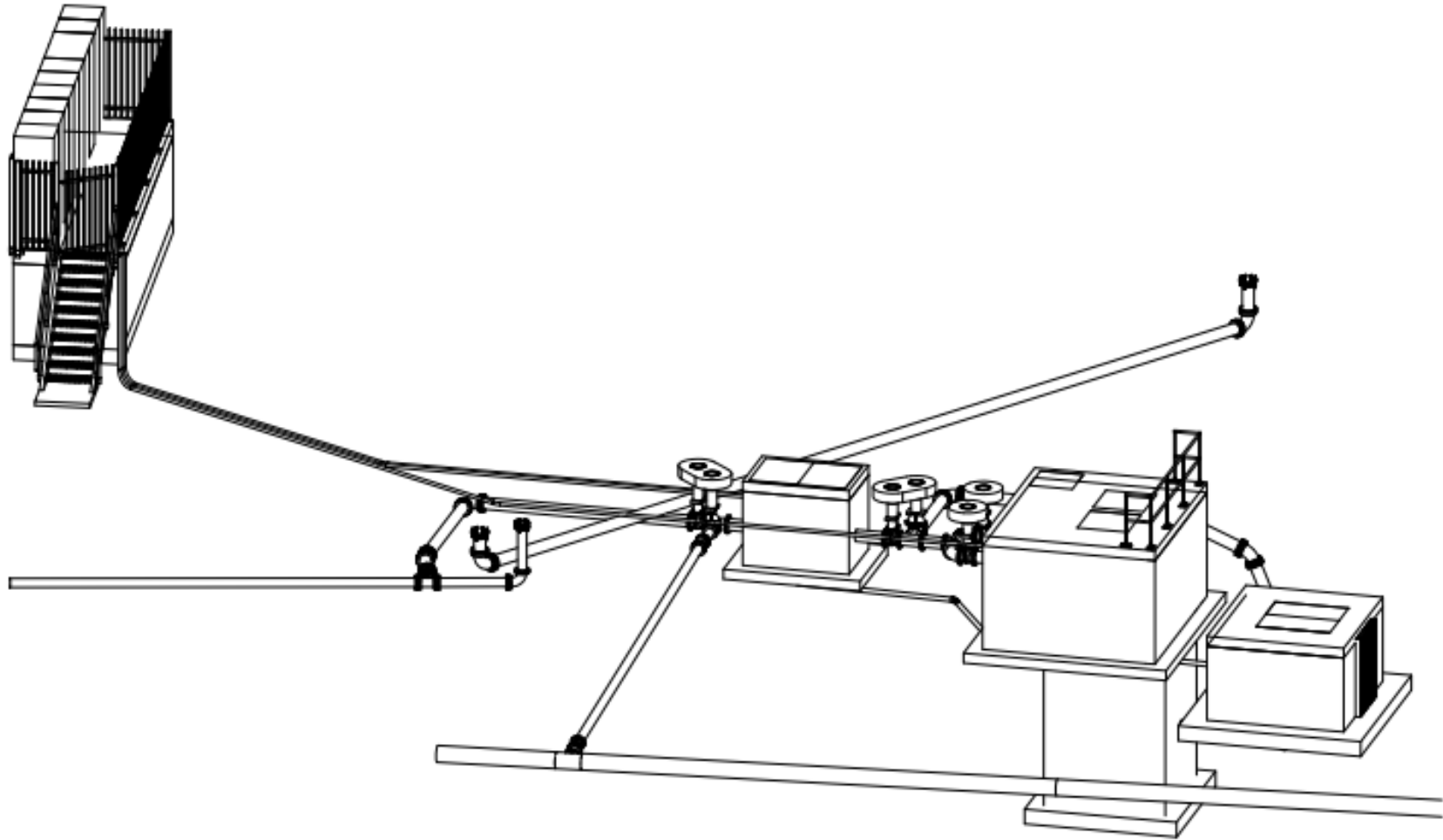
<sup>1</sup> An infiltration gallery is a horizontal system of perforated pipes that are located below the riverbed



Figure 3 Existing Raw Water Intake System Location



Figure 4 Raw Water Intake System Conceptual Design



### *Electrical Platform and Valve Vaults*

A 211-square-foot electrical platform would be constructed near the existing intake system valve vault, located at Kernville Station 003 (see Figure 3). The dimensions of the electrical platform would be as follows: approximately 8 feet in length by 26.5 feet in width, and 16 feet in height, including the electrical panels above the platform. The electrical equipment required to power the new intake system would be located on the electrical platform and elevated above the 100-year floodplain. The new electrical equipment would include an electrical meter, a 200-amp (200A) circuit breaker, variable frequency drives for the intake pumps, a feeder breaker for the intake screen, a step-down transformer, and a lighting panel. In addition, a new control panel with a remote telemetry unit would allow for automatic control of the intake pumps from the Kernville WTP.

Two vaults (a pump vault and a flowmeter vault) would be constructed to house the pumps, valves, instrumentation (for example, a flowmeter and pressure gauge), and an in-line turbidimeter. Both vaults would be installed below existing grade. The pump vault consists of a lower portion that houses the pump cans and an upper portion that houses the pump motor and valves. The lower portion and the upper portion would be separate precast structures. The overall depth of the pump vault would be approximately 20 feet. A guard rail would be installed on the southeast side of the new pump vault. The dimensions of the 35-square-foot flowmeter vault would be as follows: approximately 5 feet in length by 7 feet in width, and 6.3 feet tall (4 inches in height above existing grade).

### *Existing and Auxiliary Intake Systems*

The existing 125-square-foot pump house structure would be demolished as well as the adjacent air tank, piping, and existing electrical panels. Structures to be demolished are shown in Figure 2.

The auxiliary intake system would operate during construction of the replacement intake system. However, as shown in Figure 2, the above ground auxiliary intake piping and concrete pad would also be demolished upon completion of the new intake structure. The existing below ground piping and the valve vault would remain in place.

The existing intake system would remain in place after construction as a backup intake system. However, this system is not expected to be used regularly after construction.

### *Fencing*

The site currently does not include fencing. As part of the project, fencing would be provided only surrounding the electrical platform.

### *Lighting*

Submersible lights controlled by a switch would be installed within the pump vault. Lighting would also be installed on the exterior of the electrical platform. No additional lighting would be installed.

### *Riverbank Improvements*

Rip rap would be placed 20 feet upstream and 20 feet downstream of the new intake structure to reduce riverbank erosion due to the new intake system. The proposed rip rap is shown in Appendix H.

### *Restoration*

Approximately 30 cubic yards (CY) of reinforced, abandoned concrete blocks ranging in size from one to three CY each from previous bridge demolition would be removed from the Kern River bank, approximately five feet upstream from the existing auxiliary intake system.

### *Tree Removal*

Thirteen on-site trees would be removed to accommodate the new water intake system. The location of the trees to be removed is shown on Figure 2.

## **Operation and Maintenance**

The self-cleaning cone screen includes three rotating external brush arms (see Figure 5). The rotating brush arms would operate by a water turbine drive and would remove silt and debris build-up from the screen.

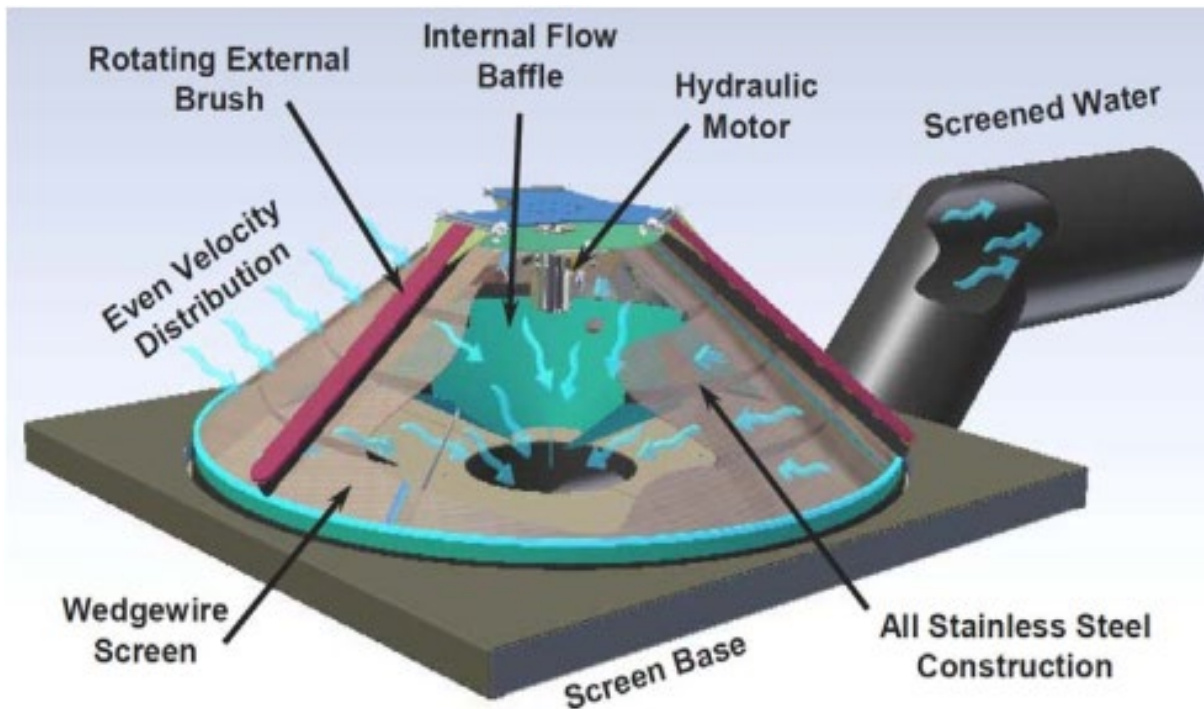
Turbidity during storm events can affect WTP operations. During operation, turbidity levels in the Kern River would be continuously monitored via a turbidimeter. During periods of high turbidity, the raw water pumps may be turned off to reduce solids loading to the WTP. In addition, the intake system and screen would be flushed with water from the raw water pumps periodically to remove fine sediment from around the screens.

Guide rails for stop logs would be provided at the inlet which would allow for maintenance of the cone screen. Accumulated sediment would be removed with the use of an 8-inch flush line that directs water from the combined discharge piping to the intake structure.

An operations and maintenance manual would be prepared prior to completion of construction. The manual would specify the maintenance requirements, which are typically:

- Remove sediment build up as required
- Annual inspection of screens (from inside intake structure)
- Replace cleaning brushes every 5 to 10 years
- Replace drive assembly every 10 years

**Figure 5 Self-Cleaning Cone Screen**



## Construction

### Access

During project construction, access to the project site would be provided via a private access road, which is accessible from Kernville Road, directly northeast of its intersection with Sirretta Street. The private access road is located on the parcel directly adjacent to the west of the project site.

### Staging

Construction staging would occur on the project site west of the riverbank (refer to Figure 2).

### Construction Personnel and Equipment

Project construction would require between three to six construction personnel per day. Construction equipment would consist of backhoes, compressors, cranes, dumpers, excavators, generators, loaders, pumps, and rollers.

### Dewatering and Flow Diversion

Due to the relatively shallow depth of the river, the construction area would be dewatered with the use of a temporary cofferdam system. The temporary cofferdam system would be installed prior to excavation so that dewatering activities can occur. The cofferdam system would keep the work area dry and prevent any sediment or construction debris from getting into the river. The cofferdam system would be a Portadam<sup>®</sup>, super sack system or other similar approved method. Construction would be limited to the months with the lowest historical water levels. Dewatering of the river would occur over approximately 2.5 months. Pile driving may be required if construction is extended to a time when water levels in the river are high.

In addition, due to high groundwater elevations on-site (9 feet below ground surface), groundwater dewatering would be required during construction of the underground facilities that would result in ground disturbing activities to depths greater than 9 feet below ground surface. Groundwater dewatering would occur over approximately 2.5 months. Cal Water intends to utilize a Baker Tank to store the dewatered groundwater and allow for sediment to settle prior to treatment and eventual discharge into the Kern River. Dewatered groundwater would be discharged to the Kern River in compliance with the requirements of the *Waste Discharge Requirements for Limited Threat Discharges to Surface Water* (Order R5-2022-0006-02), administered by the Central Valley Regional Water Quality Control Board (RWQCB). Cal Water would prepare and implement a Dewatering Plan, which would detail methods of dewatering, treatment, and disposal for river and groundwater dewatering.

### *Construction Schedule and Phasing*

Construction is anticipated to take approximately 9 months and is anticipated to start in May 2026 and be completed by the end of January 2027. The proposed project would be developed in the following phases: demolition, site preparation, grading, and construction.

Construction would occur Monday through Friday from 8 a.m. and 5 p.m. No nighttime construction would be required.

### *Grading and Soil Export*

Project construction would disturb approximately 7,100 square feet of soil. Project construction would require approximately 320 CY of cut and 184 CY of fill, with 136 CY of soil to be exported off site. Haul trucks would have capacities of approximately 16 CY. The maximum depth of excavation would vary by each component as follows: electrical platform (approximately 2 feet); flowmeter vault (approximately 7.3 feet); intake structure (approximately 7.7 feet); and pump vault (approximately 20.8 feet).

### *Haul Routes*

The construction haul route would begin at the project site and travel to Bena Landfill, located at 2951 Neumarkel Road in Bakersfield. The construction haul route would primarily travel along State Route 178 (SR-178), State Route 184 (SR-184), and State Route 58 (SR-58).

## 9. Other Public Agencies Whose Approval is Required

The State Water Board will approve the final Initial-Study Mitigated Negative Declaration (IS-MND). In addition, the approvals are required from the following agencies:

- United States Army Corps of Engineers (USACE) Clean Water Act Section 404
- State Water Board Clean Water Act Section 401 Water Quality Certification
- Central Valley RWQCB Waste Discharge Requirements for Limited Threat Discharges to Surface Water
- California Department of Fish and Wildlife (CDFW) Fish Game Code Section 1602 Lake and Streambed Alteration Agreement
- State Historic Preservation Officer (SHPO): Section 106 consultation with SHPO is required as part of the Section 404 permit process



**Kernville Raw Water Intake Upgrade Project**

- Central Valley Flood Protection Board (CVFPB) Encroachment Permit
- CVFPB No-Rise Certification
- State Water Board, Division of Drinking Water Domestic Water Supply Permit

## 10. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

On October 30, 2024, project notification letters with invitations to consult on the project were sent by email to representatives of the two tribes on the State Water Board's Assembly Bill 52 list for the project area: the Big Pine Paiute Tribe of Owens Valley and the Santa Rosa Rancheria Tachi Yokut Tribe. Neither tribe requested consultation with the State Water Board. On October 11 and 14, 2024, letters were emailed to the individuals on the Native American Heritage Commission (NAHC) contact list including the Big Pine Paiute Tribe of the Owens Valley, Chumash Council of Bakersfield, Kern Valley Indian Community, Kitanemuk & Yowlumne Tejon Indians, Tejon Indian Tribe, Tubatulabals of Kern Valley, and the Tule River Indian Tribe. Follow-up emails or phone calls to all NAHC-listed contacts were completed on October 18, 2024 and October 28, 2024, to confirm receipt of the letter and again ask about knowledge or concerns about cultural resources in the project area. None of the tribes contacted requested consultation.

## Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Aesthetics                      | <input type="checkbox"/> Agriculture and Forestry Resources | <input checked="" type="checkbox"/> Air Quality             |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources      | <input type="checkbox"/> Energy                             |
| <input checked="" type="checkbox"/> Geology and Soils    | <input type="checkbox"/> Greenhouse Gas Emissions           | <input type="checkbox"/> Hazards and Hazardous Materials    |
| <input type="checkbox"/> Hydrology and Water Quality     | <input type="checkbox"/> Land Use and Planning              | <input type="checkbox"/> Mineral Resources                  |
| <input checked="" type="checkbox"/> Noise                | <input type="checkbox"/> Population and Housing             | <input type="checkbox"/> Public Services                    |
| <input type="checkbox"/> Recreation                      | <input type="checkbox"/> Transportation                     | <input type="checkbox"/> Tribal Cultural Resources          |
| <input type="checkbox"/> Utilities and Service Systems   | <input type="checkbox"/> Wildfire                           | <input type="checkbox"/> Mandatory Findings of Significance |

## Determination

Based on this initial evaluation the State Water Board finds that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

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# Environmental Checklist

## 1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*a. Would the project have a substantial adverse effect on a scenic vista?*

The Kern County General Plan does not identify any scenic vistas within the vicinity of the project site (Kern County 2009a). However, foothills to the northeast and southwest provide views that are accessible at the project site. Construction and operation of the proposed project would not interfere with the views of the foothills, as the project would primarily consist of ground-level improvements without substantially tall or large components. As part of the project, the existing pump tank (10 feet tall), electric panelboard (7 feet tall), and electric poles (20 feet tall) would be demolished and removed. The proposed project includes installation of an approximately 16-foot-tall electrical platform and an approximately 20-foot-tall pump vault. These new structures would be similar in height to the existing on-site structures to be removed and therefore would not introduce new development taller than the existing on-site conditions. As stated in Section 13, *Noise*, to mitigate short-term temporary construction noise impacts, the construction contractor would utilize temporary noise barriers at minimum of 10 feet tall to reduce on-site construction noise. These barriers would result in temporary disruptions of views of the foothills from the project site; however, these would also block views of the construction activities. The barriers would be

removed following the completion of construction and would not result in a long-term obstruction of the foothills. These components would not substantially reduce views of the foothills accessible to the public from the Kern River, Kernville Road, and surrounding areas. Therefore, the proposed project would have a less than significant impact on scenic vistas.

