

3.6 Air Quality

The Federal Clean Air Act (CAA) was enacted for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. Basic components of the CAA and its amendments include national ambient air quality standards (NAAQS) for major air pollutants and state implementation plans (SIPs). The ~~United States~~ EPA is the federal agency responsible for identifying criteria air pollutants (CAPs), establishing NAAQS, and approving and overseeing state air programs as they relate to the CAA.

Section 176 of the CAA requires that any entity of the Federal government that engages in, supports, or in any way provides financial support for, licenses or permits, or approves any activity to demonstrate that the action conforms to the applicable SIP required under Section 110 (a) of the CAA (42 USC § 7401 (a)) before the action is otherwise approved. In this context, conformity means that such federal actions must be consistent with a SIP's purpose of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of those standards. Each federal agency must determine that any action that is proposed by the agency and that is subject to the regulations implementing the conformity requirements will, in fact conform to the applicable SIP before the action is taken.

The EPA has identified six CAPs, including ozone (O_3), carbon monoxide (CO), sulfur dioxide (SO_2), oxides of nitrogen (NO_x), particulate matter less than 10 microns in diameter (PM_{10}), particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), and lead (Pb), that are used as indicators of regional air quality. California enacted the California Clean Air Act (CCAA), which has identified four additional CAPs, sulfates, hydrogen sulfide, vinyl chloride, and visible reducing particles. The six national CAPs and the four state CAPs identified under the CCAA comprise the California Ambient Air Quality Standards (CAAQS). Regulation of air pollution is achieved through both the NAAQS and CAAQS and emission limits for individual sources of air pollutants. The NAAQS and CAAQS for the pollutants of concern (~~ozone~~ O_3 , PM_{10} , and $PM_{2.5}$) are presented in **Table 3-1**. For some of the pollutants, the EPA and California have identified air quality standards expressed in more than one averaging time in order to address the typical exposures found in the environment. For example, ~~O_3 ozone~~ is expressed as an eight-hour standard under the NAAQS and an eight- and one-hour averaging time under the CAAQS.

3.6.1 Affected Environment

The proposed pipeline alignment is located within the San Joaquin Valley Air Basin (SJVAB). The SJVAB is approximately 300 miles long and shaped like an oblong bowl, allowing air pollutants, such as ~~O_3 ozone~~ (NO_x and reactive organic gases [ROG] O_3 precursors), PM_{10} , and $PM_{2.5}$ to be retained. Regional climate and topography play a large role in the ambient air pollution concentration that affects the SJVAB, which lies within the central portion of the San Joaquin Valley. Airflow patterns within the SJVAB can generally be characterized by one of four directional types and include: northwesterly up-valley, marine winds from the San Francisco Bay Area, down-valley and foothill drainage (down sloping) winds, and northerly (non-marine) winds resulting from the exiting of a low pressure system (Western Regional Climate Center [WRCC], 2010).

TABLE 3-1
NATIONAL AND CALIFORNIA AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	Standard in parts per million		Standard in microgram per cubic meter		Violation Criteria	
		CAAQS	NAAQS	CAAQS	NAAQS	CAAQS	NAAQS
<u>O₃</u> Ozone	1 hour	0.09	-	180	-	If exceeded	N/A
	8 hours	0.07	0.075	137	157	N/A	If exceeded on more than 3 days in 3 years
PM ₁₀	Annual arithmetic mean	N/A	N/A	20	N/A	N/A	If exceeded
	24 hours	N/A	N/A	50	150	N/A	If exceeded on more than 1 day per year
PM _{2.5}	Annual arithmetic mean	N/A	N/A	12	15	N/A	If exceeded
	24 hours	N/A	N/A	N/A	35	N/A	If exceeded on more than 1 day per year

CAAQS = California Ambient Air Quality Standard

NAAQS = National Ambient Air Quality Standard

Source: California Air Resource Board, 2010a.

Attainment Status

The EPA and California Air Resource Board (CARB), the agency which has jurisdiction over air quality in California, identifies areas throughout California that meet the NAAQS and/or CAAQS, these areas are labeled either attainment or unclassifiable. Areas that do not meet the NAAQS and/or CAAQS are labeled either “nonattainment” or “maintenance.”

The EPA and CARB further classify nonattainment areas according to the level of pollution in each. There are five classes of nonattainment areas: maintenance (recently became compliant with the NAAQS or CAAQS), marginal (relatively easy to obtain levels below the NAAQS or CAAQS), serious, severe, and extreme (will be difficult to reach levels below NAAQS or CAAQS). The EPA and CARB uses these classifications to design clean-up requirements appropriate for the severity of the pollution and set realistic deadlines for reaching those clean-up goals. **Table 3-2** shows the attainment status for the SJVAB.

O₃~~Ozone~~

Photochemical reactions involving ROG and NO_x resulting from the incomplete combustion of fossil fuels is the largest source of ground-level O₃. Because photochemical reaction rates depend on the intensity of ultraviolet light and air temperature, O₃~~ozone~~ is primarily a summer air pollution problem. As a photochemical pollutant, O₃ is formed only during daylight hours under appropriate conditions, but is destroyed throughout the day and night. O₃ is considered a regional pollutant, as the reactions forming it take place over time and are often most noticeable downwind from the sources of the emissions.

TABLE 3-2
FEDERAL AND CALIFORNIA AMBIENT AIR ATTAINMENT STATUS

Pollutants	Designation/Classification	
	Federal	California
O₃Ozone 1-hour	No Federal Standard	Nonattainment/Severe
O₃Ozone 8-hour	Nonattainment/Serious	Nonattainment
PM ₁₀	Attainment	Nonattainment
PM _{2.5}	Nonattainment	Nonattainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

Source: SJAPCD, 2008.