#### **LESS-THAN-SIGNIFICANT IMPACT**

- b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

The California Department of Transportation (Caltrans) designates state scenic highways throughout California. The project site is not adjacent to an Officially Designated or Eligible state scenic highway. The nearest Officially Designated state scenic highway is State Route 190 (SR-190), located approximately 61.5 miles northeast of the project site (Caltrans 2018). The project site is not visible from SR-190. Therefore, the proposed project would not substantially damage scenic resources within a state scenic highway. No impact would occur.

#### **NO IMPACT**

- c. Would the project, 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 a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

California Public Resources Code (PRC) Section 21071 defines an urbanized area as an unincorporated area either completely surrounded by one or more incorporated cities or located within an urban growth boundary. The project site is within unincorporated Kern County and is not surrounded by incorporated cities. The project site is not within the urban growth boundary of another city. Therefore, the project site is considered to be located in a non-urbanized area for the purposes of this analysis.

Construction would involve temporary staging on the project site to the west of the bank of the Kern River. Although temporary staging areas and construction activities within and adjacent to the Kern River could alter existing visual character, equipment usage and staging would be short-term and temporary. While construction activities would require dewatering of the Kern River, which would interfere with regular views of the river, these activities would also be short-term and temporary, and the Kern River would be restored to existing conditions at the end of construction. Upon completion, all construction materials and equipment would be removed from the project site. Therefore, construction would have a less than significant impact on existing visual character.

The proposed project would replace an existing raw water intake system and ancillary structures (electrical platform and pump vault) at the project site. This change would involve the introduction of additional water infrastructure on-site, consistent with the existing on-site water infrastructure. The area surrounding the Kern River is developed and introducing additional structures would not be incompatible with the developed nature of the area surrounding the project site. The project would also remove 13 on-site trees. The Kern River is lined with trees on its eastern and western riverbanks, and the minimal tree removal required for the proposed project would not substantially degrade the quality of public views of the Kern River experienced from Kernville Road, Camp Kernville, or from the Kern River itself. Therefore, the tree removal would not substantially degrade the existing character of the project site and its surroundings.

The proposed project would also remove approximately 30 CY of reinforced, abandoned concrete blocks from the Kern River bank resulting from previous bridge demolition. The removal of concrete blocks would remove visual intrusions to the natural views of the riverbank and overall improve the visual character of the Kern River at the project site.

For the reasons described above, the proposed project would have a less than significant impact related to visual character.

**LESS-THAN-SIGNIFICANT IMPACT**

*d. Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

No nighttime construction would be required for the proposed project, and construction would not require the use of materials that would generate substantial glare. Therefore, construction would not introduce substantial temporary sources of light or glare to the project site or surrounding vicinity. The project would include submersible lights installed within the pump vault which would not be visible outside of maintenance activities. The project would also include lighting on the exterior of the electrical platform. These lights would be designed and constructed in accordance with the County's general lighting requirements described in Section 19.81.040 of the County's Municipal Code. These requirements include shielding requirements, prohibiting specific light source types, and maximum height restrictions for exterior light fixtures. With compliance with County requirements, the exterior lighting on the electrical platform would be designed such that it would have a less than significant impact related to adversely affecting views. The components of the proposed project would be non-reflective and would not have the potential to cause glare. Due to the minimal amount of lighting required for the proposed project, which would be similar to existing lighting conditions, the project would result in a less than significant related to light and glare.

**LESS THAN SIGNIFICANT IMPACT**



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## 2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- b. *Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*

The project site does not contain farmland and is not zoned for agriculture. The California Department of Conservation’s (DOC) Farmland Mapping and Monitoring Program identifies the project site as Urban and Built-Up Land, and immediately surrounded by land designated as Nonagricultural and Natural Vegetation (DOC 2018). According to the Kern County Williamson Act Geographic Information Systems data, the project site is not held under a Williamson Act contract (Kern County 2021). Therefore, the proposed project would not convert Farmland and would not conflict with existing zoning for agricultural use or a Williamson Act contract. No impact would occur.

**NO IMPACT**

**Kernville Raw Water Intake Upgrade Project**

- c. *Would the project 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))?*
- d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

According to the California Multi-Source Vegetation Layer (California Department of Forestry and Fire Protection [CalFIRE] 2024a), the project site contains the “Urban” and “Water” vegetation types, with the eastern bank of the Kern River containing the “Hardwood Woodland” vegetation type. Therefore, while wooded trees occur to the east of the project site, across the Kern River, the project site itself does not contain forest land or timberland. Furthermore, the project site is not zoned as forest land or timberland, and the Highway Commercial (CH) and Neighborhood Commercial (C-1) zones prohibit timber production (Kern County 2022). Therefore, the project would not conflict with existing zoning for forest land or result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur.

**NO IMPACT**

- e. *Would the project 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?*

As previously discussed under checklist questions 2a through 2d above, the proposed project would not result in the conversion of farmland or forest land to non-agricultural or non-forest uses. Proposed project activities would be limited to replacement of the existing raw water intake structure and operational activities and would not result in other changes to the existing environment that could result in conversion of farmland to non-agricultural use or forest land to non-forest use. No impact would occur.

**NO IMPACT**

### 3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*a. Would the project conflict with or obstruct implementation of the applicable air quality plan?*

The project site is within the Mojave Desert Air Basin (MDAB) and subject to the jurisdiction of Eastern Kern Air Pollution Control District (EKAPCD). EKAPCD has published the 2023 *Ozone Attainment Plan for the 2008 and 2015 8-Hour Ozone National Ambient Air Quality Standards* (Ozone Attainment Plan), which is the applicable plan for the project site (EKAPCD 2023). The Ozone Attainment Plan utilizes California Air Resources Board (CARB) growth profiles to forecast future emission inventories, which are primarily based upon population projections from government entities with expertise in developing forecasts for specific sectors, such as the Kern Council of Governments (EKAPCD 2023). A project is inconsistent with the Ozone Attainment Plan if it would exceed the projections of the growth profiles used to develop the Ozone Attainment Plan.

The proposed project involves the replacement of an existing raw water intake system. As described in Section 14, *Population and Housing*, the proposed project would not result in the construction of habitable structures and would not directly induce population growth. Furthermore, the proposed replacement intake system would not increase the design capacity of the existing intake system or expand water supply for the area and therefore would not result in indirect population growth. Operation of the proposed project would involve minimal ongoing operational activities comprised of weekly visual inspection, sediment removal, annual inspection, and periodic replacement of self-cleaning cone screen parts every 5 to 10 years. These operation and maintenance activities are currently required for the existing intake system and would therefore not result in an increase in trips to the project site or an increase in employees compared to existing conditions. The project would not result in growth and therefore would not exceed the growth profiles used to develop the Ozone Attainment Plan. The proposed project would not conflict or obstruct implementation of the Ozone Attainment Plan. No impact would occur.

**NO IMPACT**

**Kernville Raw Water Intake Upgrade Project**

- b. *Would the project 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?*

EKAPCD is required to monitor air pollutant levels to ensure National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) for criteria air pollutants are met. If these standards are met for a specific pollutant, the MDAB is classified as being in “attainment”. If these standards are not met for a specific pollutant, the MDAB is classified as being in “nonattainment” and EKAPCD is required to develop strategies to meet the standards which are currently exceeded. According to EKAPCD, the MDAB is currently in nonattainment for the NAAQS 8-hour ozone and the CAAQS 1-hour and 8-hour ozone and particulate matter less than ten microns in diameter (PM<sub>10</sub>) (EKAPCD 2024).

The EKAPCD has established thresholds of significance to be used for the evaluation of short-term construction and long-term operation. These thresholds are used to determine if a project would emit a cumulatively considerable net increase of a criteria pollutant. The EKAPCD thresholds for construction and operation are as follows (Kern County 2006; EKAPCD 2000; EKAPCD 1999):

- Reactive organic gases (ROG) emissions equal to or greater than 25 tons per year (construction and operation)
- Nitrous Oxide (NO<sub>x</sub>) emissions equal to or greater than 25 tons per year (construction and operation)
- PM<sub>10</sub> emissions equal to or greater than 15 tons per year (construction and operation)
- Sulfur oxide emissions greater than 27 tons per year (operation)

The California Emissions Estimator Model (CalEEMod), version 2022.1.1.22 was used to estimate the proposed project’s air pollution emissions. CalEEMod uses project-specific information, including the project’s land uses, construction equipment parameters, and location, to model a project’s construction emissions. The proposed project would not include a substantial increase in operational air pollution because no change in operation and maintenance trips or energy consumption from existing conditions would occur. Therefore, only demolition and construction emissions were modeled. Demolition and construction emissions modeled include emissions generated by on-site construction equipment, haul trips, and emissions generated by vehicle trips associated with construction, such as worker and vendor trips. The analysis reflects construction of the proposed project as described in Section 9 of the Project Description. CalEEMod modeling outputs are included in Appendix A.

**Construction**

The proposed project’s demolition and construction activities would generate temporary air pollutant emissions primarily associated with fugitive dust (PM<sub>10</sub>) and exhaust emissions from heavy construction equipment and construction vehicles. The proposed project’s estimated construction emissions are summarized in Table 1. As shown therein, construction of the proposed project would not exceed EKAPCD construction thresholds. Therefore, construction of the proposed project would have a less than significant impact related to resulting in a cumulatively considerable net increase of criteria pollutants.

**Table 1 Estimated Maximum Annual Construction Emissions**

	Estimated Maximum Annual Emissions (tons per year)					
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Construction Emissions	>1	>1	1	>1	>1	>1
EKAPCD Thresholds	25	25	N/A	N/A	15	N/A
Threshold Exceeded?	No	No	N/A	N/A	No	N/A

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxides; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide; PM<sub>10</sub> = particulate matter 10 microns or less in diameter; PM<sub>2.5</sub> = particulate matter 2.5 microns or less in diameter

See Appendix A for air quality modeling results

## Operation

The proposed project would use a 50-hp submersible vertical turbine pump, similar to the existing raw water intake system. The proposed project would include an additional 50-hp submersible vertical turbine pump; however, the additional pump would serve as a backup pump in the event of primary pump failure and therefore would not result in additional air pollutant emissions from stationary sources beyond existing conditions. Similarly, the existing intake system would remain in place after construction and would only operate as a backup system in case of primary system failure, therefore would not result in additional air pollutant emissions from stationary sources beyond existing conditions. During operation, the proposed project would require occasional sediment removal, annual inspection, replacement of cleaning brushes every 5 to 10 years, and replacement of the drive assembly every 10 years. These maintenance activities would be similar to the maintenance required for the existing raw water intake system and would not result in additional operational air pollutant emissions from vehicle trips to and from the project site beyond existing conditions. Accordingly, the proposed project would not result in an increase in operational emissions beyond existing conditions and no impact would occur.

### LESS-THAN-SIGNIFICANT IMPACT

*c. Would the project expose sensitive receptors to substantial pollutant concentrations?*

EKAPCD and the County define sensitive receptors to include residences, schools, and hospitals (Kern County 2006). The closest sensitive receptor to the project site is a single-family residence located adjacent to the Riverview Lodge and the proposed project's staging area, approximately 50 feet west of the proposed project's permanent impact area. The potential for project construction to expose sensitive receptors to substantial pollutant concentrations is discussed in the following subsections. The proposed project would not result in an increase in operational emissions compared to existing conditions and therefore would not expose sensitive receptors to substantial pollutant concentrations. Therefore, operation of the proposed project is not discussed further.

## Fugitive Dust

The proposed project would result in fugitive dust emissions during construction. Although EKAPCD Rule 402 sets forth standards for controlling fugitive dust, Rule 402 does not apply to disturbed surface areas less than two acres and therefore the proposed project would not be required to comply with Rule 402 (EKAPCD 2022). Given the proximity to the single-family residence, construction of the proposed project could result in fugitive dust emissions that could impact the adjacent single-family residence. This impact would be potentially significant, and Mitigation Measure AQ-1 is required.



## Carbon Monoxide Hotspots

Traffic-congested roadways and intersections have the potential to generate elevated localized carbon monoxide levels (i.e., carbon monoxide hotspots). In general, carbon monoxide hotspots occur in areas with poor circulation or areas with heavy traffic. Construction of the proposed project would result in minor and temporary increases in traffic on Kernville Road and Sirretta Street due to worker vehicle trips and delivery of heavy-duty equipment and materials. However, construction would not occur in an area with poor circulation or heavy traffic. Therefore, the temporary trips associated with construction traffic would not cause or contribute to potential temporary carbon monoxide hotspots. Proposed project impacts related to exposure of sensitive receptors to substantial concentrations of carbon monoxide would be less than significant.

## Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or serious illness, or that may pose a present or potential hazard to human health. TACs generally consist of four types: organic chemicals, such as benzene, dioxins, toluene, and perchloroethylene; inorganic chemicals such as chlorine and arsenic; fibers such as asbestos; and metals such as mercury, cadmium, chromium, and nickel. The primary TAC emitted during project construction would be diesel particulate matter (DPM) generated by heavy-duty equipment and diesel-fueled delivery and haul trucks during construction activities. DPM was identified as a TAC by the CARB in 1998 and is primarily composed of particulate matter exhaust emissions (CARB 2024).

Generation of DPM from construction projects typically occurs in a single area for a short period of time. Construction of the proposed project would occur over approximately 9 months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance in the environment and the extent of exposure that person has to the substance. Dose is positively correlated with time, meaning a longer exposure period would result in a higher exposure level for the maximally exposed individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the California Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project (California Office of Environmental Health Hazard Assessment 2015). Accordingly, the duration of construction, 9 months, is approximately 1.4 percent of the total exposure period used for health risk calculation. Current models and methodologies for conducting health-risk assessments are associated with longer-term exposure periods of nine, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities, resulting in difficulties in producing accurate estimates of health risk. Therefore, health risk is discussed qualitatively below.

Maximum DPM emissions would occur during the mechanical installation and electrical and instrumentation construction phases, lasting approximately 20 weeks. This period would represent approximately 0.6 percent of the total exposure period for health risk calculations. Therefore, construction activities would not represent the type of long-term TAC emission sources typically subject to health risk assessments. Construction activities would also be subject to and would comply with California regulations limiting the idling of heavy-duty construction equipment to no more than five minutes, which would further reduce nearby sensitive receptors' exposure to

temporary and variable DPM emissions. As such, impacts related to exposure of sensitive receptors to substantial DPM concentrations would be less than significant.

### **San Joaquin Valley Fever**

San Joaquin Valley Fever (Valley Fever) is an airborne fungal infection caused by the fungus *Coccidioides immitis*. Valley Fever is known to occur in Kern County soils, and exposure risk is highest from ground-disturbing agricultural and construction activities. The fungal spores responsible for Valley Fever generally grow in virgin, undisturbed soil. Project site soils are already disturbed from construction of the previous raw water intake structure. Due to the previous amount of disturbance on the project site, disturbance of soils during construction activities is unlikely to pose a substantial risk of infection of Valley Fever to construction workers or people working or residing in the project area. Furthermore, Mitigation Measure AQ-1 would reduce fugitive dust generation, which would further minimize the potential risk of infection. Therefore, within implementation of mitigation, construction of the proposed project would not substantially increase the risk to public health above existing background levels, and impacts related to Valley Fever would be less than significant.

### **Mitigation Measure**

Mitigation Measure AQ-1 is required to reduce the proposed project's potential impact to sensitive receptors from fugitive dust release.

#### *AQ-1 Fugitive Dust Reduction*

In order to reduce fugitive dust emissions during construction, California Water Service shall require the construction contractor to implement EKAPCD dust control measures listed below during construction. California Water Service shall verify these dust control measures are listed in the construction contract prior to the start of construction.

- Water shall be applied a minimum of twice daily on unpaved/untreated areas and on disturbed soil areas with active construction occurring on the project site.
- All clearing, grading, earth moving, and excavation activities shall cease during periods of winds greater than 20 miles per hour or when ongoing dust plumes occur.
- On-site vehicle speed shall be limited to 15 miles per hour.

### **Significance After Mitigation**

Implementation of Mitigation Measure AQ-1 would ensure fugitive dust generated from construction is minimized and would require construction to halt in the event substantial fugitive dust could be generated due to wind or other conditions. With implementation of Mitigation Measure AQ-1, the proposed project would have a less than significant impact on sensitive receptors.

### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

Construction of the proposed project could generate odors associated with heavy-duty equipment operation and earth-moving activities. Such odors would be temporary in nature and limited to the duration of construction in the vicinity of the project site. The construction contractor(s) would be

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required to adhere to EKAPCD Rule 419 (Nuisance), which prohibits the discharge of air contaminants which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, including odor. Project operation would involve the operation of a raw water intake system which would not result in the generation of odors. The minimal vehicle trips required for operation and maintenance activities would be similar to the existing intake system, and therefore the minimal odors generated by vehicle trips would be similar to existing conditions. Therefore, the proposed project would have a less than significant impact related to other emissions such as odors adversely affecting a substantial number of people.

**LESS-THAN-SIGNIFICANT IMPACT**

# 4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
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 U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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Rincon Consultants, Inc. (Rincon) conducted a Biological Resources Assessment, including a literature review and field reconnaissance survey, to document existing site conditions and the potential presence of special-status biological resources, including federal- and state-listed plant and wildlife species, plant communities, jurisdictional waters and wetlands, and habitat for nesting birds. The following analysis is based on the findings of the assessment. The complete Biological Resources Assessment is contained in Appendix B of this document. Additionally, Rincon completed an Aquatic Resources Delineation for the proposed project which confirms the extent of potential jurisdictional waters at the project site. The Aquatic Resources Delineation is contained in Appendix C of this document.