Particulate Matter

Particle pollution is a mixture of microscopic solids and liquid droplets suspended in air. This pollution, also known as particulate matter, is made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, soil or dust particles, and allergens (such as fragments of pollen or mold spores). The size of particles is directly linked to their potential for causing health problems. PM₁₀ and PM_{2.5} pose the greatest public health concerns, because they can traverse deep into the lungs (PM₁₀) and can be small enough to enter the bloodstream (PM_{2.5}).

Attainment and nonattainment areas are identified through monitoring. Unclassifiable areas are those for which air monitoring has not been conducted but are assumed to be in attainment under the NAAQS and/or CAAQS. **Table 3-3** provides a three-year summary listing the highest annual concentration observed for pollutants of concern in the SJVAB (state 1- and federal 8-hour ~~O₃ozone~~, state and federal 24-hour average PM₁₀, and federal 24-hour PM_{2.5}). The monitoring station is located at the Clovis-N Villa Avenue intersection, in the City of Clovis. This station was selected because of its relatively close proximity to the Proposed Action.

Sensitive Receptors

Schools, hospitals, and convalescent homes are considered to be relatively sensitive to poor air quality because children, elderly people, and the infirm are more susceptible to respiratory distress and other air quality related health problems. Residential areas are considered sensitive to poor air quality, because people usually stay home for extended periods of time increasing the potential exposure to ambient air quality. Recreational uses are also considered sensitive due to the greater exposure to ambient air quality conditions because vigorous exercise associated with recreation places a high demand on the human respiratory system.

The land surrounding the project alignments is primarily uninhabited open space. The proposed pipeline alignment would go through the Millerton Lake Marina located at the northern end of

TABLE 3-3
FEDERAL AND STATE AIR MONITORING DATA

FEDERAL AND STATE AIR MONITORING DATA				
Pollutant	Standard	2006	2007	2008
O₃ Ozone State 1-hour:				
Highest	0.09 ppm	0.127	0.121	0.156
Days Exceeded		37	14	33
O₃ Ozone Federal 8-hour:				
Highest	0.075 ppm	0.096	0.101	0.127
Days Exceeded		51	30	44
PM₁₀ 24-hour State:				
Highest	50 ug/m ³	106	111	79.0
Days Exceeded		72	¹	78.7
PM₁₀ Federal 24-hour:				
Highest	150 ug/m ³	104	116	80.5
Days Exceeded		0	0	0
PM_{2.5} Federal 24-hour:				
Highest	35 ug/m ³	65.8	64.7	52.3
Days Exceeded		28.0	51.5	42.5

Note: ¹ There was insufficient (or no) data available to determine the value.
Source: CARB, 2010b

Winchell Cove Road (**Figure 2**). The nearest sensitive receptor to the project alignment is a residence located 450 feet south of Millerton Lake and approximately 550 feet from the pipeline, it should be noted that the pipeline is located within the Millerton Lake bed at this distance. The on-shore distance to this receptor is 1,880 feet. The next closest residence is in the Eagle Springs Golf Course complex and is located 1,950 feet southeast of the proposed pipeline alignment across Millerton Road. No schools or hospitals are located along the proposed pipeline alignment. Construction activity would only occur within 20 feet of the proposed pipeline alignment.

3.6.2 Environmental Consequences

3.6.2.1 No Action

~~Under the No Action Alternative, there would be no construction or ground disturbing activities. No impacts to air quality would occur. Should the system fail, a separate environmental review would occur; any potential impacts to air quality would be identified at that time.~~ Under the No Action Alternative, the proposed maintenance and improvements to the existing CSA 34 water system would not be installed. Continued use of the existing pipeline at full design capacity is likely to result in significant damage to this facility in the long-term, resulting in interrupted water service to existing water users within CSA 34.

Should the system fail, emergency improvements would be required to restore service to CSA 34 customers. The scope of these improvements is speculative and would depend on the location and extent of the system failure. Environmental review would be conducted by the County as required in accordance with CEQA (and possibly by Reclamation in accordance with NEPA if approval of a lease amendment is triggered) and any potential air quality impacts from construction and operation of the improvements would be identified at that time. Effects

associated with emergency improvements would likely be similar to those identified for the Proposed Action described below.

3.6.2.2 Proposed Action

Air Quality Standards

Construction

Construction emissions from grading, trenching, paving, and worker trips were estimated using the 2007 Urban Emissions (URBEMIS) air quality model. URBEMIS estimated construction emissions are shown in **Table 3-4** and compared to the SJVAPCD CEQA Guidelines (Guidelines) thresholds of 10 tons per year for ROG and NO_x and implementation of mitigation measures for PM₁₀ required by the SJVAPCD for all construction projects. As shown in **Table 3-4** construction emissions of ~~O₃zone~~ precursors and PM₁₀ and PM_{2.5} from exhaust emissions would not exceed de minimus levels or Guidelines thresholds. With the implementation of **Mitigation Measure AQ-1** in **Section 3.6.3**, PM₁₀ and PM_{2.5} emissions resulting from construction of the Proposed Action would be reduced. Construction of the Proposed Action would not conflict with or obstruct implementation of the SJVAPCD 2004 ~~O₃zone~~ or 2008 Particulate matter Attainment Plans and would not cause or contribute to a violation of the NAAQS or CAAQS. Proposed construction activities would not contribute to an exceedance of ambient air quality standards.

TABLE 3-4
CONSTRUCTION EMISSIONS

Construction Year	ROG	NO _x	PM ₁₀ ¹	PM _{2.5} ¹	PM ₁₀ ²	PM _{2.5} ²	CO ₂
	Tons per Year						
2010	0.19	1.49	0.23	0.11	0.08	0.08	144.83
De Minimus Levels	10	10	100	100	100	100	N/A
Exceedance	No	No	No	No	No	No	N/A
SJVAPCD Thresholds	10	10	N/A	N/A	N/A	N/A	N/A
Exceedance	No	No	N/A	N/A	N/A	N/A	N/A

¹ Total PM₁₀ and PM_{2.5} emissions.

² PM₁₀ and PM_{2.5} from exhaust, N/A = not applicable.

Source: URBEMIS, 2007.

Operation

Operation of the Proposed Action would not result in an increase in maintenance or worker trips over current levels for the existing pipeline. No operational emissions are expected, and no operating permit is required. No adverse impacts to air quality would occur as a result of operation of the Proposed Action.

Sensitive Receptors

Diesel particulate matter (DPM) and fugitive dust are of concern during the construction phase of the proposed pipeline. Construction would include grading, trenching, and paving. These activities utilize heavy equipment, which use diesel fuel and emit DPM. The land surrounding the project site is primarily undeveloped land with scattered residences, and limited recreation facilities. The nearest sensitive receptor is located approximately 550 feet south of the pipeline alignment within Millerton Lake, and approximately 1,880 feet east of the on-land pipeline alignment. DPM generally dissipates to 9 percent of its original concentration within 500 feet of

the source. Due to the distance of the nearest sensitive receptor, topography, and the dissipation rate of DPM and fugitive dust emitted during construction, sensitive receptors would not be exposed to fugitive dust or substantial concentrations of DPM.

Odor

Under the SJVAPCD, CEQA Guidelines significance is determined in two steps; first does the project produce odors and second are there receptors close to the odor source. Construction odor is generally not noticeable beyond the boundaries of the project alignment and there are no receptors within 550 feet of the project alignment. As a result, construction activities would not create objectionable odors that would adversely affect surrounding residents.

3.6.2.3 Cumulative Impacts

No Action

In the event of system failure as a result of the No Action Alternative, cumulative effects associated with construction and operation of emergency improvements would likely be similar to those identified for the Proposed Action described below.

Proposed Action

A cumulative air quality analysis considers a project over time and in conjunction with other related past, present, and reasonably foreseeable future projects. The SJVAPCD recommends that a project's impact on the ambient concentrations of O₃ ozone, PM₁₀, and CO be analyzed in conjunction with other foreseeable projects.

Under the SJVAPCD CEQA guidelines, a significant cumulative impact would occur if a project exceeds the SJVAPCD thresholds of 10 tons per year of ROG or NO_x. As shown in **Table 3-4** project emissions of NO_x and ROG do not exceed these thresholds. CO and PM₁₀ emissions are considered local pollutants, due to the rapid rate at which these pollutants disperse. Due to the distance of the nearest sensitive receptor (approximately 550 feet) to the pipeline alignment, the project would not expose sensitive receptors to high cumulative concentrations of CO and PM₁₀.

3.6.3 Mitigation

AQ-1: The project proponent shall ensure through contractual obligations that the following PM control measures are implemented during construction, as required by the SJVAPCD:

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover vegetative ground cover.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- With the demolition of buildings up to six stories in height, all exterior surfaces of the building shall be wetted during demolition.
- When materials are transported off-site, all material shall be covered, or effectively

wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.

- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.) (Use of blower devices is expressly forbidden.)
- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.
- Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday.
- Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.

3.7 Global Climate

3.7.1 Affected Environment

Climate change is a global phenomenon attributable to the sum of all human activities and natural processes. The Governor's Office of Planning and Research recommends quantification of ~~greenhouse gas~~ (GHG) emissions, assessment of the significance of any impact on climate change, and identification of mitigation or alternatives that would reduce GHG emissions. Climate change has the potential to reduce the snow packs in the Sierra Nevada Mountains, cause the sea level to rise, and increase the intensity of wildfires and storms intensity.

The regulatory background provided below gives context to the issues of climate change and importance to reducing GHG emissions.

Federal

The following are the most recent regulatory actions taken by the EPA and the CEQ:

- In response to the FY2008 Consolidated Appropriations Act (H.R. 2764; Public Law 110–161), EPA has issued the Final Mandatory Reporting of Greenhouse Gases Rule. Signed by the Administrator on September 22, 2009, the rule requires in general that suppliers of fossil fuels and industrial GHGs, manufacturers of vehicles and engines outside of the light duty sector, and facilities that emit 25,000 metric tons or more of GHGs per year to submit annual reports to EPA. The rule is intended to collect accurate and timely emissions data to guide future policy decisions on climate change.
- On February 23, 2010 the CEQ provided for public comment, its Draft NEPA Guidance on Consideration of the Effects of Climate Change and GHG emissions (NEPA Guidance). The NEPA Guidance provides Federal agencies guidance on how to analyze the environmental impacts of ~~greenhouse gas~~GHG emissions and climate change when they describe the environmental impacts of a proposed action under NEPA. The NEPA Guidance provides practical tools for agency reporting, including a presumptive threshold of 25,000 metric tons of carbon dioxide equivalent emissions from the proposed action to

trigger a quantitative analysis, and instructs agencies how to assess the effects of climate change on the proposed action and its design. The NEPA Guidance exempts land and resource management actions and does not propose to regulate ~~greenhouse gases~~ GHGs. The NEPA Guidance does not provide a numerical GHG emission threshold. As of April, 2013, a revised version of the NEPA Guidance has not been released. ~~Public comment on the NEPA Guidance will be taken until May 9, 2010, after that the CEQ will move quickly to approve the NEPA Guidance.~~

California

Signed by the California State Governor on September 27, 2006, Assembly Bill (AB) 32 codifies a key requirement of EO S-3-05, specifically the requirement to reduce statewide GHG emissions to year 1990 levels by the year 2020. AB 32 tasks CARB with monitoring state sources of GHGs and designing emission reduction measures to comply with the law's emission reduction requirements.