- a. *Would the project 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 U.S. Fish and Wildlife Service?*

No special-status plant species have a moderate or high potential to occur within the project site (Appendix B). Six special-status plant species have a low potential to occur within the project site. The species with low potential to occur are associated with chaparral, cismontane woodlands, and riparian scrub habitat present in the areas surrounding the project site. Given the minimal size of the impact area, surrounding development, ongoing disturbance, prevalence of non-native, herbaceous vegetation, and the low potential for occurrence, potential project impacts would not reduce the populations of special-status plant species below self-sustaining levels. Therefore, impacts to Kern Canyon clarkia, Mojave tarplant, rose-flowered larkspur, Koch's cord moss, southern Sierra monardella, and beautiful threadplant would not occur. Therefore, no special-status plants would be impacted by the proposed project.

Twenty-five special-status wildlife species have a low potential to occur within the project site based upon known ranges, habitat preferences for the species, and species occurrence records. Species with a low potential to occur include monarch – California overwintering population, California golden trout, northwestern pond turtle, California legless lizard, foothill yellow-legged frog – southern Sierra DPS, American goshawk, Cooper's hawk, northern goshawk, tricolored blackbird, golden eagle, long-eared owl, Swainson's hawk, northern harrier, western yellow-billed cuckoo, olive-sided flycatcher, black swift, southwestern willow flycatcher, California condor, bald eagle, California spotted owl, pallid bat, Sierra Nevada mountain beaver, Townsend's big-eared bat, Yuma myotis, and American badger. The project site lacks essential habitat elements needed to support each of these species and has been subject to prior development and ongoing disturbances that reduce the potential for occurrence of these species. Therefore, the project is not expected to result in potential impacts to these species.

Five special-status wildlife species identified as CDFW Species of Special Concern have a moderate or high potential to occur within the project site (Appendix B). These species are listed below and discussed in the following subsections:

- Crotch's bumble bee (*Bombus crotchii*)
- Kern River rainbow trout (*Onchorhynchus mykiss gilberti*)
- Southern Sierra legless lizard (*Anniella campi*)
- Yellow-breasted chat (*Icteria virens*)
- Yellow warbler (*Setophaga petechia*)

### *Crotch's Bumble Bee*

Project construction activities such as grading and vegetation removal/disturbance could result in temporary and permanent indirect impacts to foraging habitat including removal of flowering plants within the Study Area. Ground disturbing activities could result in temporary and permanent indirect impacts to nesting habitat and overwintering habitat through the destruction of nests. Ground disturbing activities could potentially result in direct impacts to the species via injury or mortality of individuals. Impacts to this species from construction activities would be reduced to a less-than-significant level with the implementation of Mitigation Measures BIO-2, BIO-3, and BIO-6. Further, the removal of concrete debris and restoration of this area to vegetated habitat would be beneficial to this species.

### *Kern River Rainbow Trout*

The project site contains suitable habitat for Kern River rainbow trout and the species is known to occur in the north fork of the Kern River. This species breeds in shallower, slower-moving water than is found within the project site. However, breeding habitat exists adjacent to the project site, and the project site provides foraging habitat and access to up and downstream sections of the river. Kern River rainbow trout may be directly affected by construction activities if individuals are present in the portion of the river that would be dewatered. Temporary impacts to water quality may also occur during the installation of the coffer dam and groundwater dewatering, which could result in impacts on this species. Water quality impacts during installation of the cofferdam would be short-term and installation would comply with the requirements of the Dewatering Plan. While dewatered groundwater would be discharged to the Kern River, this would be carried out in compliance with the requirements of Dewatering Plan and the *Waste Discharge Requirements for Limited Threat Discharges to Surface Water* (Order R5-2022-0006-02), which would ensure dewatered groundwater is adequately treated to minimize water pollutants prior to disposal. However, due to the river dewatering and installation of the cofferdam, impacts to this species from construction activities are potentially significant and implementation of Mitigation Measures BIO-1, BIO-2, and BIO-3 are required.

### *Southern Sierra Legless Lizard*

The project site contains suitable habitat for the southern Sierra legless lizard. This species is most likely to be found in areas with sufficient moist leaf litter or other ground cover to support their habitat requirements. The species may be directly affected (injury or mortality) by the construction activities in their habitat if individuals are present in the work area during construction. Impacts to this species from construction activities are potentially significant and implementation of Mitigation Measures BIO-2, BIO-3, and BIO-4 are required.

### *Special-Status Bird Species and Nesting Birds*

The project site contains suitable nesting habitat for several native and special-status bird species, including yellow-breasted chat and yellow warbler. In general, avian species can typically avoid direct impacts from construction activity. However, active nests of special-status birds and/or raptors could be adversely affected by construction activity through removal of thirteen trees to accommodate the new water intake system. Construction activity around active nests could also result in nest abandonment because of noise, vibrations, or human activity. Nest destruction or abandonment of active special-status species nests would be a potentially significant impact. Destruction or abandonment of native bird nests would violate the California Fish and Game Code

(CFGC) and Migratory Bird Treaty Act (MBTA). These regulations make it unlawful to take, possess, or destroy birds of prey and migratory birds, and their nests and eggs. Impacts to special-status nesting birds are potentially significant and implementation of Mitigation Measures BIO-2, BIO-3, and BIO-5 are required.

## **Mitigation Measures**

Implementation of the following mitigation measures during project construction would be required to reduce the proposed project's potential impact on special-status species.

### *BIO-1 Aquatic Species Pre-Construction Survey, Relocation, and Seasonal Work Window Restrictions*

Project activities in the Kern River are proposed to occur outside of the trout spawning season and when water levels are at their lowest—July 1 through October 31. However, project activities may occur when water levels are higher, increasing the potential for Kern River rainbow trout to be present. To minimize effects to Kern River rainbow trout, Cal Water or its contractor(s) or representative(s) shall prepare and implement a fish relocation plan detailing the process of relocating both native and non-native fish. Additionally, Cal Water or its contractor(s) or representative(s) shall also contract a qualified fisheries biologist to oversee the aquatic species relocation effort.

Prior to in-water construction, block nets shall be erected around the project site upstream and downstream of the temporary coffer dam location. Block nets shall remain in place until in-river work is complete or may be removed after the cofferdam has been successfully installed and dewatering within the Kern River has been achieved. After block net installation, Kern River rainbow trout shall be removed from the block-netted area by seine and dipnets, if found. After placement of the temporary cofferdam, dewatering within the coffer dams shall be monitored by a qualified fisheries biologist familiar with Kern River rainbow trout to rescue any remaining fish or other aquatic species, if present. Dewatering pumps shall be screened per screening criteria determined during consultation with regulatory agencies to prevent the entrainment of small fish.

Captured Kern River rainbow trout shall be placed in aerated 5-gallon buckets with water taken directly from the Kern River at the capture site and held no more than 20 minutes before relocation downstream of the block nets to ensure adequate dissolved oxygen concentrations and water temperatures are maintained, and that stress and mortalities are avoided. Smaller fish shall be placed in separate aerated buckets to avoid predation by larger fish. Buckets shall also be placed out of direct sunlight to avoid increased water temperatures. If water temperatures are above approximately 20°C at the time of rescue, aerated coolers instead of aerated buckets may be used to better regulate holding temperatures.

Captured non-native fishes shall be removed from the work site. Other aquatic or semi-aquatic species shall be captured from the impound and relocated outside of the block nets in species-specific suitable habitat.

### *BIO-2 Worker Environmental Awareness Program (WEAP)*

Prior to initiation of construction activities (including staging and mobilization) Cal Water or its contractor(s) or representative(s) shall arrange for all personnel associated with project construction to attend WEAP training, conducted by a qualified biologist, to aid workers in recognizing special-status resources that may occur in the construction area. The specifics of this

program shall include identification of special-status species with moderate and high potential to occur, sensitive habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employers, and other personnel involved with construction. If new construction personnel are added to the project, the crew foreman shall ensure the new personnel receive the WEAP training before starting work. All employees shall sign a form provided by the trainer indicating they have attended the WEAP and understand the information presented to them. The form shall be submitted to Cal Water to document compliance.

### *BIO-3 Biological Resources Avoidance and Minimization*

The following measures shall be implemented during construction by the construction contractor to avoid and/or minimize impacts to special-status species and regulated biological resources.

- Ground disturbance shall be limited to the minimum necessary to complete the project. The limits of disturbance for each construction phase shall be flagged. Areas of special biological concern within or adjacent to the limits of disturbance shall have highly visible orange construction fencing installed, under the supervision of a qualified biologist, between said area and the limits of disturbance.
- A qualified biological monitor shall be present during initial ground disturbing/vegetation-clearing activities within the work area to identify and relocate special-status species that may have been missed during pre-construction surveys or repopulated and confirm the biological resources avoidance and minimization measures are effectively implemented. The biologist performing relocations of special-status species must have the appropriate handling permits.
- No endangered/threatened species shall be captured/handled, relocated, harmed, or harassed without written authorization from the CDFW and/or USFWS.
- At the end of each workday, excavations shall be secured with a cover or ramp provided to prevent wildlife entrapment.
- All trenches, pipes, culverts, or similar structures shall be inspected for animals prior to burying, capping, moving, or filling.

### *BIO-4 Southern Sierra Legless Lizard Pre-Construction Surveys*

Pre-construction clearance surveys for southern Sierra legless lizard shall be conducted by a qualified biologist within 14 days prior to the start of construction (including staging and mobilization) in areas of suitable habitat. Individuals found in the project site shall be relocated from the project site by a biologist with the appropriate scientific collecting permit to a location with suitable habitat at least 50 feet away from the work area.

### *BIO-5 Nesting Bird Pre-Construction Surveys*

To avoid disturbance of nesting and special-status birds, or migratory species protected by Sections 3503, 3503.5, and 3513 of the CFGC, activities related to project construction, including but not limited to vegetation and/or tree removal, shall occur outside of the bird breeding season (February 1 through August 31). If ground disturbance, vegetation and tree removal, or heavy equipment work must begin in the breeding season, then a pre-construction nesting bird survey shall be conducted no more than 7 days prior to the initiation of construction activities. The nesting bird pre-



construction survey shall be conducted with binoculars in the disturbance footprint and a 250-foot buffer for passerines and a 500-foot buffer for raptors. The survey shall be conducted by a qualified biologist familiar with the identification of avian species known to occur in the region. An additional survey shall be conducted following any lapse in construction activity of seven or more days during the bird breeding season.

If nests are found, an avoidance buffer of 250 feet for passerines and 500 feet for raptors and listed species shall be established by the qualified biologist. The buffer shall be established to ensure nesting activity is not disturbed by construction activity and determined by the qualified biologist based on the species' known tolerances, the proposed work activity, and existing disturbances associated with land uses outside of the project site. The buffer(s) shall be demarcated by the biologist and the boundary marked with bright construction fencing, flagging, construction lathe, or other means. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No work shall be allowed within these avoidance buffers until the avian biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest, or the nest has become otherwise inactive. Encroachment into the buffer shall occur only at the discretion of the qualified biologist and with monitoring of the active nest to ensure construction activities are not disrupting nesting behavior.

*BIO-6 Crotch's Bumble Bee Avoidance, Minimization, and Compensation Measures*

- Prior to construction activities or vegetation disturbance, a qualified biologist shall conduct a habitat assessment for Crotch's bumble bee within 50 feet of the project work area (survey area). The habitat assessment shall identify potential foraging, nesting, and/or overwintering resources. If suitable habitat is present, those areas shall be avoided to the extent feasible.
- If suitable habitat is unavoidable, prior to the start of initial ground-disturbing activities (including, but not limited to, site preparation, staging and mobilization, vegetation clearance/mowing/trimming, grading, and excavation), a qualified biologist shall conduct a protocol-level presence/absence survey for Crotch's bumble bee in areas of suitable habitat during the peak active period for Crotch's bumble bee (highest detection probability). The peak active period for Crotch's bumble bee in the project area is anticipated to be April through June given the expected desiccation of Crotch's bumble bee floral resources within the project area by mid-summer, though this timing could depend on annual climatic factors. Survey methodology shall be based on Section 4.1.1 of CDFW's 2023 Survey Considerations for CESA Candidate Bumble Bee Species, or the most current CDFW guidance in effect at the time.
- If Crotch's bumble bee is present, the qualified biologist shall identify the location of nests in in the survey area, to the extent feasible. If nests are identified, the qualified biologist shall determine the need to establish a no-disturbance buffer around the nest, where feasible, to reduce the risk of disturbance or accidental take. The buffer shall provide at least 50 feet (15 meters) of clearance around active nest entrances. If project component activities may result in disturbance or potential take, the qualified biologist, in coordination with CDFW, shall expand the buffer zone as necessary to prevent disturbance or take. If establishment of a no-disturbance buffer is feasible, construction activities shall not occur within the buffer until a qualified biologist determines the colony is no longer active (i.e., no Crotch's bumble bees are seen flying in or out of the nest for three consecutive days, indicating the colony has completed its nesting season and the next season's queens have dispersed from the colony). Once the nest has been determined to be inactive, construction activities within the no-disturbance buffer(s) shall be allowed to resume. Otherwise, the no-disturbance buffer shall be maintained for the

duration of project component construction activities in each work area and shall be removed only after the conclusion of all grading, clearing, and construction activities at each construction site.

- If Crotch's bumble bee is determined to be present on the project site, floral resources associated with the species that will be removed or damaged by project construction activities in the areas of the project site where Crotch's bumble bee is detected and documented, shall be replaced at a minimum 1:1 ratio.

### **Significance After Mitigation**

Mitigation Measures BIO-1 through BIO-6 would reduce potential impacts to special-status species by requiring pre-construction surveys for aquatic species (BIO-1), implementation of WEAP training prior to the start of construction (BIO-2), procedures that would be implemented throughout construction to avoid and/or minimize impacts to special-status species (BIO-3), pre-construction surveys for southern Sierra legless lizard (BIO-4), pre-construction surveys for nesting birds (BIO-5) would ensure compliance with the CFGC and MBTA, and pre-construction surveys for and avoidance of Crotch's bumble bee (BIO-6). With implementation of Mitigation Measures BIO-1 through BIO-6, impacts to special status species would be reduced to a less-than-significant level.

#### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- b. Would the project 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 U.S. Fish and Wildlife Service?*

The project site contains one sensitive natural community—Fremont cottonwood forest and woodland alliance—which encompasses 0.039-acre of the proposed project's temporary and permanent impacts area (Figure 2). This community is typically found on floodplains, along low-gradient rivers, perennial or seasonally intermittent streams, and in valleys with a dependable subsurface water supply. This vegetation community is classified as sensitive by CDFW (Appendix B). In the project site, this community is found along the upper bank of the northern fork of the Kern River. Mature Fremont cottonwoods are dominant in the tree layer, with mature Goodding's willows common as a subdominant species. As described in checklist question 4(c), the riparian area occupied by the Fremont cottonwood forest and woodland alliance, was delineated as CDFW jurisdictional streambed and riparian habitat under CFGC 1600 et seq. and is subject to CDFW regulation. This habitat is heavily disturbed by development and consistent human presence, and several dead trees and limbs were observed. Because this sensitive natural community is within the proposed project's temporary and permanent impacts area, the proposed project could result in a substantial adverse effect on this habitat through direct removal. Impacts would be potentially significant, and implementation of Mitigation Measure BIO-7 is required.

### **Mitigation Measure**

Implementation of the following mitigation measure during project construction would be required to reduce the proposed project's potential impact to sensitive natural communities.

*BIO-7 Sensitive Natural Community Offsets and Waters/Streambed Mitigation Plan*

Impacts to Fremont cottonwood forest and woodland habitat and jurisdictional waters/streambed shall be offset through on-site restoration, in-lieu fee (ILF) payment, or purchase of credits by Cal Water at an agency-approved (USACE, State Water Board, and/or CDFW) mitigation bank for waters/streambed at a minimum 1:1 ratio. Prior to the issuance of regulatory permits from USACE, State Water Board, and/or CDFW, a qualified biologist shall be retained by Cal Water to determine the final impacts to riparian habitat and waters/streambed and the subsequent amount of acreage needed for restoration and/or enhancement for the project. The biologist shall develop a Habitat Restoration/Enhancement Plan that includes, at a minimum, the following components:

- Description of the project/impact site (i.e., location, responsible parties, areas to be impacted by habitat type)
- Goal(s) of the compensatory mitigation project (i.e., the type/types and area/areas of habitat to be established, restored, enhanced, and/or preserved; specific functions and values of habitat type/types to be established, restored, enhanced, and/or preserved)
- Description of the proposed compensatory mitigation-site (i.e., location and size, ownership status, existing functions and values of the compensatory mitigation site)
- Implementation plan for the compensatory mitigation site (the plan will include rationale for expecting implementation success, responsible parties, schedule, Study Area preparation, planting plan, including plant species to be used, container sizes, and seeding rates)
- Maintenance activities during the monitoring period, including weed removal and irrigation as appropriate (the plan will include activities, responsible parties, and schedule)
- Monitoring plan for the compensatory mitigation site, including no less than quarterly monitoring for the first year; the plan will include performance standards, target functions and values, target acreages to be established, restored, enhanced, and/or preserved, annual monitoring reports
- Success criteria based on the goals and measurable objectives for percent cover of native species by vegetation type based on existing site conditions
- An adaptive management program and remedial measures to address unanticipated issues with the restoration effort
- Notification of completion of compensatory mitigation and agency confirmation
- Contingency measures (e.g., initiating procedures, alternative locations for contingency compensatory mitigation, funding mechanism)

On-site restoration is preferred, but if not feasible, the project can compensate for impacts through an ILF program or purchase of mitigation credits as an alternative.