AB 32 required that CARB prepare a comprehensive "scoping plan" that identifies all strategies necessary to fully achieve the required 2020 emissions reductions. In early December 2008, CARB released its scoping plan to the public and on December 12, 2008, the CARB board approved the scoping plan. CARB provided an update to the December, 2008 Scoping Report in November, 2009.

The scoping plan calls for an achievable reduction in California's carbon footprint. Reduction of GHGs emissions to 1990 levels are proposed, which equates to cutting approximately 30 percent from estimated GHG emission levels projected in 2020, or about 15 percent from today's levels. The scoping plan relies on existing technologies and improving energy efficiency to achieve the 30 percent reduction in GHG emission levels by 2020. The scoping plan provides the following key recommendations to reduce GHG emissions:

- Expand and strengthen existing energy efficiency programs as well as building and appliance standards;
- Achieve a statewide renewable energy mix of 33 percent;
- Develop a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establish targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets;
- Adopt and implement measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard.

3.7.2 Environmental Consequences

3.7.2.1 No Action

~~Under the No Action Alternative, emissions associated within construction and operation would not occur. No impact to air quality would occur. Should the system fail, a separate environmental review would occur; any potential impacts related to GHG emissions would be identified at that time.~~ Under the No Action Alternative, the proposed maintenance and

improvements to the existing CSA 34 water system would not be installed. Continued use of the existing pipeline at full design capacity is likely to result in significant damage to this facility in the long-term, resulting in interrupted water service to existing water users within CSA 34.

Should the system fail, emergency improvements would be required to restore service to CSA 34 customers. The scope of these improvements is speculative and would depend on the location and extent of the system failure. Environmental review would be conducted by the County as required in accordance with CEQA (and possibly by Reclamation in accordance with NEPA if approval of a lease amendment is triggered) and any potential climate change impacts from construction and operation of the improvements would be identified at that time. Effects associated with emergency improvements would likely be similar to those identified for the Proposed Action described below.

3.7.2.2 Proposed Action

The 2010, CEQ NEPA Guidance provides that if project-related emissions are below 25,000 metric tons per year of GHG emissions, then a qualitative analysis of project-related climate change impact is sufficient. The SJVAPCD provides CEQA Guidelines for GHG stationary sources; however, project construction is considered indirect mobile sources; therefore, the SJVAPCD CEQA Guidelines thresholds are not applicable.

Project-related GHG emissions are significantly below 25,000 metric tons per year of GHG emissions. The project would emit 144.83 tons of GHGs during construction. These emissions are short-term and temporary. Implementation of **Mitigation Measure AQ-2** would result in the implementation of performance based BMPs, further reducing construction-related GHG emissions.

3.7.2.3 Cumulative Impacts

No Action

In the event of system failure as a result of the No Action Alternative, cumulative effects associated with construction and operation of emergency improvements would likely be similar to those identified for the Proposed Action described below.

Proposed Action

GHG impacts are considered cumulative impacts; however, as discussed in **Section 3.7.2.2**, project emissions of NO_x and ROG do not exceed SJVAPCD thresholds and, due to the distance of the nearest sensitive receptor, the project would not expose sensitive receptors to high cumulative concentrations of CO and PM₁₀. The estimated annual CO₂e emissions required to construct the proposed pipeline would be 144.83 tons (131.80 metric tons) per year, which is well below the 25,000 metric tons per year threshold for reporting GHG emissions. As a result, the Proposed Action is not expected to contribute cumulative adverse impacts to global climate change

CVP water allocations are made dependent on hydrologic conditions and environmental requirements. Since Reclamation operations and allocations are flexible, any changes in hydrologic conditions due to global climate change would be addressed within Reclamation's operation flexibility and therefore water resource changes due to climate change would be the same.

3.7.3 Mitigation

AQ-2: The project proponent shall ensure through contractual obligations that the following best management practices are implemented during construction to minimize GHG emissions:

- The contractor shall use alternative-fueled (e.g. biodiesel, electric, etc) construction vehicles/equipment of at least 15 percent of their fleet.
- The contractor shall use local building materials of at least 10 percent.
- The contractor shall recycle at least 50 percent of construction waste or demolition materials.

3.8 Indian Trust Assets

3.8.1 Affected Environment

ITAs are legal interests in assets that are held in trust by the ~~United States (U.S.)~~ for ~~Federally~~federally recognized Indian tribes or individuals. The trust relationship usually stems from a treaty, executive order (EO), or act of Congress. The Secretary of the Interior is the trustee for the U.S. on behalf of ~~Federally~~federally recognized Indian tribes. “Assets” are anything owned that holds monetary value. “Legal interests” means there is a property interest for which there is a legal remedy, such as compensation or injunction, if there is improper interference. ITA cannot be sold, leased or otherwise alienated without the U.S.’ approval. “Assets” can be real property, physical assets, or intangible property rights, such as a lease, or right to use something; which may include lands, minerals and natural resources in addition to hunting, fishing, and water rights. Indian reservations, rancherias, and public domain allotments are examples of lands that are often considered trust assets. In some cases, ITA may be located off trust land. Reclamation shares the Indian Trust responsibility with all other agencies of the Executive Branch to protect and maintain ITA reserved by or granted to Indian tribes, or Indian individuals by treaty, statute, or ~~Executive Order~~EO. A portion of pipeline would extend through an existing CSA 34 public utility easement located on Table Mountain Rancheria tribal trust land. Table Mountain Rancheria tribal trust land is the only ITA located near the project vicinity.

Reclamation assesses the effect of its programs on tribal trust resources and federally-recognized tribal governments. To carry out this policy, the Reclamation incorporated procedures into its NEPA compliance procedures to require evaluation of the potential effects of its proposed actions. Reclamation will comply with procedures contained in Department Manual Part 512, Chapter 2 guidelines, which protect ITAs.

3.8.2 Environmental Consequences

3.8.2.1 No Action

Under the No Action Alternative, there would be no impacts to ITAs since no change to existing conditions would occur.

3.8.2.2 Proposed Action

As stated above, a portion of the proposed pipeline would extend through an existing CSA 34 public utility easement located on Table Mountain Rancheria tribal trust land. The proposed pipeline would be located underground, and would not impact land uses within the tribal trust land. Further, the pipeline would be located within an existing easement, and no new or modified easements would be recorded on tribal trust land. No other ITAs are located within the Proposed Action's area-of-potential-effects. Therefore, the Proposed Action would not adversely affect ITAs.

3.9 Executive Order 13007– Indian Sacred Sites

3.9.1 Affected Environment

Sacred sites are defined in EO 13007 (May 24, 1996) as "any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site."

EO 13007 requires Federal land managing agencies to accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and to avoid adversely affecting the physical integrity of such sacred sites. It also requires agencies to develop procedures for reasonable notification of proposed actions or land management policies that may restrict access to or ceremonial use of, or adversely affect, sacred sites.

As described in **Section 3.4**, the State of California NAHC was asked to review the Sacred Lands file for information on Native American cultural resources on the project site on March 4, 2010. The NAHC responded on March 8, 2010, indicating they have no knowledge of any cultural resources located within the project site. At the same time, the NAHC provided a list of seven individuals/ organizations for further consultation. The request for the sacred lands search is included in the Confidential Cultural Resource Report (AES, 2011b).

3.9.2 Environmental Consequences

3.9.2.1 No Action

Under the No Action Alternative, there would be no impacts to Indian sacred sites since conditions would remain the same as existing conditions and there are no known sites within the action area.

3.9.2.2 Proposed Action

There are no known sacred sites located within the project area and mitigation is provided in **Section 3.4.3** to reduce the potential for impacts to unknown buried cultural resources. Thus, the Proposed Action would not impact known Indian sacred sites and/or prohibit access to and ceremonial use of these resources.

3.10 Indirect Impacts

The CEQ Regulations for implementing NEPA (Section 1508.8) define indirect effects as impacts caused by an action that are later in time or farther removed in distance, but are a reasonably foreseeable result of the action. Similarly, CEQA Guidelines Section 15358(2) defines indirect effects as those “which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect or secondary effects may include growth-inducing effects and other effects related to induced change in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems.” Examples of indirect effects include effects resulting from off-site mitigation or community growth induced by the implementation of a project.

As stated in **Section 1.3**, the scope of this EA/IS is limited to the Winchell Cove Pipeline Project which is needed under existing conditions to serve existing demands on the CSA 34 water system. Indirect growth inducement could result if the project removed an obstacle to population growth that would lead to the construction of new development; however, in this case, any water purveyance beyond currently permitted water rights must be approved by Reclamation. While the infrastructure may eventually be utilized to provide water supply to future developments within the CSA 34 service area, specifically the Millerton New Town Specific Plan which is currently undergoing NEPA review by Reclamation for the approval of water ~~rights-transfers~~ to serve the development, no changes to water rights or permitted capacity of the CSA 34 water system would result from the proposed Winchell Cove Pipeline Project. Reclamation and the County can approve the Proposed Action, without committing to approval of future developments that may utilize water from the CSA 34 system.

The CSA 34 boundary consists of approximately 1,903 acres and includes the Millerton New Town Specific Plan Area and Brighton Crest. The delivery of CVP water from Millerton Lake through the Winchell Cove Pipeline is subject to an existing contract between Reclamation and CSA 34 (Contract No. 14-06-200-8292A). The contract service area for M&I use of water delivered through the Winchell Cove Pipeline is limited to Brighton Crest, and was recently expanded to include an 83-acre area within Millerton New Town referred to as “Tract 4870”. The existing boundaries of CSA 34 and the authorized contract service area for delivery of water are shown in Figure 1 of **Appendix E**. As stated in a March 8, 2010 letter from Reclamation to the County:

“...the expansion of the Friant Division of M&I place-of-use does not authorize deliveries of water to the remaining portion of the Millerton New Town lands until all necessary transfer or exchange agreements are executed and approved by Reclamation. Additional environmental documentation will also be required before Reclamation may authorize delivery of water to the remaining portion of Millerton New Town (Reclamation, 2010).

Build-out of the existing place of use for Brighton Crest and Tract 4870 would result in the addition of 215 previously approved residential units (54 within the Brighton Crest Community and 161 within Tract 4870). The build-out of these homes is not contingent on the construction of the Proposed Action, and has been previously been subject to CEQA and NEPA review.

Because no off-site mitigation is necessary to minimize the potential effects of the Proposed Action and because the Winchell Cove Pipeline Project is needed under existing conditions to provide a more reliable water system and contingency plan for providing water to users in CSA 34, and therefore would not, in itself, have a growth inducing effect on the surrounding community, no indirect impacts are expected to occur as a result of the Proposed Action. Potential consequences of buildout of the Millerton New Town Specific Plan, should Reclamation choose to approve the water right application for that project, will be fully evaluated within a separate EA prepared pursuant to NEPA. Additionally, potential impacts associated with buildout of the Millerton New Town Specific Plan were previously analyzed within an Environmental Impact Report prepared pursuant to CEQA by the County of Fresno (Fresno County, 1984). This document is available for review at the following address during normal business hours (Monday through Friday from 8 am to 5 pm):

County of Fresno
Department of Public Works and Planning
2220 Tulare Street, 6th floor
Fresno, CA 93721
(559) 600-4078

Potential impacts associated with buildout of Tack 4870 were analyzed within an EA pursuant to NEPA by Reclamation. This document is available for review at the following address during normal business hours (Monday through Friday from 8 am to 5 pm):

Bureau of Reclamation
South-Central California Area Office
1243 "N" Street
Fresno, CA 93721-1813
559 487-5116

Similar to Millerton New Town, any future development within CSA 34 would be required to be analyzed in separate environmental documents under CEQA and NEPA. Additional projects listed within Section 3.0 of the EA/IS, including Ventana Hills, Mira Bella, Friant Ranch, and Wellington Ranch, are not located within the contract service area for M&I use of water delivered through the Winchell Cove Pipeline, and thus would not be served by the proposed water pipeline.