### **Significance After Mitigation**

Implementation of Mitigation Measure BIO-7 would reduce potential impacts related to direct removal of Fremont cottonwood forest and woodland alliance by requiring on-site restoration, in-lieu fee payment, or purchase of credits by Cal Water at an approved mitigation bank. In addition, Mitigation Measure BIO-7 requires development of a Habitat Restoration/Enhancement Plan. With implementation of Mitigation Measure BIO-7, the proposed project's potential impacts to sensitive natural communities would be reduced to a less-than-significant level.

### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- c. *Would the project 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?*

The project site contains approximately 0.02 acre (163 linear feet) of non-wetland waters of the U.S. and state, including natural streambed, associated with the Kern River. No wetland waters of the U.S. or state were documented within the project site. The Kern River has defined indicators of an ordinary high-water mark (OHWM), direct hydrological connectivity to an intrastate water and is perennial in nature. Therefore, it is subject to regulation by the USACE and State Water Board.

Additionally, the Kern River, including the riparian area occupied by the Fremont cottonwood forest and woodland alliance, covering approximately 0.14 acre (178 linear feet), was delineated as CDFW jurisdictional streambed and riparian habitat under CFGC 1600 et seq. and is subject to CDFW regulation.

The project has the potential to temporarily impact up to 0.006 acre of non-wetland waters of the U.S. and 0.026 acre of CDFW streambed and potentially permanently impact up to 0.011 acre of CDFW streambed (Appendix B). Therefore, the project would require coordination and regulatory permit acquisition from the USACE, State Water Board, and CDFW. The project's impacts to non-wetland waters of the U.S., to CDFW streambed, and to the Fremont cottonwood forest and woodland alliance within CDFW jurisdictional habitat would be potentially significant, requiring implementation of Mitigation Measure BIO-7.

### **Mitigation Measures**

Implementation of Mitigation Measure BIO-7, listed within item 4(b), would be required to reduce the proposed project's impact to state or federally protected wetlands.

### **Significance After Mitigation**

Implementation of Mitigation Measure BIO-7, listed under checklist question 4(b) above, would reduce the potential impact to a less-than-significant level by requiring on-site restoration, in-lieu fee payment, or purchase of credits by Cal Water at an approved mitigation bank for potential impacts to CDFW jurisdictional streambed and riparian habitat.

### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- d. *Would the project 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?*

The proposed project is not expected to hinder wildlife movement in the region, considering the project footprint is minimal, and the section of channel to be dewatered does not cross the entire width of the Kern River (Appendix B). Therefore, impacts related to interference with wildlife movement would be less than significant.

### **LESS-THAN-SIGNIFICANT IMPACT**

- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

The project site is within unincorporated Kern County and is therefore subject to the Kern County *Code of Ordinances* (updated March 2024) and Kern County *General Plan* (2009). These plans and regulations include policies relating to protected trees, protecting floodplain and riparian habitats, as well as regulating water and light pollution. Kern County *General Plan* Provision 1.10.10 restricts the removal of oak species; no oak trees were observed in the project site. In addition, the Kern County Code of Ordinances prohibits the removal of native tree species within the Kern River Corridor Combining District as defined in the Kern River Plan Element of the Metropolitan Bakersfield General Plan. The project site is approximately 20 miles northeast of the Kern River Corridor as defined in the Kern County Code of Ordinances and thus proposed project activities are not subject to this regulation. As described above, the proposed project has the potential to result in potential impacts to special-status species and habitat which could potentially conflict with the policies within the County's General Plan which aim to protect threatened or endangered species and riparian habitat. Therefore, this impact would be potentially significant, requiring implementation of Mitigation Measures BIO-1 through BIO-7.

### **Mitigation Measures**

Implementation of Mitigation Measures BIO-1 through BIO-7, listed within Items 4(a) and 4(b), would be required to reduce the proposed project's potential impact related to conflicts with the County's General Plan.

### **Significance After Mitigation**

Implementation of Mitigation Measures BIO-1 through BIO-7 would reduce potential impacts to special-status species and sensitive natural communities in compliance with County General Plan policies to protect species threatened or endangered species and riparian habitat through required pre-construction surveys, WEAP training, and on-site restoration, in-lieu fee payment, or purchase of credits by Cal Water at an approved mitigation bank. With implementation of Mitigation Measures BIO-1 through BIO-7, this impact would be reduced to a less-than-significant level.

### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- f. *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The project site does not occur within any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan areas (Appendix B). Therefore, the proposed project would not conflict with the provisions of any such plans and no impact would occur.

### **NO IMPACT**

# 5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Rincon prepared a Cultural Resources Technical Report to evaluate project impacts to historical and archaeological resources. The Cultural Resources Technical Report includes the results of a cultural resources records search review, archival and background research, a Sacred Lands File search conducted by the Native American Heritage Commission (NAHC), and a pedestrian field survey. The following analysis is based on the Cultural Resources Technical Report (public version), included as Appendix D of this document.

On September 12, 2022 (Records Search File No. 22-344) and May 13, 2024 (Records Search File No. 24212), the Southern San Joaquin Valley Information Center provided California Historical Resources Information System records search results for the proposed project. The Southern San Joaquin Valley Information Center is the official state repository for cultural resources records and reports for the county in which the project site is located. The purpose of the records search was to identify previously recorded cultural resources, as well as previously conducted cultural resources studies within the project site and a 0.5-mile radius surrounding it. Rincon archaeologists also reviewed the National Register of Historic Places, the California Register of Historical Resources, the California Historical Landmarks list, and the Built Environment Resources Directory, as well as its predecessor the California State Historic Property Data File. Rincon archaeologists also conducted a pedestrian field survey of the project site on September 21, 2022.

No previously recorded cultural resources were documented within or adjacent to the project site. In addition, no new historical or archaeological resources were identified during the pedestrian field survey of the project site.

**Kernville Raw Water Intake Upgrade Project**

- a. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*
- b. *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (PRC Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources, a resource included in a local register of historical resources, or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.

Section 15064.5 of the State CEQA Guidelines defines significant archaeological resources as resources that meet the criteria for historical resources or resources that constitute unique archaeological resources. A project-related significant impact could occur if a project would significantly affect archaeological resources that fall under either of these categories. If it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC, Section 21083.2[a], [b]).

PRC, Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

No historical or unique archaeological resources were identified within the project site based on the records search results, background research, tribal outreach, and field survey; however, it is possible for archaeological material that could be deemed a historical resource to be buried and not visible on the surface. Therefore, while the potential for encountering undiscovered historical or archaeological resources during construction of the project is low, it is possible. The implementation of Mitigation Measures CUL-1 and CUL-2 would result in less than significant impacts to historical and archaeological resources with mitigation incorporated.

## **Mitigation Measures**

Implementation of the following mitigation measures during construction would be required to reduce the proposed project's potential impact on historical and archaeological resources.

### *CUL-1 Worker's Environmental Awareness Program Training*

All construction personnel and monitors who are not trained archaeologists shall be briefed regarding unanticipated discoveries of archaeological resources prior to the start of construction activities. A basic presentation shall be prepared and presented by a qualified archaeologist to inform all construction personnel working on the project about the archaeological sensitivity of the area. The purpose of the WEAP training is to provide specific details on the kinds of archaeological materials that may be identified during construction and explain the importance of and legal basis for the protection of significant archaeological resources. Each worker shall also learn the proper procedures to follow in the event archaeological resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the on-call archaeologist and if appropriate, Native American representative. If new construction personnel are added to the project, the crew foreman shall ensure the new personnel receive the WEAP training before starting work. The necessity of training attendance shall be stated on all construction plans and Cal Water shall maintain records demonstrating construction worker WEAP participation.

### *CUL-2 Discovery of Archaeological Resources*

If new archaeological resources or human remains are discovered during project construction, all ground-disturbing activities in the vicinity of the find shall cease, the area will be protected from disturbance, and an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards (National Park Service 1983) shall be retained to evaluate the find. If the find is human remains, the County Coroner will be contacted immediately, and California Health and Safety Code Section 7050.5 shall be followed. The State Water Board will also be contacted immediately if human remains, or archaeological resources are discovered, and the procedures outlined in CEQA §15064.5 (d) and (e) shall be implemented by the State Water Board. Work may continue on other parts of the project while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5 [f]).

After the archaeological assessment is completed, the archaeologist shall submit a CRHR eligibility recommendation to the State Water Board. If a resource is determined by the State Water Board, based on recommendations of the qualified archaeologist, and the Tribe as appropriate, to constitute a "historical resource" or "unique archaeological resource", or a "tribal cultural resource", time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Sections 21083.2 for unique archaeological resources, and section 21084.3 for tribal cultural resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. If the find is Native American, the State Water Board and landowner shall, in good faith, consult with the Tribe on the disposition and treatment of any Native American artifacts or other cultural materials encountered during the project.



## **Significance After Mitigation**

Mitigation Measures CUL-1 and CUL-2 would reduce potential impacts resulting from the unanticipated discovery of previously unknown archaeological resources to a less-than-significant level, as these measures would require construction workers to undergo an environmental awareness program training (CUL-1) and all work to be temporarily halted during the unanticipated discovery of an archaeological resource (CUL-2). With implementation of Mitigation Measures CUL-1 and CUL-2, the proposed project's potential impact to archaeological resources would be reduced to a less-than-significant level.

### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- c. *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

No human remains are known to be present within the project site. However, the discovery of human remains is always a possibility during ground disturbing activities. In the event human remains are inadvertently encountered during ground disturbing activities, they would be treated consistent with state and local regulations including California Health and Safety Code Section 7050.5, PRC Section 5097.98, and the CCR Section 15064.5(e). In accordance with these regulations, if human remains are found, the County Coroner must be immediately notified of the discovery. No further disturbance can occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. If the County Coroner determines the remains are, or believed to be Native American in origin, he or she is required to notify the NAHC. The NAHC will then notify those persons believed to be the most likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner must reinter the remains in an area of the property secure from subsequent disturbance. With adherence to existing California law, impacts to human remains would be less than significant.

### **LESS-THAN-SIGNIFICANT IMPACT**

## 6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

During project construction, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, and construction worker travel to and from the project site. Energy use during construction would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, construction contractors would be required to comply with the provisions of CCR Title 13 Sections 2449 and 2485, which prohibit off-road diesel vehicles and diesel-fueled commercial motor vehicles, respectively, from idling for more than five minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the United States Environmental Protection Agency (USEPA) Construction Equipment Fuel Efficiency Standard, and trucks would be subject to the CARB Advanced Clean Trucks regulation, both of which would also minimize inefficient, wasteful, or unnecessary fuel consumption (USEPA 2004). These regulations would result in the efficient use of energy necessary to construct the project. Therefore, project construction would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy, and no impact would occur.

During operation, the proposed project would require the same maintenance activities as under existing conditions for occasional sediment removal, annual inspection, replacement of cleaning brushes every 5 to 10 years, and replacement of the drive assembly every 10 years. These occasional maintenance activities would result in the same energy use from vehicle trips to and from the project site as under existing conditions. The proposed project would include an additional 50-hp submersible vertical turbine pump; however, the additional pump would serve as a backup pump in the event of primary pump failure and therefore would not require additional energy beyond existing conditions. Furthermore, as the replacement intake system would be equipped with newer, more energy-efficient technology compared to the existing intake system, the energy required to power the proposed intake system could be less than the existing intake system. This energy use would not be considered wasteful, as it would be required to ensure proper functionality

of the proposed raw water intake system. Therefore, operation of the proposed project would not result in a potentially significant environmental effect due to the wasteful, inefficient, or unnecessary consumption of energy. No impact would occur.

**NO IMPACT**

*b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

State regulations for energy conservation, such as the California Green Building Standards Code and California Energy Code, target energy efficiency in the development or renovation of buildings and would be inapplicable to the proposed project. Although the County's General Plan contains the Energy Element, this document is related to the management of petroleum resources and implementation of renewable energy facilities, including wind, solar, and hydroelectric facilities (Kern County 2009a). Accordingly, no state or local plans for renewable energy or energy efficiency would apply to the proposed project. Therefore, no impact would occur.

**NO IMPACT**

# 7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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Would the project:

a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

This section is based in part on the Geotechnical Report prepared for the proposed project by Bajada Geosciences, Inc. in January 2023 (Appendix E).

*a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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?*

Alquist-Priolo Earthquake Fault Zones are regulatory zones established throughout California by the California Geological Survey. These zones identify areas where potential surface rupture along an active fault could prove hazardous and identify where special studies are required to characterize the fault rupture hazard potential to habitable structures. The project site does not partially or fully intersect any Alquist Priolo Fault Zone (DOC 2021). Therefore, the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of an earthquake fault delineated on an Alquist-Priolo Earthquake Fault Zoning Map. No impact would occur.

*a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

According to the United States Geological Survey (USGS), the Kern Canyon fault zone is inferred to underlie the project site in a north-south direction (USGS 2022a). The Kern Canyon fault zone could produce strong seismic ground shaking in the event of an earthquake. The proposed project's disturbance of approximately 7,100 square feet of soil during construction would not create conditions that would promote seismic activity. The proposed project involves replacement of a raw water intake system and would not include habitable structures. The electrical platform and pump house structures would be designed and constructed in compliance with the California Building Code (CBC), which requires all improvements be constructed to withstand anticipated ground shaking from regional fault sources. Design and construction of the raw water intake system would consider the seismic environment and would comply with applicable seismic design standards. The entirety of project design and construction would incorporate the recommendations from the Geotechnical Report prepared for the proposed project, such as use of specific structural fill materials and compaction of soil, which would minimize the potential for the project to result in seismic risk (Appendix E). The risk of injury is minimal as personnel would only be on site during temporary construction activities lasting approximately 9 months and during minimal operation and maintenance activities, which would not be increased compared to existing conditions. A large seismic event, such as a fault rupture, seismic shaking, or ground failure could result in damage. In the event an earthquake compromised project components during operation, Cal Water would conduct emergency repairs as soon as possible. Therefore, while the proposed project would be located in a seismically active area, the proposed project's impact related to the risk of loss, injury, or death strong seismic ground shaking would be less than significant.

#### **LESS-THAN-SIGNIFICANT IMPACT**

*a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*

Liquefaction is the process whereby soil is temporarily transformed to a fluid form during intense and prolonged ground shaking. Liquefaction can occur in soils which are loosely packed and water-logged (USGS 2024). According to the Geotechnical Report, the project site could be subject to

potential liquefaction hazards. As discussed in Items 7(a.1) and 7(a.2), there is a potential for seismic ground shaking to occur at the project site, which could cause liquefaction. However, construction of the proposed project would not induce or increase the risk of fault rupture or seismic ground shaking and thus would not increase the risk of seismic-related ground failure. The project does not include habitable development and therefore would have a low potential to expose people to hazards associated with liquefaction. The proposed project would be designed in compliance with the CBC to minimize the potential to cause adverse effects involving liquefaction. The Geotechnical Report states additional subsurface exploration and geotechnical analyses is required to determine if liquefaction prevention must be incorporated into project design. Additional subsurface exploration to determine the extent of liquefaction potential would be conducted, the results of which would be documented in a geotechnical report. Design and construction of the raw water intake system would comply with all geotechnical recommendations from the subsurface exploration and geotechnical analyses. Therefore, the proposed project would have a less than significant impact related to the risk of seismic-related ground failure, including liquefaction.

**LESS-THAN-SIGNIFICANT IMPACT**

*a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*

The project site does not contain steep slope conditions necessary for a landslide to occur. The land surrounding the project site is relatively flat, and project activities would not create substantial slopes which could result in landslides. Therefore, no impact would occur.

**NO IMPACT**

*b. Would the project result in substantial soil erosion or the loss of topsoil?*

Construction of the project would result in the disturbance of approximately 0.53-acre adjacent to the Kern River, which could result in soil erosion due to the use of construction equipment, grading, and other ground-disturbing activities. During construction, the contractor would comply with Chapter 17.28.140 of the County's Municipal Code, which requires implementation of temporary erosion control features during construction and requires the faces of cut and fill slopes to be maintained to control erosion. As part of project design, rip rap would be placed 20 feet upstream and 20 feet downstream of the new intake structure to reduce riverbank erosion due to the new intake system during operation. In addition, the new intake structure has been designed to minimize scour of the riverbank. The new intake structure would be located within the existing bank with minimal extension into the active channel outside, and the heights of the intake facilities would be consistent with the existing riverbank elevation. Operation of the proposed project would not include components which could contribute to substantial long-term erosion. Removal of the abandoned concrete blocks along the Kern Riverbank would not increase erosion because the concrete blocks are not utilized for the purposes of bank stabilization. With implementation of erosion control features during construction and through project design, the proposed project would have a less than significant impact related to soil erosion.

**LESS-THAN-SIGNIFICANT IMPACT**

- c. *Would the project 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?*

As described in Item 7(a.4), the project site is not subject to landslides. As described in Item 7(d), the project site has a low potential for soil expansion, and therefore would not be subject to high shrink-swell potential or collapse. As described in Item 7(a.3), the project site is subject to liquefaction and therefore lateral spreading; however, the proposed project would be designed in compliance with applicable seismic design standards and geotechnical design recommendations to minimize the potential to result in soil instability and liquefaction. The proposed project would draw water from the Kern River but would not pump groundwater. Construction of the proposed project would require groundwater dewatering; however, groundwater dewatering would be temporary during excavation, which is anticipated to occur for 2.5 months. Groundwater dewatering would be localized to the 0.53-acre project site and therefore is only anticipated to affect shallow groundwater levels and therefore would not substantially increase the risk of subsidence on site. Accordingly, the project would have a less than significant impact related to geologic and soil instability.

**LESS-THAN-SIGNIFICANT IMPACT**

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

Expansive soils are soils with high shrink-swell potential. The shrink-swell potential is low if the soil has a linear extensibility of less than three percent (United States Department of Agriculture [USDA] 2017). The project site is underlain by Aquents-Aquolls-Riverwash complex and Southlake-Urban land complex, which have linear extensibility ratings of 1.5 percent, indicating a low shrink-swell potential (USDA 2024). Furthermore, the Geotechnical Report concludes the project site has a low potential for expansion (Appendix E). Therefore, the proposed project would have a less than significant impact related to expansive soil.

**LESS-THAN-SIGNIFICANT IMPACT**

- e. *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The proposed project would not include or require the use of septic tanks or alternative wastewater disposal systems. No impact would occur.

**NO IMPACT**

- f. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Paleontological resources, or fossils, are the evidence of once-living organisms preserved in the rock record. They include both the fossilized remains of ancient plants and animals and the traces thereof (e.g., trackways, imprints, burrows). Paleontological resources are not found in “soil” but are contained within the geologic deposits or bedrock that underlie the soil layer. Typically, fossils are greater than 5,000 years old (i.e., older than middle Holocene in age) and are typically preserved in sedimentary rocks. Although rare, fossils can also be preserved in volcanic rocks and low-grade metamorphic rocks under certain conditions (Society of Vertebrate Paleontology [SVP] 2010). Fossils

occur in a non-continuous and often unpredictable distribution within some sedimentary units, and the potential for fossils to occur within sedimentary units depends on several factors. It is possible to evaluate the potential for geologic units to contain scientifically important paleontological resources, and therefore evaluate the potential for impacts to those resources and provide mitigation for paleontological resources if they are discovered during construction of a project.

The project site is located in the Sierra Nevada geomorphic province, one of the eleven geomorphic provinces of California (California Geological Survey 2002). The Sierra Nevada is a tilted fault block nearly 400 miles long. Its eastern face is a high, rugged scarp, contrasting with the gentle western slope that disappears under sediments of the Great Valley. Its upper courses, especially in massive granites of the higher Sierra, are modified by glacial sculpturing, forming such scenic features as Yosemite Valley. The high crest culminates in Mount Whitney with an elevation of 14,495 feet above sea level near the eastern scarp. The northern Sierra Nevada boundary is marked where bedrock disappears under the Cenozoic volcanic cover of the Cascade Range (California Geological Survey 2002).

The geology of the region surrounding the project site was mapped by Smith (1964), who identified a single geologic unit, Quaternary alluvium, beneath the project site. Quaternary alluvium consists of Holocene-aged, loosely consolidated sediments (Smith 1964). Due its young age, Quaternary alluvium is likely too young (i.e., less than 5,000 years old) to preserve paleontological resources and, therefore, has low paleontological sensitivity.

The project site is underlain by a single geologic unit with low paleontological sensitivity, Quaternary alluvium. However, Pleistocene-aged alluvial sediments are observed at the surface within the Kern River valley less than 2,000 feet from the project site (Smith 1964), meaning there is a chance Quaternary alluvium may be underlain by these older, higher-sensitivity sediments in the subsurface, but the depth at which this transition occurs is unknown. The maximum depth of excavation would vary by each project component as follows: electrical platform (approximately 2 feet); flowmeter vault (approximately 7.3 feet); intake structure (approximately 7.7 feet); and pump vault (approximately 20.8 feet). At these depths, Pleistocene-aged alluvial sediments may be impacted. Therefore, this impact would be potentially significant, and Mitigation Measures GEO-1 and GEO-2 would be required.

## **Mitigation Measure**

Mitigation Measures GEO-1 and GEO-2 are required to reduce the proposed project's potential impact to paleontological resources and unique geologic features.

### *GEO-1 Paleontological Worker Environmental Awareness Program*

Prior to the start of construction, a qualified professional paleontologist (as defined by SVP [2010]) or their designee shall conduct a paleontological WEAP training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. A basic presentation shall be prepared and presented by a qualified professional paleontologist to inform all construction personnel working on the project about the paleontological sensitivity of the area. The purpose of the WEAP training is to provide specific details on the kinds of paleontological or geologic materials that may be identified during construction and explain the importance of and legal basis for the protection of paleontological resources. Each worker shall also learn the proper procedures to follow in the event paleontological resources or unique geologic features are uncovered during ground-disturbing activities. These procedures include halting construction and resource assessment. If new construction personnel are



added to the project, the crew foreman shall ensure the new personnel receive the WEAP training before starting work. The necessity of training attendance shall be stated on all construction plans and Cal Water shall maintain records demonstrating construction worker WEAP participation.

### *GEO-2 Unanticipated Discovery of Paleontological Resources*

In the event of a fossil discovery by construction personnel, all construction activity within 50 feet of the find shall cease, and the qualified professional paleontologist shall evaluate the find. If the fossil(s) is (are) not scientifically significant, then construction activity may resume within the 50-foot radius. If it is determined the fossil(s) is (are) scientifically significant, the following shall be completed:

- **Fossil Salvage.** The qualified professional paleontologist shall salvage (i.e., excavate and recover) the fossil to protect it from damage/destruction. Typically, fossils can be safely salvaged quickly by a single paleontological monitor with minimal disruption to construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. Bulk matrix sampling may be necessary to recover small invertebrates or micro vertebrates from paleontologically sensitive deposits. After the fossil(s) is (are) salvaged, construction activity may resume.
- **Fossil Preparation and Curation.** Fossils shall be identified to the lowest (i.e., most-specific) possible taxonomic level, prepared to a curation-ready condition, and curated in a scientific institution with a permanent paleontological collection along with all pertinent field notes, photos, maps, and data required by the curating institution. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the qualified professional paleontologist.
- **Final Paleontological Mitigation Report.** Upon completion of ground-disturbing activities (or laboratory preparation and curation of fossils, if necessary), the qualified professional paleontologist shall prepare a final report describing the results of the paleontological monitoring efforts. The report shall include a summary of the field and laboratory methods employed; an overview of project geology; and, if fossils were discovered, an analysis of the fossils, including physical description, taxonomic identification, and scientific significance. The report shall be submitted to Cal Water and, if fossil curation occurred, the designated scientific institution.

### **Significance After Mitigation**

Implementation of Mitigation Measures GEO-1 and GEO-2 would reduce potential impacts to paleontological resources and unique geologic features to a less-than-significant level by requiring worker environmental awareness training (GEO-1) and setting forth procedures for the recovery, identification, and curation of fossils discovered during construction.

### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

## 8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

Climate change is the observed increase in the average temperature of the Earth’s atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. Climate change is the result of numerous, cumulative sources of greenhouse gas (GHG) emissions contributing to the warming of Earth’s surface. GHG emissions occur both naturally and as a result of human activities, such as fossil fuel burning, decomposition of landfill wastes, raising livestock, deforestation, and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO<sub>2</sub>), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

EKAPCD and the County do not have adopted GHG thresholds for construction activity. EKAPCD provides guidance for addressing GHG emissions from stationary projects. In the absence of construction-specific GHG thresholds, EKAPCD guidance for stationary projects is utilized for the purposes of this analysis. According to EKAPCD, projects that emit less than 25,000 tons per year of GHGs would have a less than significant impact on GHG emissions and would not require further review (EKAPCD 2012).

GHG emissions associated with project construction were estimated using CalEEMod, with the assumptions described under Item 3(b) in Section 3, *Air Quality*. As described therein, operation of the proposed project would not use additional power or require additional operational and maintenance trips compared to the existing raw water intake system. Therefore, the proposed project’s operational GHG emissions are not quantified and are rather discussed qualitatively. Construction emissions were amortized over the proposed project’s estimated 30-year lifetime because construction emissions are confined to a relatively short period of time in relation to the overall life of the proposed project. Table 2 shows the proposed project’s estimated construction emissions amortized over a 30-year project lifetime. As shown therein, construction would generate approximately 213 metric tons, or 234 tons per year of carbon dioxide equivalent<sup>2</sup> which would

<sup>2</sup> Carbon dioxide equivalent is a unit of measurement used to standardize the climate effects of various GHGs in terms of the amount of carbon dioxide that would create the same amount of global warming.

equate to approximately eight tons per year over a 30-year period. GHG emissions generated during construction of the proposed project would be short-term in nature, lasting only for the 12-month construction period, and would not represent a long-term source of GHG emissions. The GHG emissions generated during construction would not exceed the 25,000 tons per year GHG threshold established by EKAPCD. Use of the 50-hp submersible vertical turbine pumps and vehicle travel for operation and maintenance would result in a minimal amount of GHG generation and would not increase from existing conditions, as operation would not use additional power or require additional operational and maintenance trips compared to existing conditions. Accordingly, the proposed project would have a less-than-significant impact related to the generation of GHG emissions.

**Table 2 Estimated Construction GHG Emissions**

Year	Project Emissions (tons/year of carbon dioxide equivalent)
Total	234
<b>Amount per year amortized over 30 years</b>	<b>8</b>

See Appendix A for CalEEMod worksheets.

**LESS-THAN-SIGNIFICANT IMPACT**

*b. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

The most directly applicable adopted regulatory plans to reduce GHG emissions are CARB’s 2022 Scoping Plan and the Kern Council of Government’s 2022 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The proposed project’s consistency with these plans is discussed in the subsections below.

**2022 Scoping Plan**

The principal state policies for reducing GHG emissions are Assembly Bill 32 and Senate Bill 32. The quantitative goal of Assembly Bill 32 is to reduce GHG emissions to 1990 levels by 2020 and the goal of Senate Bill 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030. The 2022 Scoping Plan identifies plans, regulations and strategies to be implemented at the state and project level that will reduce GHG emissions consistent with state policies with a target of 85 percent below 1990 levels by 2045, which is the equivalent of carbon neutrality by 2045. The 2022 Scoping Plan identifies priority GHG reduction strategies related to transportation electrification, building decarbonization, and reduction in vehicles miles traveled (VMT) (CARB 2022). Because the proposed project involves the replacement of a raw water intake system, the majority of the 2022 Scoping Plan priority GHG reduction strategies are inapplicable. Operation of the proposed project would not require additional power use or additional operation and maintenance trips in comparison to the existing raw water intake system. Given the proposed project would not increase the number of operational trips beyond existing conditions, the proposed project would not conflict with the 2022 Scoping Plan’s goal of reducing GHG emissions through reductions in VMT statewide. Therefore, the proposed project would not conflict with the priority GHG reduction strategies within the 2022 Scoping Plan. No impact would occur.

## **Kern Council of Governments 2022 Regional Transportation Plan/Sustainable Communities Strategy**

The Kern Council of Governments approved and adopted the 2022 RTP/SCS which is a regional growth-management strategy that targets GHG reduction from vehicle travel, integrated land uses, and planning for housing throughout Kern County (Kern Council of Governments 2022). The 2022 RTP/SCS integrates land use and transportation strategies to assist in achieving statewide GHG emissions reduction targets. Typically, a project would be inconsistent with the 2022 RTP/SCS if the project would exceed the population and employment growth assumptions within the 2022 RTP/SCS. As discussed under in Section 14, *Population and Housing*, the proposed project would not result in direct or indirect population growth as the proposed project would not include housing, result in increased water supplies, or require additional employees beyond existing conditions. Therefore, the proposed project would not exceed the population and employment growth forecasts within the 2022 RTP/SCS. Therefore, the proposed project would not conflict with the 2022 RTP/SCS. No impact would occur.

**NO IMPACT**

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# 9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. For a project located in 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Construction and maintenance would involve minimal and infrequent use or disposal of limited quantities of hazardous materials. During construction, the presence of construction equipment would require the use of diesel fuel, gasoline, motor oil, and other similar materials. Hazardous materials would be contained within receptacles specifically engineered for safe storage and would not be transported, stored, or used in quantities which would pose a threat of release into the environment. Construction personnel would be required to have the necessary training and/or certifications to operate equipment used during proposed project activities, minimizing the risk of hazards due to equipment malfunction. Hazardous materials would be handled and disposed in accordance with applicable federal and state regulations including the Hazardous Material Transportation Act; Resource Conservation and Recovery Act; the California Hazardous Materials Management Act; and CCR Title 22, Division 4.5. Mandatory compliance with applicable regulations related to hazardous materials during construction and operation would ensure the proposed project would have a less-than-significant impact related to the transport, use, or disposal of hazardous materials.

**LESS-THAN-SIGNIFICANT IMPACT**

- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Of the proposed structures for demolition and removal, the existing electrical panel boards are the oldest, with construction of the panels having commenced in 2001. Because these structures were built after asbestos and lead-based paints were banned for use in construction, there is no potential that demolition of these structures could release asbestos or lead-based paints. In addition, the project site does not contain known polychlorinated biphenyl contamination. Accordingly, demolition activities would not create a significant hazard due to reasonably foreseeable upset and accident conditions. There is no evidence of contamination on the project site or within the immediate vicinity and therefore ground disturbing activities during construction would not constitute a reasonably foreseeable upset and accident condition which could release contaminated soil or groundwater. As described in Item 9(a), the use of hazardous materials would be completed in accordance with the Hazardous Material Transportation Act; Resource Conservation and Recovery Act; the California Hazardous Materials Management Act; and CCR Title 22, Division 4.5. which would ensure potential upset and accident conditions are minimized. During operation, the greatest potential for hazardous materials to be released would be in the event a fire occurs at the electrical panels. However, proposed project structures would be constructed in compliance with the standards of the California Fire Code to ensure the potential for structure fire is minimized. Overall, regulatory compliance would ensure the proposed project would have a less than significant impact related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

**LESS-THAN-SIGNIFICANT IMPACT**

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The Kernville Elementary School is located approximately 0.25-mile northeast of the project site. As discussed under Items 9(a) and 9(b), the proposed project would not emit hazardous emissions. Hazardous materials used would primarily include fuels during construction activities and during intermittent and minimal component replacement during operation. Compliance with existing regulations regarding the transport and handling of hazardous materials would ensure the risk of upset and accident conditions involving fuel release would be minimized. Therefore, impacts related to emissions of hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within 0.25-mile of an existing or proposed school would be less than significant.

**LESS-THAN-SIGNIFICANT IMPACT**

- d. *Would the project be located on a site that is included on a list of hazardous material 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?*

The following databases were reviewed in May 2024 for known hazardous material contamination at the project site:

- State Water Board GeoTracker database
- California Department of Toxic Substance Control (DTSC) EnviroStor database
- Superfund Enterprise Management System (SEMS) database

The project site is not included on a hazardous material site list compiled pursuant to Government Code Section 65962.5 (DTSC 2024; State Water Board 2024a; USEPA 2024). The GeoTracker database identifies two historical Leaking Underground Storage Tank (LUST) cleanup sites approximately 430 feet west of the project site. These listings are both closed with a clean-up status of 'Completed – Case Closed' (State Water Board 2024b, 2024c). There is no evidence of contamination or active hazardous material facilities/sites on the project site or within the immediate vicinity. Therefore, the project site would not be located on a hazardous materials site that would create a significant hazard to the public or environment. No impact would occur.

**NO IMPACT**

- 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?*

The closest airport to the project site, the Kern Valley Airport, is located approximately 1.6 miles south of the project site. The Kern Valley Airport provides service for small private planes and minor maintenance (Kern Valley Airport 2022). The project site is outside of the noise contours established for the Kern Valley Airport within the Kern County Airport Land Use Compatibility Plan (Kern County 2012). Temporary construction activities and intermittent ongoing operational activities would not result in the placement of workers in a location such that a safety hazard or excessive noise would occur due to proximity to Kern Valley Airport. Therefore, the proposed project would not result in a safety hazard or excessive noise for people residing or working in the project area. No impact would occur.

**NO IMPACT**



- f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The proposed project would not include any permanent features that would have the potential to interfere with adopted emergency response plans or emergency evacuation plans. The proposed project would involve the transport of construction equipment and workers to and from the project site, as well as the hauling of construction debris. Construction activity would temporarily increase traffic adjacent to the project site and on State Route 155 and SR-178 as these would be used as haul routes. Minor delays in traffic would be intermittent and temporary, lasting approximately 9 months. Construction staging would occur on the project site west of the riverbank, and no road closures would occur during construction. Routine maintenance activities would result in the same amount of trips to the project site as under existing conditions, which would not result in roadway closures or substantial traffic congestion such that emergency response would be impaired. Therefore, the proposed project's impact related to impairment of implementation of or physical interference with County emergency response or evacuation plans would be less than significant.

**LESS-THAN-SIGNIFICANT IMPACT**

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

The project site is located within a Very High Fire Hazard Severity Zone in a State Responsibility Area (CalFIRE 2024b). However, the project site is located within the Kern River and on the Kern River's adjacent western bank with minimal scattered vegetation and surrounding development. These conditions are not conducive to a high potential for wildland fire. The proposed project would be subject to several regulatory standards designed to limit wildfire risk. CCR Title 14, Division 1.5, Chapter 7, Subchapter 2 sets forth minimum requirements for emergency access, emergency water standards, and fuel modifications. PRC Section 4442 mandates the use of spark arrestors, which prevent the emission of flammable debris from exhaust on earth-moving and portable construction equipment with internal combustion engines that operate on any forest-covered, brush-covered, or grass-covered land. PRC Section 4443 prohibits the use of any handheld portable, multi-position, internal-combustion engine operated on hydrocarbon fuels unless it is equipped and maintained for the prevention of fire. PRC 4428 requires construction contractors to maintain fire suppression equipment during the highest fire danger period (April 1st to December 1st) when vegetation would sustain combustion permitting the spread of fire. Furthermore, the proposed project would not develop any habitable structure which could expose people to wildfire risk. Therefore, the proposed project's impacts related to wildland fires would be less than significant.

**LESS-THAN-SIGNIFICANT IMPACT**

# 10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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:				
(i) Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

This section is based in part on the Geotechnical Report prepared for the proposed project by Bajada Geosciences, Inc. in January 2023 (Appendix E) and the Final Hydraulics Report prepared for the proposed project by GHD Inc., in March 2024 (Appendix F).