The tee valve connection to Table Mountain Rancheria referenced in Section 2.2 would enable the Tribe to utilize CSA 34 infrastructure for water delivery in the event that future water may become available to the Tribe under separate agreements. In the event that the pipeline is utilized to deliver water to the Tribe, the water would serve existing tribal commercial uses, community facilities, and residences within the Rancheria. There are no reasonably foreseeable development plans within the Tribe's property that would be supported by the Proposed Action. A significant portion of the water demands generated by existing uses on the reservation are currently served by water that is trucked in from the City of Fresno. The delivery of water through the CSA 34 system, should future water rights or transfers be secured, would reduce

large truck traffic and associated diesel emissions. This would be a beneficial impact. Any permanent change to the approved M&I use boundary for Reclamation water within the reservation would also be subject to Reclamation approval and NEPA review. Further, any development within the Tribe's reservation is subject to the requirements of the FESA.

Section 4 CEQA Environmental Checklist

This section of the EA/IS includes an evaluation of environmental impacts that may result from implementation of the Proposed Project considering environmental factors outlined in the CEQA Guidelines- Appendix G Environmental Checklist Form. The CEQA Guidelines state that an initial study may identify environmental impacts by use of a checklist, matrix, or other method, provided that conclusions are briefly explained and supported by relevant evidence. If it is determined that a particular physical impact to the environment could occur, then the checklist must indicate whether the impact is Potentially Significant, Less Than Significant with Mitigation, or Less Than Significant. Findings of No Impact for issues that can be demonstrated not to apply to a proposed project do not require further discussion. References to **Section 3.0** are included where appropriate to avoid duplicative discussion of environmental factors previously considered.

4.1 Discussion of Potentially Affected Environmental Factors

4.1.1 Aesthetics

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock croppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

4.1.1.1 Affected Environment

Landscape features that define the visual character of the project area are related to a variety of natural features. The lands surrounding the proposed pipeline alignment are dominated by non-native annual grassland with oak trees and rock outcroppings. Topography east and west of the proposed pipeline alignment consists of large rolling hills that impede views in either direction.

4.1.1.2 Environmental Consequences

No Action Alternative

Under the No Action Alternative, the project area would remain undeveloped and no alteration of the visual character would occur. No impacts would result.

Proposed ActionProject

Questions A-C: Scenic Vista, Scenic Highway, Visual Character

Construction related aesthetic impacts, including the use of large sized heavy equipment, would be temporary in nature, as the development of the pipeline would occur along a linear area and construction would not occur in one area over an extended period of time. After construction, the proposed pipeline would not be visible as it will/would be located underground. Impacts under CEQA associated with effects to scenic vistas, scenic highways, or the visual character of the project area would be considered ***less than significant***.

Question D: Light and Glare

The Proposed Project would not require the installation of any large lighting systems or additional sources of light or glare. Construction activities would occur during the daylight hours and would not require night lighting. If the need for night work is required, the temporary lighting would be directed at the work area and not broadcast over a large area. Temporary lighting would have no effect on nearby residences due to the short duration of lighting. Impacts under CEQA would be ***less than significant***.

Cumulative Impacts

As the buried pipeline would not be visible, the Proposed Project would not alter the visual character of the project area during operation. Therefore, the Proposed Project would not contribute to cumulatively significant impacts associated with aesthetics.

4.1.2 Agricultural and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☒	☐
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☒	☐

4.1.2.1 Affected Environment

Fresno County is the leading agricultural producing county in the ~~United States~~ U.S., with a gross production value in 2008 of \$5,662,895,000 (Fresno, 2008). The majority of the agricultural activities occur in the central and western portions of the County, while the eastern portion consists of the rolling hills of the Sierra Nevada foothills.

The Agriculture and Food Act, which contained the Farmland Protection Policy Act (FPPA) (7 U.S.C. § 4201), was passed in 1981. The FPPA is intended to minimize the impact Federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. The farmland classification system developed and classified by the Farmland Mapping and Monitoring Program (FMMP) places farmland into 5 specific categories. These categories are based upon available soil surveys and land use data. The proposed pipeline alignment is located in the eastern portion of Fresno County. Lands in the vicinity of the proposed pipeline are classified as either Grazing land or Nonagricultural and Natural Vegetation. Nonagricultural and Natural Vegetation includes heavily wooded, rocky or barren areas, riparian and wetland areas, grassland areas which do not qualify for grazing land due to their size or land management restrictions, small water bodies and recreational water ski lakes (California Department of Conservation [CDC], 2009).

The California Legislature passed the Williamson Act in 1965 to preserve agricultural lands and open space by discouraging premature and unnecessary conversion to urban uses. Under the

Williamson Act, private landowners contract with counties and cities to voluntarily restrict privately-owned land to agricultural and compatible open-space uses. In return, restricted parcels are assessed for property tax purposes at a rate consistent with their actual use, rather than their potential market value. The vehicle for these agreements is a rolling-term, ten-year contract that is automatically renewed unless either party files a “notice of nonrenewal.” Two parcels of non-prime agricultural land approximately 200 feet west of the proposed pipeline alignment are currently in non-renewal. No other Williamson Act parcels are in the immediate vicinity of the proposed pipeline alignment.

4.1.2.2 Environmental Consequences

No Action

Under the No Action Alternative, no impact to agricultural or forest resources would occur.