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Demolition and construction activities would disturb approximately 7,100 square feet (0.16 acre) of soil. The proposed project would involve demolition and removal of the existing pump house structure, air tank, piping, electrical panels, and auxiliary intake piping and concrete pad. As discussed in Section 9, *Hazards and Hazardous Materials*, on-site structures do not have the potential to contain asbestos or lead, and no known polychlorinated biphenyl contamination is present. Demolition activities would therefore not have the potential to release these pollutants. However, demolition and construction activities for the proposed project could result in the alteration of existing drainage patterns and soil erosion due to earth-moving activities such as stockpiling, excavation, soil compaction, cut and fill activities, and grading. Disturbed soils within and in the vicinity of the Kern River would be susceptible to erosion from river flow, wind, and rain, resulting in sediment transport from the construction site and temporary staging area. The types of pollutants contained in runoff from construction sites could include sediments and contaminants such as oils, fuels, paints, and solvents. Additionally, other pollutants, such as trace metals and hydrocarbons, could attach to sediment and be transported downstream of the project site's location on the Kern River, contributing to the overall degradation of water quality.

The project would comply with Kern County Code of Ordinances Section 17.28.140, Erosion Control, which requires temporary erosion control measures to be provided, as needed, at the end of each workday during grading operations. Section 17.28.140 also requires dust control of all graded areas and materials. With adherence to existing regulations, the potential for erosion and sedimentation during demolition and construction would be minimized. Therefore, demolition and construction would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality, and the impact would be less than significant. Additionally, Cal Water would be required to obtain a Clean Water Act Section 401 Water Quality Certification from the State Water Board, a Section 1602 Lake and Streambed Alteration Agreement from CDFW, and a Clean Water Act Section 404 permit from USACE which could include individual requirements to further minimize potential impacts to water quality.

Work within the Kern River would require dewatering, which would occur with the use of a temporary cofferdam system that would be installed prior to the start of excavation. Installation of the cofferdam system would be short-term and temporary, and the cofferdam system would keep the work area dry and prevent sediment, construction debris, or other pollutants from entering the Kern River. In addition, installation of the cofferdam would comply with the requirements of the project-specific Dewatering Plan.

Based on subsurface investigation completed to inform the Geotechnical Report, groundwater was observed at a depth of approximately nine feet below the existing grade of the project site (Appendix E). As described in Section 8, *Description of Project*, installation of the pump vault would require excavations of approximately 20.8 feet below ground surface. These excavations are anticipated to encounter groundwater at the project site and therefore groundwater dewatering would likely be required. Dewatered groundwater would be discharged to the Kern River. Discharge of dewatered groundwater would require coverage under the Central Valley RWQCB's *Waste Discharge Requirements for Limited Threat Discharges to Surface Water* (Order R5-2022-0006-02). In

addition, groundwater dewatering would comply with the requirements Dewatering Plan, which would detail methods of treatment and disposal of dewatered groundwater. Groundwater may contain elevated levels of total dissolved solids, nitrates, or other constituents that could affect surface water quality. However, groundwater dewatering would be conducted in accordance with the requirements of Dewatering Plan and Order R5-2022-0006-02, which requires testing and treatment, as necessary, of groundwater prior to its release into surface waters to prevent exceedances of effluent limitations. Cal Water would utilize a Baker Tank to store the dewatered groundwater and allow for sediment to settle prior to treatment and eventual discharge into the Kern River. As a result, groundwater dewatering during excavation activities would result in a less than significant impact on water quality.

During commissioning of the new intake structure, water would be pumped to the Kerrville WTP and would therefore not impact surface or groundwater quality.

Project operation would not introduce new sources of pollutants that could adversely affect water quality, as the project would replace the existing raw water intake system with a new raw water intake system. The proposed project's operation and maintenance activities would be the same as existing conditions and therefore would not increase the potential for degraded water quality. As part of project design, rip rap would be placed 20 feet upstream and 20 feet downstream of the new intake structure which would reduce the potential for erosion of the Kern Riverbank. In addition, the new intake structure has been designed to minimize scour of the riverbank. The new intake structure would be located within the existing bank with minimal extension into the active channel outside, and the heights of the intake facilities would be consistent with the existing riverbank elevation. Therefore, project operation would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality, and the impact would be less than significant.

#### **LESS-THAN-SIGNIFICANT IMPACT**

- b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

The project site overlies the Kern River Valley Groundwater Basin, which is designated as a very-low priority basin by the California Department of Water Resources. The proposed project would replace an existing raw water intake system at the project site along the Kern River. As described in Item 10(a), groundwater dewatering would likely be required during excavation activities. Extraction of groundwater can lower the groundwater table; however, groundwater dewatering would be temporary and short-term and is anticipated to occur for approximately 2.5 months. Groundwater dewatering would be localized to the 0.53-acre project site and therefore is only anticipated to affect shallow groundwater levels. Dewatered groundwater would be discharged to the Kern River. Because the Kern River Valley Groundwater Basin is designated as a very-low priority basin, the basin is not at risk of overdraft. Therefore, the temporary groundwater dewatering that would be required during excavation would not substantially decrease groundwater supplies or impede sustainable groundwater management.

The proposed project would result in a minor increase of 166 square feet of impervious surfaces through the installation of associated infrastructure which would minimally decrease the potential for groundwater infiltration to occur on the project site. However, the overall existing drainage patterns on the project site would not be modified by the proposed project. The proposed project would not induce growth or result in a permanent demand for increased water supplies. Therefore,

impacts related to substantially decreasing groundwater supplies or substantially interfering with groundwater recharge would be less than significant.

**LESS-THAN-SIGNIFICANT IMPACT**

- c.(i) Would the project 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 result in substantial erosion or siltation on- or off-site?*
- c.(ii) Would the project 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c.(iii) Would the project 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 that would 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?*

The project site is primarily undeveloped but includes impervious areas from the existing on-site water infrastructure. The proposed project would replace an existing raw water intake system at the project site along the Kern River. Due to the need to dewater a portion of the project site in the Kern River during construction, a cofferdam would be installed. This would not substantially alter the course of the Kern River as it would occur only on the western side of the riverbank and would not block the entire width of the Kern River. Installation of the cofferdam system would be short-term and temporary, and the cofferdam system would keep the work area dry and prevent sediment, construction debris, or other pollutants from entering the Kern River during construction.

The project would result in a minor increase of 166 square feet of new impervious surfaces, associated with the installation of associated infrastructure to support the raw water intake system. The project would not substantially increase the rate or amount of surface runoff as runoff would be directed to the Kern River similar to existing conditions. In addition, the proposed project does not include features that would change the pollutants of concern from the project site or permanently alter the course of the Kern River.

Overall, the proposed project would not substantially alter the existing drainage pattern or the course of the Kern River, and would not result in substantial erosion, siltation, or flooding, exceed the capacity of existing or planned stormwater drainage systems, or providing substantial additional sources of polluted runoff. Impacts would be less than significant.

**LESS-THAN-SIGNIFICANT IMPACT**

- c.(iv) Would the project 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 impede or redirect flood flows?*

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps, the project site is located in a regulatory floodway within the Zone AE special flood hazard area (FIRM #06029C0368E, Effective 9/26/2008; FEMA 2008). A regulatory floodway is defined as the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to

discharge the base flood without cumulatively increasing the water surface elevation more than a designated height (FEMA 2020). The floodplain administrator for the Kern River is CVFPB.

The proposed project would result in a minor increase of 166 square feet of new impervious surfaces and would replace the existing raw water intake system within Kern River. Based on the results of the Final Hydraulics Report, the proposed raw water intake system would result in a 0.06-foot decrease in water surface elevation at the proposed intake system and an 0.09-foot increase in water surface elevation approximately 108 feet upstream. As stated in the Final Hydraulics Report, a rise of less than 0.1-feet would meet the CVFPB's criteria for a No-Rise Certification.<sup>3</sup> This minor change in water elevation is localized, being confined to the immediate upstream and downstream of the proposed raw water intake system. As shown in the Final Hydraulics Report, the structure would not result in changes to surface water elevations elsewhere in the Kern River. Because the proposed project's minimal and localized changes to surface water elevation in Kern River would comply with the CVFPB requirements, the proposed project's impacts related to impeding or redirecting flood flows would be less than significant.

#### **LESS-THAN-SIGNIFICANT IMPACT**

*d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

As described in Item 10(c.iv), the project site is located in a regulatory floodway within the Zone AE special flood hazard area (FIRM #06029C0368E, Effective 9/26/2008; FEMA 2008).

Facilities or construction activities that use or store large quantities of hazardous materials could harm the environment if inundated by a flood resulting from a storm event or dam failure. As described in Section 9, *Hazards and Hazardous Materials*, only limited quantities of hazardous materials would be used during construction and operation and these materials would be contained within receptacles specifically engineered for safe storage, would not be transported, stored, or used in quantities which would pose a threat of release into the environment during inundation, and would be disposed of off-site. Project construction activities would be temporary in nature, lasting for approximately nine months. Operation of the project would not introduce new pollutants to the project site or result in a change to the existing flood patterns, as the project site would be similar to existing conditions once construction activities have concluded. The proposed project would also reduce risk of release of pollutants resulting from erosion during flooding within the Kern River through the installation of rip rap 20 feet upstream and 20 feet downstream of the new intake structure. In addition, the new intake structure has been designed to minimize scour of the riverbank. The new intake structure would be located within the existing bank with minimal extension into the active channel outside, and the heights of the intake facilities would be consistent with the existing riverbank elevation. Thus, the risk of release of pollutants due to inundation during a flood hazard would be less than significant.

The project site is not located within a tsunami inundation area (DOC 2024). Therefore, the project site is not subject to flooding from tsunami. The project site is also not located in a dam inundations area (Kern County 2009b). Seiches are a related hazard that can occur when a sudden displacement event (i.e., earthquake) or very strong winds occur in an enclosed or semi-enclosed body of water, such as a lake or reservoir. The closest body of water, Lake Isabella, is located approximately 1.6 miles south of the project site. Due to the distance between the project site and Lake Isabella, the proposed project would not be at risk from inundation by seiche.

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<sup>3</sup> A No-Rise Certification certifies a project within a floodway would not increase flood heights.

Overall, the project site is would not experience inundation from a tsunami or seiche. Although the project site is located within a regulatory floodway within the Zone AE special flood hazard area, the project's impacts related to pollutant release due to flood inundation would be less than significant.

**LESS-THAN-SIGNIFICANT IMPACT**

- e. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The *Water Quality Control Plan for the Tulare Lake Basin* (Basin Plan), adopted by the Central Valley RWQCB, is the water quality control plan applicable to the project site. The Basin Plan defines beneficial uses, sets forth water quality objectives, and establishes programs to manage the quality of surface water and groundwater and achieve those water quality objectives for protection of beneficial uses. As discussed under Item 10(a), above, project construction and operation would not violate water quality objectives of the Kern River. Therefore, project construction and operation would not degrade water quality in receiving waters protected by the Basin Plan and would not conflict with or obstruct implementation of the Basin Plan. This impact would be less than significant.

The project site overlies the Kern River Valley Groundwater Basin, which is designated as a very-low priority basin by the California Department of Water Resources pursuant to the Sustainable Groundwater Management Act, and development of a Groundwater Sustainability Plan was not required (California Department of Water Resources 2024). Therefore, there is no Groundwater Sustainability Plan applicable to the project. The project would therefore not conflict with or obstruct implementation of a sustainable groundwater management plan, and no impact would occur.

**LESS-THAN-SIGNIFICANT IMPACT**

# 11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*a. Would the project physically divide an established community?*

Construction staging would occur on the project site west of the riverbank. Construction would be temporary, lasting approximately nine months. Operation of the proposed project would not have the potential to physically divide an established community because the proposed project would be primarily located within the Kern River, and the location of project components on the western bank would not obstruct access to the Riverview lodge or trailer park. Therefore, no impact would occur.

**NO IMPACT**

*b. Would the project 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?*

The project site is located within the Kern County General Plan area and is zoned as Neighborhood Commercial. Pursuant to Municipal Code Chapter 19.30 and Chapter 19.34, water systems are permitted within Neighborhood Commercial (C-1) and Highway Commercial (CH) zones, respectively (Kern County 2022). Policies 37, 43, and 44 of the Kern County General Plan would relate to the proposed project (Kern County 2009a):

- Policy 37:** Ensure maintenance and repair of existing water systems.
- Policy 43:** Drainage shall conform to the Kern County Development Standards and the Grading Ordinance.
- Policy 44:** Discretionary projects shall analyze watershed impacts and mitigate for construction-related and urban pollutants, as well as alterations of flow patterns and introduction of impervious surfaces as required by the California Environmental Quality Act (CEQA), to prevent the degradation of the watershed to the extent practical.



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The proposed project would install a new raw water intake system to restore depleted supply capacity due to existing impaired infrastructure. Maintenance of the proposed project would be guided by an operational and maintenance manual that specifies the maintenance requirements for the proposed project. As discussed in Section 10, *Hydrology and Water Quality*, the project would comply with Section 17.28.140, Erosion Control, of the Kern County Grading Ordinance during construction activities, and thus project-related drainage activities would conform with Kern County standards. Furthermore, as analyzed in Section 10, *Hydrology and Water Quality*, the project would not substantially alter drainage patterns and would not introduce a substantial amount of impervious surfaces, and thus the project would not degrade the Kern River watershed through the introduction of construction-related and urban pollutants. Therefore, the project would comply with Policies 37, 43, and 44 of the Kern County General Plan. The proposed project would not 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 and environmental effect. No impact would occur.

**NO IMPACT**

# 12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project 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?*
- b. *Would the project 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?*

Based on a review of the USGS Mineral Resources Data System, there are no known mineral resources at the project site or in the immediate vicinity (USGS 2022b). In addition, the Kern County General Plan does not designate the project site as 8.4 (Mineral and Petroleum) which contains productive petroleum fields, natural gas, and mineral deposits (Kern County 2009a). Furthermore, Kern County prohibits mineral extraction activities in areas zoned Neighborhood Commercial (C-1) and Highway Commercial (CH) (Kern County 2022). Therefore, the proposed project would not 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 or 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. No impact would occur.

**NO IMPACT**

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# 13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project result in:				
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 applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. *Would the project result in 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 applicable standards of other agencies?*

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. The equivalent noise level ( $L_{eq}$ ) is one of the most frequently used noise metrics; it considers both duration and sound power level. The  $L_{eq}$  is defined as the single steady-state A-weighted sound level equal to the average sound energy over a time period. When no time period is specified, a 1-hour period is assumed. The  $L_{max}$  is the highest noise level within the sampling period. Community noise is usually measured using Day-Night Average Level ( $L_{dn}$ ), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.).

The primary existing noise sources in the vicinity of the project site include vehicular traffic on Sirretta Street and Kernville Road, the Riverview Lodge and Camp Kernville, and recreational activities along the Kern River. According to the USEPA, small town and quiet suburban noise levels range from approximately 45 to 55 dBA  $L_{dn}$  (USEPA 1974). Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. The Kern County General Plan identifies residential areas, schools, convalescent and acute care hospitals, parks and recreational areas, and churches and noise sensitive receivers (Kern County 2009a). The closest sensitive receiver to the project site is Camp Kernville located adjacent to the access/staging area

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and approximately 45 feet northeast of the project's permanent impact area. Other nearby sensitive receivers include single-family residences and Riverview Lodge located 50 feet west of the project site, the Kernville Inn at 270 feet from the project site, and single-family residences at 415 feet from the project site. The closest school to the project site is Kernville Elementary School located approximately 0.25-mile northeast of the project site.

The Noise Element of the Kern County General Plan does not contain construction noise standards. The Noise Element includes Implementation Measure F to limit the exposure of sensitive land uses to exterior noise, as described below:

- Require proposed commercial and industrial uses or operations to be designed or arranged so that they will not subject residential or other noise sensitive land uses to exterior noise levels in excess of 65 dB  $L_{dn}$  and interior noise levels in excess of 45 dB  $L_{dn}$ .

Implementation Measure F is utilized as the applicable operational noise threshold for the purpose of this analysis. Potential noise impacts associated with project construction and operation are discussed below.

## Construction

Section 8.36.020(H) of the County's Municipal Code prohibits construction noise between 9:00 p.m. and 6:00 a.m. on weekdays and 9:00 p.m. and 8:00 a.m. on weekends. The County's Municipal Code does not provide a quantitative construction noise threshold. Therefore, the FTA's Transit Noise and Vibration Impact Assessment (2018) threshold of 80 dBA  $L_{eq}$  for an 8-hour period is utilized. Construction would have a potentially significant impact if it would exceed 80 dBA  $L_{eq}$  or if construction would occur outside the County's allowable hours.

Construction activities would generate temporary noise, exposing sensitive receptors to increased noise levels from the use of construction equipment. Each phase of construction has a specific equipment mix and associated noise characteristics, depending on the equipment used during that phase. Construction would be short-term and temporary, lasting approximately nine months. Typical construction projects have long-term noise averages that are lower than louder short-term noise events due to equipment moving from one point to another on the site, work breaks, and idle time. Each phase of construction has a specific equipment mix depending on the work to be carried out during that phase. Accordingly, each phase also has its own noise characteristics; some will have higher continuous noise levels than others, and some may have discontinuous high-impact noise levels. The maximum hourly  $L_{eq}$  of each phase is determined by combining the  $L_{eq}$  contributions from each piece of equipment used in that phase (FTA 2018). Construction would include demolition, site preparation, grading, and construction phases. For assessment purposes, construction noise was estimated using the Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM). Each phase was modeled assuming the three loudest pieces of construction equipment for each phase would operate simultaneously. Demolition was modeled assuming a concrete saw, dump truck, and excavator would operate simultaneously. Site preparation was modeled assuming a dump truck, excavator and dozer would operate simultaneously. Grading was modeled assuming a dump truck, roller, and dozer would operate simultaneously. Building construction was modeled assuming a concrete mixer truck, crane, and excavator would operate simultaneously. Pile driving may be required if construction of the new intake structure is extended to a time when water levels in the river are high. Construction equipment was derived from an equipment list provided by Cal Water. Noise levels for each phase of construction are presented in Table 3 below, with additional information provided in Appendix G.

**Table 3 Construction Phase Equipment and Noise Levels**

Equipment	Receptor Distance (feet)	dB <sub>A</sub> L <sub>eq</sub> 8-hour <sup>1</sup>
<b>Demolition</b>		
Concrete Saw	50	83
Dump Truck	50	80
Excavator	50	90
<b>Demolition Phase Total</b>		<b>86.3</b>
<b>Site Preparation</b>		
Dump Truck	50	80
Excavator	50	81
Dozer	50	81
<b>Site Preparation Phase Total</b>		<b>85.5</b>
<b>Grading</b>		
Dump Truck	50	80
Roller	50	78
Dozer	50	81
<b>Grading Phase Total</b>		<b>84.6</b>
<b>Pile Driving</b>		
Impact Pile Driver <sup>2</sup>	140	85
Roller	50	78
Dozer	50	81
<b>Pile Driving Phase Total</b>		<b>87.3</b>
<b>Building Construction</b>		
Concrete Mixer Truck	50	81
Crane	50	77
Excavator	50	81
<b>Building Construction Phase Total</b>		<b>84.8</b>

<sup>1</sup> dB<sub>A</sub> L<sub>eq</sub> = A-weighted decibels time-weighted equivalent over a period of 8 hours.

<sup>2</sup> Impact pile driving would occur at the intake structure, and the closest distance to receivers would be 140 feet.

See Appendix G for RCNM outputs.

Construction would occur Monday through Friday from 8 a.m. and 5 p.m. and therefore would occur within the County’s allowable hours for construction activities. Table 4 depicts the noise levels from construction activity at the nearest sensitive receiver, Camp Kernville, at 45 feet, to the single-family residences and Riverview Lodge, at 50 feet, to the Kernville Inn, at 270 feet, and to single-family residences at 415 feet. Although the project site extends adjacent to these receivers, distances of 45 and 50 feet were chosen for analysis because the location of western permanent impact area (i.e., where construction equipment would primarily be operating; see Figure 2) is located 45 feet from Camp Kernville and 50 feet from the single-family residence and Riverview Lodge west of the project site. Impact pile driving would occur at the intake structure, and is measured at the distance to each receiver from that location. As shown in Table 4, each construction phase would result in construction noise in excess of 80 dB<sub>A</sub> L<sub>eq</sub> (8-hour) at 45 and 50 feet but would not result in construction noise in excess of 80 dB<sub>A</sub> L<sub>eq</sub> (8-hour) at 270 feet or 415 feet. Accordingly, construction of the proposed project would not generate substantial noise at the Kernville Inn or the single-

family residence east of Buena Vista Drive, but would potentially generate excessive noise at Camp Kernville, the single-family residence west of the project site, and the Riverview Lodge. This impact would be potentially significant, and implementation of Mitigation Measure NOI-1 is required.

**Table 4 Construction Noise Levels**

Sensitive Receivers	Distance (feet) <sup>1</sup>	Construction Noise Levels (dBA L <sub>eq</sub> 8-hour)					Exceed Threshold? <sup>1</sup>
		Demolition	Site Preparation	Grading	Grading With Pile Driving	Building Construction	
Camp Kernville	45	87.2	86.4	85.5	87.6	85.7	Yes
Single-family residences to west; Riverview Lodge	50	86.3	85.5	84.6	87.3	84.8	Yes
Kernville Inn	270	71.7	70.9	70.0	75.8	70.2	No
Single-family residences east of Buena Vista Drive	415	67.9	67.1	66.2	76.2	66.4	No

<sup>1</sup> Distance from impact pile driving at intake structure would be the following: Camp Kernville and single-family residences to west/Riverview Lodge: 140 feet; Kernville Inn: 460 feet; single-family residences east of Buena Vista Drive: 415 feet

<sup>2</sup> Threshold is 80 dBA L<sub>eq</sub> (8-hour)

dBA L<sub>eq</sub> = A-weighted decibels time-weighted equivalent.

See Appendix G for RCNM outputs.

## Operation

The proposed project involves the replacement of an existing raw water intake system. This would include the installation of new mechanical equipment, specifically the two 50-horsepower submersible vertical turbine pumps located with an enclosure. Only one pump would operate at a time, as the second pump would operate as a backup if the first pump fails. To analyze noise impacts from the pumps and accompanying mechanical components, a reference noise level measured for a 100-horsepower pump at a water treatment plant was used (Padre Dam Municipal Water District 2015). This 100-horsepower pump had a sound power level of 93.2 dBA L<sub>eq</sub> that is equivalent to a sound pressure level (SPL) of 85.2 dBA L<sub>eq</sub> at a distance of three feet.

The pump enclosure would provide noise attenuation; noise was assumed to be attenuated by at least 35 dBA from the inside of the enclosure to the outside of the structure (FHWA 2011). With this estimated reduction and the distance of approximately 75 feet between the pump and the nearest sensitive receptor property lines to the west, the pump would generate a noise level of 22 dBA L<sub>eq</sub>. When converted to dBA L<sub>dn</sub>, this would equal 28 dBA L<sub>dn</sub>, well below Kern County’s exterior noise standard of 65 dB L<sub>dn</sub>. Other project equipment, such as other electrical components, would not measurably increase noise levels because they would not be perceptible over the noise generated by the pumps. Therefore, project operation would not generate substantial on-site operational noise levels at the nearest sensitive receptors, and impacts would be less than significant.

## Mitigation Measures

Mitigation Measure NOI-1 is required to reduce the proposed project’s potential impact regarding generation of construction noise above applicable standards.

*NOI-1 Construction Noise Management*

Prior to the start of ground-disturbing construction activities, Cal Water shall direct the construction contractor to prepare a Construction Management Plan, to be approved and implemented by Cal Water. The Construction Management Plan shall include, at a minimum, the following:

- Prior to the initiation of construction activities at the project site that occur within 50 feet of nearby sensitive receptors, the contractor shall install temporary noise barriers/blankets between the construction boundary and these sensitive residential receptors. More specifically, temporary noise barriers/blankets shall be installed along the northeastern project boundary between the access/staging area and the edge of Camp Kernville and the western project boundary between the access/staging area and backyard of the adjacent single-family residence and Riverview Lodge. The temporary barriers/blankets shall have a minimum height of 10 feet to block the line of sight between the construction noise sources and the adjacent sensitive receivers. Barriers shall be constructed with a solid material that has a density of at least 1 pound per square foot with no gaps from the ground to the top of the barrier and be lined on the construction side with acoustical blanket, curtain or equivalent absorptive material rated Sound Transmission Class 32 or higher.
- At least 10 days prior to the start of construction activities, a sign shall be posted at the construction site, or other conspicuous location, which includes a telephone number for project information, and a procedure in which a construction manager will respond to and investigate noise complaints and take corrective action, if necessary, in a timely manner.
- At least 21 days prior to the start of construction activities, businesses and residents within 500 feet of the project site shall be notified of the planned construction activities. The notification shall include a brief description of the project, the activities that would occur, the hours when construction would occur, and the construction period's overall duration. The notification shall include the telephone numbers of Cal Water's and the construction contractor's authorized representatives assigned to respond in the event of a noise complaint.
- If a construction noise complaint is registered, Cal Water shall retain a qualified noise consultant to conduct noise measurements at the properties that registered the complaint. The noise measurements shall be conducted for a minimum of one hour. The consultant shall prepare a letter report summarizing the measurements, calculation data used in determining impacts, and potential measures to reduce noise levels to the maximum extent feasible.
- Prior to the start of and for the duration of construction, the construction contractor shall properly maintain and tune all construction equipment in accordance with the manufacturer's recommendations to minimize noise emissions.
- Prior to use of any construction equipment, the construction contractor shall fit all equipment with properly operating mufflers, air intake silencers, and engine shrouds no less effective than as originally equipped by the manufacturer.
- Material hauling and deliveries shall be coordinated by the construction contractor to reduce the potential of trucks waiting to unload for protracted periods of time.
- Signs shall be posted at the job site entrance(s) and within the on-site construction zones to reinforce the prohibition of unnecessary engine idling. All other equipment shall be turned off if not in use for more than five minutes. The construction manager shall be responsible for enforcing this measure.
- To the extent feasible, hydraulic equipment shall be used instead of pneumatic impact tools, and electric-powered equipment shall be used instead of diesel-powered equipment.



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- Stationary noise sources (e.g., generators) shall be located as far from sensitive receptors as practicable, and they shall be muffled and enclosed within temporary sheds, or insulation barriers with a minimum Sound Transmission Class rating of 32.
- The use of bells, whistles, alarms, and horns shall be restricted to safety warning purposes only.

Cal Water shall require implementation of the above noise reduction measures as part of the construction contract and shall confirm the above noise reduction measures are implemented by the construction contractor at the beginning of the construction period, and as needed during the construction period.

### Significance After Mitigation

Implementation of Mitigation Measure NOI-1, including the use of temporary noise barriers, would reduce construction noise levels by 15 to 20 dBA (Bies, Hansen, and Howard 2018; Harris 1991). Therefore, implementation of Mitigation Measure NOI-1 would result in mitigated construction noise levels ranging from approximately 67 to 72 dBA  $L_{eq}$  at Camp Kernville and 66 to 71 at the single-family residence to the west and Riverview Lodge, which is below the FTA 80 dBA  $L_{eq}$  (8-hour) threshold used for this analysis. Therefore, implementation of Mitigation Measure NOI-1 would reduce the proposed project's construction noise impacts to a less-than-significant level.

#### LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

Groundborne vibration consists of oscillatory waves that move through the ground from a source to adjacent buildings or structures. The primary concern from vibration is that it may cause structural damage. Typically, groundborne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. For the purposes of this analysis, vibration amplitudes are expressed in peak particle velocity (PPV) and described in inches per second (in/sec). PPV is often used as it corresponds to the stresses experienced by buildings. Kern County has not adopted construction vibration thresholds. For the purposes of this analysis, the vibration thresholds outlined in the FTA's Transit Noise and Vibration Assessment Manual are utilized, which are shown in Table 5.

**Table 5 Groundborne Vibration Architectural Damage Thresholds**

Building Category	PPV (in/sec)
I. Reinforced concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Nonengineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

in/sec = inches per second; PPV = peak particle velocity

Source: FTA 2018

Construction activities known to generate excessive groundborne vibration, such as pile driving, may occur if construction is extended to a time when water levels in the river are high. This would only occur in the easternmost temporary construction area (Figure 2), approximately 140 feet east of the Riverview Lodge. At 25 feet, an impact pile driver would generate a vibration level of approximately

1.5 PPV in/sec, which equates to  $0.11 \text{ PPV in/sec}^4$  at 140 feet which would not exceed the threshold of 0.2 PPV in/sec (FTA 2018). Therefore, pile driving would not result in substantial vibration at the Riverview Lodge.

If pile driving is not required, the greatest source of vibration during project construction activities would be the use of a roller during grading activities. The closest building to the project site is the Riverview Lodge located approximately 45 feet west of the proposed project's temporary construction area. The Riverview Lodge is a nonengineered timber and masonry building and therefore would have a vibration threshold of 0.20 PPV in/sec. At 25 feet, a vibratory roller would generate a vibration level of approximately 0.21 PPV in/sec (FTA 2018), which equates to 0.09 PPV in/sec at 45 feet (Appendix G) and therefore would not exceed the vibration threshold of 0.2 PPV in/sec. Use of a vibratory roller (and other general construction equipment) during grading would not result in substantial impacts associated with vibration.

Based on the above, construction of the proposed project would have a less-than-significant impact related to groundborne vibration.

## **Operation**

Operation of the proposed project would involve operation of a raw water intake system and would therefore not include any operational sources of vibration. Maintenance activities such as cleaning brushes and replacing the drive assembly would not require machinery that would generate substantial groundborne vibration and would be similar to existing operational conditions. Therefore, project operation would have a less-than-significant impact related to groundborne vibration.

## **LESS-THAN-SIGNIFICANT IMPACT**

- 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?*

The closest airport to the project site, the Kern Valley Airport, is located approximately 1.6 miles south of the project site. The Kern Valley Airport provides service for small private planes and minor maintenance (Kern Valley Airport 2022). The project site is outside of the noise contours established for the Kern Valley Airport within the Kern County Airport Land Use Compatibility Plan (Kern County 2012). Therefore, temporary construction activities and intermittent ongoing operational activities would not result in the placement of employees in a location such that they would be exposed to excessive noise due to proximity to Kern Valley Airport. No impact would occur.

## **NO IMPACT**

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<sup>4</sup>  $\text{PPV}_{\text{equip}} = \text{PPV}_{\text{ref}} * (25/D)^{1.5}$  where  $\text{PPV}_{\text{equip}}$  = PPV adjusted for distance (in/sec),  $\text{PPV}_{\text{ref}}$  = source reference vibration at 25 feet, D = distance

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# 14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project 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)?*
- b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The proposed project would not result in the construction of habitable structures and would not induce population growth. The proposed replacement intake system would not increase the design capacity of the existing intake system or expand the water supply for the area and therefore would not result in indirect population growth. Operation of the proposed project would involve minimal ongoing operational activities comprised of weekly visual inspection, sediment removal, annual inspection, and periodic replacement of self-cleaning cone screen parts every 5 to 10 years. These operation and maintenance activities are currently required for the existing intake system and would therefore not result in an increase in employees compared to existing conditions. The proposed project would not induce substantial population growth or displace substantial numbers of existing people or housing. No impact would occur.

**NO IMPACT**

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# 15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a. Would the project 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:				
1 Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2 Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3 Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4 Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5 Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a.1. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

a.2. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

a.3. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

a.4. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

**Kernville Raw Water Intake Upgrade Project**

*a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

As discussed in Section 14, *Population and Housing*, the proposed project would not induce substantial population growth, either directly or indirectly. Therefore, the proposed project would not include actions which have the potential to increase demand for fire protection, police protection, schools, parks, libraries, or other public services such that new or physically altered public facilities would be warranted. The proposed project would not result in substantial physical impacts associated with the provisions of new or physically 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 fire protection services, police protection services, schools, parks, or other public facilities. No impact would occur.

**NO IMPACT**

# 16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a. Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. Would the project 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?*
- b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

The proposed project does not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. Temporary construction activities over a 12-month period and occasional, intermittent operational activities would not substantially interfere with or permanently prohibit the use of existing neighborhood and regional parks or other recreational facilities, including the Kern River, such that other parks or recreational facilities would be utilized more frequently, and substantial physical deterioration of the facility would occur or be accelerated. The project would result in no impact on recreational facilities.

**NO IMPACT**



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# 17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

The project site is adjacent to Kernville Road and Sirretta Street. Kernville Road contains a Class II bicycle lane which crosses in front of the entrance to the project site. Sidewalks are available for pedestrians on the roads adjacent to the project site. The nearest transit facility to the project site is a bus stop located approximately 415 feet west of the project site on Tobias Street.

Potential impacts to the circulation system would be primarily associated with construction personnel traveling to and from the project site, delivery trips for heavy equipment and construction tools, and trips to dispose of demolition debris and soil. Construction-related vehicle trips would be temporary and would cease once construction is complete. Construction would not require road closures or result in substantial interruption of the existing circulation system because construction vehicles and equipment would be staged on the project site west of the riverbank away from existing transportation facilities. During operation, the proposed project would require the same amount of vehicle trips to the project site as under existing conditions which would not disrupt existing traffic patterns or otherwise interfere with existing circulation infrastructure. Because the proposed project would not interfere with existing transit, roadway, bicycle, or pedestrian facilities, the proposed project would not conflict with a program, plan, ordinance or policy addressing the circulation system. No impact would occur.

**NO IMPACT**

- b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

CEQA Guidelines Section 15064.3(b) identifies criteria for evaluating transportation impacts. Specifically, the guidelines state VMT exceeding an applicable threshold of significance may indicate a significant impact. According to Section 15064.3(b)(3) of the CEQA Guidelines, a lead agency may include a qualitative analysis of operational and construction traffic if existing models or methods are not available to estimate the VMT for the project being considered. Construction of the proposed project would result in short-term, temporary vehicle trips to and from the project site during the construction period. These temporary vehicle trips would not result in long-term changes to VMT within Kernville; therefore, construction of the proposed project would not generate VMT inconsistent with CEQA Guidelines Section 15064.3(b). Operation of the proposed project would require the same amount of vehicle trips to the project site as under existing conditions. Therefore, operation of the proposed project would not increase VMT or otherwise be inconsistent with CEQA Guidelines Section 15064.3(b). No impact would occur.

**NO IMPACT**

- c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

The proposed project would not alter or affect the existing street and intersection network in its vicinity. Equipment staging would occur on the project site and construction personnel would park on the project site minimizing the potential for construction-related vehicles and equipment to create a dangerous intersection. Construction and operation of the proposed project would not involve incompatible uses such as farm equipment. No new roadway facilities or features would be included as part of the proposed project. Therefore, the proposed project would not substantially increase hazards due to a geometric design feature or incompatible use. No impact would occur.