Proposed ActionProject

Questions A-C and E: Agricultural Resources

Designated grazing land may be temporarily disturbed due to construction activities related to the Proposed Project. However, these impacts would be temporary in nature. After construction, the proposed pipeline would be located underground and existing adjacent agricultural uses, including grazing, would continue. Therefore, the Proposed Project would not convert agricultural land to non-agricultural use. Impacts to agricultural resources under CEQA are considered ***less than significant***.

The proposed pipeline alignment does not intersect any Williamson Act parcels. Therefore, under CEQA, ***no impact*** to Williamson Act lands would occur.

Question D: Forest Resources

The Proposed Project is not located in an area defined as timber or forest land, nor is the project alignment being used for or zoned for timberland production. Therefore, the Proposed Project ~~will~~would not result in a significant impact on the region’s forest resources. Under CEQA, ***no impact*** to forest resources would occur.

Cumulative Impacts

The Proposed Project would not convert any farmland or forest land to non-agricultural/forest use; therefore, the Proposed Project would not contribute to cumulatively significant impacts to agricultural or forest resources.

4.1.3 Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

4.1.3.1 Affected Environment

Refer to **Section 3.6.1** for a discussion of the affected environment associated with air quality.

4.1.3.2 Environmental Consequences

No Action

Under the No Action Alternative, no impacts associated with air quality would occur.

Proposed ActionProject

Refer to **Section 3.6.2** for a discussion of the Proposed Project's potential environmental consequences associated with air quality. A brief summary is provided below.

Questions A-C: Air Quality

Construction emissions from grading, trenching, paving, and worker trips were estimated using the 2007 Urban Emissions (URBEMIS) air quality model and compared to the San Joaquin Air Pollution Control District (SJVAPCD) CEQA Guidelines thresholds and federal Clean Air Act de minimis levels. As shown in **Table 3-4**, construction emissions of reactive organic gases

(~~ROG~~) and ~~oxides of nitrogen~~ (NOx) from exhaust emissions would not exceed *de minimus* levels or Guidelines thresholds; therefore, the Proposed Project would not conflict with or obstruct implementation of the applicable air quality plan, violate any air quality standard or contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment. Furthermore, as noted in Section 1.6, the project is subject to SJVAB District Code 9510 and would require filing of AIA Application and paying of any off-site mitigation fees to the District. Potential impacts resulting from construction are considered ***less than significant***.

Operation of the Proposed Project would not result in an increase in maintenance or worker trips over current levels for the existing pipeline; therefore, ***no impact*** to air quality would occur as a result of operation of the Proposed Project.

Question D: Sensitive Receptors

Construction activities could generate dust which could impact sensitive receptors. With the implementation of **Mitigation Measure AQ-1** in **Section 3.6.3**, which is required by the SJVAPCD for all construction projects, PM₁₀ and PM_{2.5} emissions resulting from construction activities of the Proposed Project would be reduced and impacts to air quality would be ***less than significant with mitigation***.

Question E: Odor

Construction odor is generally not noticeable beyond the boundaries of the project alignment and there are no receptors within 550 feet of the project alignment. Impacts associated with odor are considered ***less than significant***.

Cumulative Impacts

As discussed in **Section 3.6.2.3**, under the SJVAPCD CEQA guidelines, a significant cumulative impact would occur if a project exceeds the SJVAPCD thresholds of 10 tons per year of ROG or NOx. As shown in **Table 3-4** project emissions of NOx and ROG do not exceed these thresholds. CO and PM₁₀ emissions are considered local pollutants, due to the rapid rate at which these pollutants disperse. Due to the distance of the nearest sensitive receptor (approximately 550 feet) to the pipeline alignment, the project would not expose sensitive receptors to high cumulative concentrations of CO and PM₁₀.

4.1.4 Biological Resources

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native residents or migratory wildlife corridors or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
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?	☐	☐	☐	☒

4.1.4.1 Affected Environment

Refer to **Section 3.3.1** for a discussion of the affected environment associated with biological resources.

4.1.4.2 Environmental Consequences

No Action

Under the No Action Alternative, no impacts biological resources would occur.

Proposed ActionProject

Refer to **Section 3.3.2** for a discussion of the Proposed Project's potential environmental consequences associated with biological resources. A brief summary is provided below.

Question A: Special Status Species

Construction of the Proposed Project could have potential effects on the following special-status species and/or their habitat: ~~California Tiger Salamander (CTS), Western Spadefoot Toad (WST),~~ Pallid Bat, Spotted Bat, American Badger, ~~San Joaquin Kit Fox (SJKF),~~ and migratory birds. Through the implementation of the mitigation measures listed in **Section 3.3.3**, impacts to special-status species under CEQA would be ***less than significant with mitigation***.

Questions B, D, E, and F: Sensitive Habitat, Native and Migratory Fish, local ordinances, and Habitat Conservation Plans

The Proposed Project would have ***no impact*** on any riparian habitat, sensitive natural communities, native resident or migratory fish or wildlife, local policies or ordinances protecting biological resources, or habitat conservation plans because none exist within the pProposed actionProject area.

Question C: Wetlands and Waters of the U.S.

Approximately 0.56 miles of the proposed pipeline would be located within the lakebed of Millerton Lake, a designated water of the U.S. as defined by Section 404 of the CWA. Implementation of the Proposed Project would require obtaining a Section 404 permit from the Corps, a Section 401 Water Quality Certification from the RWQCB, and a Streambed Alteration Agreement with the CDFG. Through adherence to the conditions of these permits as listed in **Section 3.3.3**, impacts to waters of the U.S. under CEQA are considered ***less than significant with mitigation***.

Cumulative Impacts

As discussed in **Section 3.3.2.3**, the effects of the Proposed ~~ActionsProject~~ are temporary in nature, and do not contribute to a cumulative direct or indirect loss of sensitive or special-status wildlife species and their habitat, loss of migratory birds, or conflict with local plans or policies protecting biological resources. The Proposed ~~Actions-Project~~ would not contribute to cumulative impacts to biological resources. No mitigation is required.