**NO IMPACT**

- d. Would the project result in inadequate emergency access?*

The proposed project would not include any permanent features that would have the potential to result in inadequate emergency access at the project site. The proposed project would involve the transport of construction materials, equipment and workers to and from the project site, as well as the hauling of construction debris. Construction activity would temporarily increase traffic adjacent to the project site and along haul routes. However, minor delays in traffic would be intermittent and temporary, lasting approximately nine months. Construction staging would occur on the project site west of the riverbank, and no road closures would occur during construction. Accordingly, construction activities would not result in inadequate emergency access. Operation would result in result in the same number of trips to the project site as under existing conditions for routine maintenance activities which would not result in roadway closures or otherwise interfere with emergency access to the project site, the Riverview Lodge, or the adjacent residences. Therefore, the proposed project's impact on emergency access would be less than significant.

**LESS-THAN-SIGNIFICANT IMPACT**

# 18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <p>a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?</p>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?*

On October 30, 2024, project notification letters with invitations to consult on the project were sent by email to representatives of the two tribes on the State Water Board’s Assembly Bill 52 list for the project area: the Big Pine Paiute Tribe of Owens Valley and the Santa Rosa Rancheria Tachi Yokut Tribe. Neither tribe requested consultation with the State Water Board.

**Kernville Raw Water Intake Upgrade Project**

Additionally, a cultural resources study that included a records search at the Regional Information Center of the CHRIS, a Sacred Lands File search conducted by the NAHC, a pedestrian survey, and tribal outreach (see below) found no tribal cultural resources were identified on or near the project site.

The following describes the additional tribal outreach contained in the Cultural Resources Technical Report (Appendix D). The Sacred Lands File search and Native American contact list was requested from the NAHC and the NAHC responded on October 27, 2022, indicating the Sacred Lands File search was “negative”. On October 11 and 14, 2024, letters were emailed to the individuals on NAHC contact list including the Big Pine Paiute Tribe of the Owens Valley, Chumash Council of Bakersfield, Kern Valley Indian Community, Kitanemuk & Yowlumne Tejon Indians, Tejon Indian Tribe, Tubatulabals of Kern Valley, and the Tule River Indian Tribe. (The Santa Rosa Rancheria Tachi Yokut Tribe were not included in the NAHC’s list of tribes for the area.) The letters described the project and asked if there are tribal cultural resources in the project area. Follow-up emails or phone calls to all NAHC-listed contacts were completed on October 18, 2024 and October 28, 2024, to confirm receipt of the letter and again ask about knowledge or concerns about cultural resources in the project area.

None of the tribes contacted provided information on known tribal cultural resources or expressed concerns about the project having impacts on tribal cultural resources. No tribal cultural resources listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources are currently known to be present within the project site. Furthermore, no tribal cultural resources that have been determined by the lead agency to be significant are currently known to be present within the project site. Therefore, the project would not cause a substantial adverse change in a known tribal cultural resource. The project would have no impacts to tribal cultural resources.

**NO IMPACT**

# 19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

## Water

The proposed project is a raw water intake system intended to replace an existing raw water intake system which is currently operating at limited capacity, the environmental effects of which are analyzed throughout this IS-MND. The proposed project would not require or result in the relocation or construction of new or expanded water facilities that could cause significant environmental effects. . Therefore, no impact related to water facilities would occur beyond what is analyzed within this IS-MND.

## **Wastewater Treatment**

The proposed project would not include structures which would generate wastewater. Minimal wastewater generated during temporary construction activities would be served by on-site portable restroom facilities. Therefore, the proposed project would not result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects. No impact would occur.

## **Stormwater Drainage**

During storm events, the Kern River serves as a natural channel for stormwater runoff. The proposed project would add 166 square feet of impervious surfaces. This minimal introduction of impermeable surfaces at the project site would not substantially increase stormwater runoff which would require the addition of stormwater drainage facilities. Therefore, the proposed project would not result in the relocation or construction of new or expanded stormwater drainage, the construction or relocation of which could cause significant environmental effects. No impact would occur.

## **Electric Power**

The proposed project would include the construction of an electrical platform to power the new intake system, the environmental effects of which are analyzed throughout this IS-MND. No additional new or expanded electric power facilities would be required other than those analyzed herein, and no impact would occur.

## **Natural Gas**

The proposed project involves replacement of a raw water intake system and installation of ancillary features to power the new intake system. The proposed project would not introduce an increased demand for natural gas. Therefore, the proposed project would not result in the relocation or construction of new or expanded natural gas facilities, the construction or relocation of which could cause significant environmental effects. No impact would occur.

## **Telecommunications**

The proposed project includes a remote telemetry unit, the environmental effects of which are analyzed throughout this IS-MND. No additional new or expanded telecommunications facilities would be required other than those analyzed herein, and no impact would occur.

## **NO IMPACT**

*b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

The proposed project is a raw water intake system and would not include development that would generate water demand. A minimal amount of water would be required during construction activities for dust suppression purposes, which would be temporary and cease at the end of construction. The proposed project would not increase the production capacity of the existing intake system or increase Cal Water's permitted water allocation from the Kern River. Minimum water level of the Kern River at the intake structure would be approximately 1.4 feet. Therefore, the project would not require additional water supplies beyond existing conditions. This impact would be less than significant.

## **LESS-THAN-SIGNIFICANT IMPACT**

- c. *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

As described under Item 19(a), the proposed project would only generate wastewater during construction activities which would be served by portable restroom facilities. Proposed project operation would not include any use requiring long-term wastewater discharge. Therefore, the proposed project would have no impact on wastewater systems.

**NO IMPACT**

- d. *Would the project 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?*
- e. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Demolition and construction activities would generate approximately 30 CY of concrete and 136 CY of soil debris. In addition, demolition would create waste from the removal of the existing pump building, foundation, electrical panels, and piping. These materials would be disposed of at Bena Landfill. Bena Landfill has a maximum permitted capacity of 4,500 tons per day and a remaining capacity of 32.8 million cubic yards and is estimated to have a cease operation date of 2046 (California Department of Resources, Recycling, and Recovery 2024). Bena Landfill has sufficient permitted capacity to accommodate the proposed project's temporary solid waste disposal needs associated with demolition and construction activities. Furthermore, construction and demolition waste would be minimized pursuant to Assembly Bill 939, which requires recoverable materials generated during construction to be separated and recycled to minimize construction waste.

Operation of the proposed project would generate minimal amounts of solid waste from replaced cleaning brushes, occurring every five to ten years, and replaced drive assembly, occurring every ten years, which would be similar to maintenance of the existing systems. This minimal amount of solid waste would not substantially exceed local landfill capacity. The proposed project would produce minimal waste during construction and operation and comply with all applicable statutes and regulations related to solid waste. Therefore, impacts related to solid waste would be less than significant.

**LESS-THAN-SIGNIFICANT IMPACT**



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## 20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require the installation or maintenance 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

The project site is located within a Very High Fire Hazard Severity Zone (CalFIRE 2024b). As discussed in Section 9, *Hazards and Hazardous Materials*, the movement of construction equipment, hauling of construction debris, and transportation of construction personnel could temporarily increase traffic on roadways, particularly Kernville Road and haul routes (SR-178, SR-184, and SR-58). However, any minor traffic increases during construction would be temporary in nature and would not impair an adopted emergency response plan or emergency evacuation plan. Construction staging would occur on the project site west of the riverbank and would not necessitate the rerouting of traffic. Therefore, this impact would be less than significant.

### LESS-THAN-SIGNIFICANT IMPACT

**Kernville Raw Water Intake Upgrade Project**

- b. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, 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?*
- c. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance 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?*
- d. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

The project site is located within a Very High Fire Hazard Severity Zone (CalFIRE 2024b). However, the project site is within the Kern River and on the adjacent western bank and a dirt road. The project site contains minimal, scattered vegetation and is bounded to the west by existing development. These conditions limit the potential for wildfire. To further minimize fire risk, construction personnel would adhere to PRC Section 4442, which requires earth-moving and portable construction equipment with internal combustion engines to use spark arrestors when operating on any forest-covered, brush-covered, or grass-covered land to reduce the potential for sparks which could ignite existing vegetation. In addition, PRC Section 4428 requires construction contractors to maintain fire suppression equipment during the highest fire danger period (April 1 to December 1) when operating on or near any forest-covered, brush-covered, or grass-covered land. During operation, project components would be housed in outdoor, nonflammable structures that would reduce the potential for accidental sparks to ignite nearby vegetation. Electrical equipment would be installed in accordance with the requirements of the California Electrical Code, including requirements governing wiring protection, overcurrent protection, and wiring methods. Compliance with regulatory safeguards would minimize the fire risk associated with ancillary infrastructure. The proposed project would not result in additional habitable structures and would not accommodate occupants. As discussed in Section 7, *Geology and Soils*, the project site does not contain steep slope conditions conducive to landslide risk. Rip rap would be placed 20 feet upstream and 20 feet downstream of the new intake structure to reduce riverbank erosion due to the new intake system, which would minimize the risk of drainage changes. Thus, the proposed project would not expose people or structures to significant risks associated with wildfire. Therefore, impacts would be less than significant.

**LESS-THAN-SIGNIFICANT IMPACT**

# 21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a. *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

As discussed in Section 4, *Biological Resources*, the project would not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce the number or restrict the range of a rare or endangered plant or animal. In addition, as discussed in Section 5, *Cultural Resources*, the project would not eliminate important examples of the major periods of California history or prehistory. No impact would occur.

**NO IMPACT**

**Kernville Raw Water Intake Upgrade Project**

- b. *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

Cumulative impacts are defined as two or more individual (and potentially less than significant) project effects which, when considered together or in concert with other projects, combine to result in a significant impact within an identified geographic area. Cumulative development in the geographic area of the project site (defined as Supervisorial District 1 of Kern County) primarily includes roadway improvements, roadway paving, and improvements to the Meadows Field Airport. No cumulative projects are directly adjacent to the project site (Kern County 2023).

Project impacts are primarily temporary, localized effects that would occur during construction activities. As discussed throughout this IS-MND, the project would result in no impacts to agriculture and forestry resources, energy, land use and planning, mineral resources, population and housing, public services, recreation, and tribal cultural resources, and therefore the project would not contribute to cumulative impacts to these resources. The potential for the project to contribute to cumulative impacts would be limited to the infrequent periods of project activities and the following specific issue areas, for which the project is anticipated to have less than significant impacts (with or without mitigation):

- **Aesthetics:** Cumulative development in the region could continue to change the existing visual landscape. However, there are no cumulative projects in the vicinity of the project site. The project would result in a small change to the current visual character of the project site through the addition of new infrastructure to support the raw water intake system but would be substantially similar to what is present at the site currently. Cumulative development would be subject to existing regulations governing scenic character, including the Kern County General Plan. Therefore, cumulative impacts related to aesthetics would not be significant.
- **Air Quality:** Because the Basin is designated as being in nonattainment for the ozone and PM<sub>10</sub> NAAQS and CAAQS, significant cumulative air quality impacts currently exist for these pollutants. As discussed in Section 3, *Air Quality*, with implementation of Mitigation Measure AQ-1, the proposed project would not generate emissions of these air pollutants which exceed the EKAPCD significance thresholds, which are intended to assess whether a project’s contribution to existing cumulative air quality impacts is considerable. Therefore, the project’s contribution to significant cumulative air quality impacts would not be cumulatively considerable.
- **Biological Resources:** Cumulative development in the region would continue to disturb areas with the potential to contain or provide habitat for biological resources. Discretionary cumulative development projects have undergone or would be required to undergo CEQA review, which would determine the extent of potential biological resources impacts and mitigate those impacts appropriately. If these cumulative projects would result in impacts to biological resources, impacts to such resources would be addressed on a case-by-case basis. The Kern County General Plan Update Environmental Impact Report determined that development throughout Kern County would result/is resulting in a significant cumulative impact to biological resources (Kern County 2004). The proposed project would be required to implement Mitigation Measures BIO-1 through BIO-7, which would protect special-status species and restore riparian and aquatic habitat, such that the proposed project would not have a cumulatively considerable contribution to the significant cumulative impact.

- **Cultural Resources:** As mentioned above, discretionary cumulative development projects have undergone or would be required to undergo CEQA review, which would determine the extent of potential cultural resources impacts. If cumulative projects would result in impacts to known or unknown cultural resources, impacts to such resources would be addressed on a case-by-case basis. The Kern County General Plan Update Environmental Impact Report determined that development throughout Kern County would result/is resulting in a significant cumulative impact to cultural resources (Kern County 2004). The proposed project would be required to implement Mitigation Measures CUL-1 and CUL-2, which would require construction worker training, and unanticipated discovery protocols to protect cultural resources, such that the proposed project would not have a cumulatively considerable contribution to the significant cumulative impact.
- **Geology and Soils:** Geologic impacts are typically site-specific and not cumulative in nature. However, cumulative development in the region would continue to disturb areas with the potential to contain paleontological resources. As discussed above, discretionary cumulative development projects have undergone or would be required to undergo CEQA review, which would determine the extent of potential paleontological resources impacts and mitigate those impacts to the extent feasible. The Kern County General Plan Update Environmental Impact Report determined that development throughout Kern County would result/is resulting in a significant cumulative impact to paleontological resources (Kern County 2004). The proposed project would be required to implement Mitigation Measures GEO-1 and GEO-2, which would require construction worker training and an unanticipated discovery protocol to protect paleontological resources, such that the proposed project would not have a cumulatively considerable contribution to the significant cumulative impact.
- **Greenhouse Gas Emissions:** GHG emissions and climate change are, by definition, cumulative impacts. As discussed in Environmental Checklist Section 8, *Greenhouse Gas Emissions*, the adverse environmental impacts of cumulative GHG emissions, including increased average temperatures, more drought years, and more frequent large wildfires, are already occurring. As a result, cumulative impacts related to GHG emissions are significant. Thus, the issue of climate change involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. As discussed in Section 8, *Greenhouse Gas Emissions*, project emissions would be consistent with adopted plans that reduce climate change, such as CARB's 2022 Scoping Plan and the Kern Council of Government's 2022 RTP/SCS, and would therefore not be cumulatively considerable.
- **Hazards and Hazardous Materials:** Similar to the proposed project, cumulative projects would be required to comply with regulations applicable to the use, disposal, and transportation of hazardous materials during construction activities, and compliance with applicable regulations would reduce potential cumulative impacts to less-than-significant levels. With respect to the use and accidental release of hazardous materials in the environment during construction, effects are generally limited to site-specific conditions. Therefore, cumulative impacts related to accidental release of hazardous materials would not be significant.
- **Hydrology and Water Quality:** As discussed in Section 10, *Hydrology and Water Quality*, the project's construction-related water quality impacts would be less than significant with regulatory compliance. The cumulative projects listed above would have less than significant impacts related to hydrology and water quality, as they would be required to comply with existing NPDES regulations to ensure they do not result in substantial erosion or stormwater discharges that would substantially affect water quality in the area. Implementation of these

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regulations minimizes and avoids the potential for cumulative impacts to occur. Therefore, cumulative impacts to hydrology and water quality would not be significant.

- **Noise:** Cumulative development projects may occur at the same time as the proposed project; however, there are no cumulative projects in the vicinity of the project site that could result in an increase in noise, should construction schedules overlap. Furthermore, construction would be temporary, and Mitigation Measure NOI-1 would be implemented, which would require a Construction Management Plan with noise-reducing measures. Finally, operation of the project would not increase ambient noise levels and would therefore not contribute to cumulative noise impacts. Therefore, cumulative impacts related to noise would not be significant.
- **Transportation:** Cumulative development projects may occur at the same time as the proposed project. However, the cumulative development projects and the proposed project would not increase traffic levels or require closures of the same roadways such that they would result in a significant cumulative transportation impact.
- **Utilities and Service Systems:** The project itself consists of replacement of a raw water intake system and would therefore not result in a cumulatively considerable contribution to adverse impacts on water supply. The project would temporarily generate minimal wastewater and solid waste during construction. Therefore, the project's contribution to cumulative impacts related to solid waste or wastewater, significant or otherwise, would not be considerable.
- **Wildfire:** The cumulative projects listed above would generally involve the continued operation of existing activities and would not contribute considerably to cumulative wildfire impacts. All cumulative projects would be required to comply with PRC Section 4442 and Section 4428, which would minimize potential fire risk. As described in Section 20, *Wildfire*, potential wildfire impacts associated with the project would be less than significant with compliance with applicable regulations. Project operation would not involve potentially flammable activities. In addition, the proposed project would not introduce habitable structures, and therefore, would not expose new residents to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Since there would be no long-term project operational wildfire impacts and potential construction-related wildfire impacts would be limited, the project's contribution to cumulative wildfire impacts would not be considerable.

Given the above discussion, the proposed project would not result in a cumulatively considerable contribution to a significant cumulative impact with mitigation incorporated.

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- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, noise, and wildfire impacts. As detailed in Section 3, *Air Quality*, the project would not result, either directly or indirectly, in substantial adverse effects related to air quality through construction or operation with implementation of Mitigation Measure AQ-1. As discussed in Section 9, *Hazards and Hazardous Materials*, project operation would not involve the routine use of large quantities of hazardous materials. Compliance with applicable regulations during project construction would ensure potential impacts on human beings related to hazards and hazardous materials would be less than significant. During project construction, noise impacts would be limited to the daytime hours of 8:00 a.m. to 5:00 p.m., and implementation of Mitigation Measure NOI-1 would ensure construction activities would not generate noise above the FTA threshold for

construction noise at a residential land use. Project operation would not generate noise or increase noise levels. Impacts involving noise would be less than significant with mitigation incorporated. As discussed in Section 20, *Wildfire*, the project's impacts involving wildfire would be less than significant, as project construction would comply with applicable regulations minimizing fire risk.

Therefore, the project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. These impacts would be less than significant with mitigation incorporated.

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