4.1.5 Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

4.1.5.1 Cultural Resources Affected Environment

A discussion of the affected cultural resources environment is provided in **Section 3.4.1**.

Environmental Consequences

No Action

Under the No Action Alternative, no impacts cultural resources would occur.

Proposed Action/Project

A discussion of the Proposed Project's potential environmental consequences associated with cultural resources is provided in **Section 3.4.2**. A brief summary is provided below.

Questions A, B and D: Cultural Resources

No cultural resources were identified within the Proposed Project's ~~area of potential effects (APE)~~. Further, based on soil survey information and geoarchaeology sensitivity studies for the region, the potential for buried archaeological resources in the project area is low to very low (see-Meyer et al., 2010). Through the implementation of the mitigation measures listed in **Section 3.4.3** for inadvertent discovery of unknown cultural resources, impacts to cultural resources from the Proposed Project would be *less than significant*.

Cumulative Impacts

Section 106 Consultation with SHPO has been completed for the Proposed Project. As discussed in **Section 3.4.2.3**, because there are no known cultural resources recorded within the current

APE, there ~~will~~would be no cumulative impacts to resources in the immediate Proposed ~~Action~~Project area. At present the potential cumulative impacts to cultural resources outside of the current Proposed ~~Action~~Project area resulting from possible future water transfers and development within the CSA 34 service area, which may or may not be approved, are unknown. Any such future actions would be expected to undergo appropriate regulatory review as required under local preservation ordinances, CEQA, and/or Section 106 of the NHPA, during which potential impacts to cultural resources would be considered.

4.1.5.2 Paleontological Resources (Question C)

Affected Environment

California Public Resources Code

Section 5097.5 of the PRC prohibits “knowing and willful” excavation, removal, destruction, injury, or defacement of paleontological resources on public lands without prior permission from the appropriate agency. Public lands include those “owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.” If paleontological resources are identified within a given project area, the lead agency must take those resources into consideration when evaluating project impacts. The level of consideration may vary with the importance of the resource in question.

Setting

The presence of paleontological resources at any particular site is influenced by geological composition resulting from formation processes occurring over long periods of time. Fossils typically reside in sedimentary layers, and may or may not become mineralized dependent upon the mineral composition within their depositional environment.

As described in **Section 4.1.6**, the region’s geologic history is characterized by volcanic eruptions, tectonic uplift and tilting, and erosion. Locally, the dominant geologic feature is the Sierra Nevada Batholith, a massive Mesozoic-era grano-dioritic structure, which underlies the project area. Within the project area a thin soil mantle is present, which consists mostly of well drained sandy loams and very rocky coarse sandy loams, derived from quartz diorite and granitic alluvium. Significant fossil resources generally do not occur within the very shallow sediments overlying the western edge of the Sierra Nevada batholith, and none are present within the batholith itself.

Several sources were consulted to identify unique geologic formations within the project site. Sources reviewed include: the *California Geotour Index* maintained by the California Geologic Survey (~~CA Geologic Survey~~CGS, 2007); *California Landscape* (Hill, 1984); *Roadside Geology of Northern and Central California* (Alt and Hyndman, 2000); and *A Natural History of California* (Schoenherr, 1992). A review of the above-referenced sources did not identify the presence of any unique geologic features within or in close proximity to the project site.

A search of the University of California Museum of Paleontology (UCMP) database indicates that 2,818 paleontological specimens have been reported in Fresno County (UCMP, 2010). Areas along the western edge of the San Joaquin Valley and adjacent southern Coast Range have the highest frequency of fossils in the County. Within Fresno County, the vast majority of fossil specimens have been documented within eight major geologic formations, none of which occur in proximity to the project site. These formations include: Domengine, Etchegoin, Jacalitos,

Kreyenhagen, Lodo, Moreno, Santa Margartia, and Temblor (UCMP, 2010). Regionally, significant fossil discoveries have been made within the deep alluvial fans within the San Joaquin Valley. Of particular importance is the Fairmead fossil bed in Madera County, located roughly 30 miles west of the project area. The Fairmead locale, discovered in 1993 at the Madera County Landfill, contains a wide variety of Pleistocene fauna including mammoth, birds, reptiles, and large cats, among others (Dundas et al., 1996).

Environmental Consequences

No Action

Under the No Action Alternative, no impacts paleontological resources would occur.

Proposed ActionProject

Question C: Paleontological Resources

Indicators of significant paleontological resources within the project site and immediate vicinity are absent in the sources consulted, and no such resources were observed in the course of a surface reconnaissance survey by Table Mountain Archaeologists in 2008 and AES in 2010. The geologic formation upon which the project site is located has not produced significant paleontological specimens of scientific consequence and is unlikely to do so in the future. Therefore, potential impacts to paleontological resources are ***less than significant***.

Cumulative Impacts

At present the potential cumulative impacts to paleontological resources outside of the current Proposed ActionProject area resulting from possible future water transfers and development within the CSA 34 service area, which may or may not be approved, are unknown. Any such future actions would be expected to undergo appropriate regulatory review as required under state and local regulations, during which potential impacts to paleontological resources would be considered.

4.1.6 Geology and Soils

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to 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?	☐	☐	☒	☐
b) Expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving strong seismic ground shaking?	☐	☐	☒	☐

c) Expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
d) Expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving landslides?	☐	☐	☒	☐
e) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
f) 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?	☐	☒	☐	☐
g) Be located on expansive soil, as defined in Table 18-1-B of the uniform Building Code (1994), creating substantial risks to life or property?	☐	☒	☐	☐
h) 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?	☐	☐	☐	☒

4.1.6.1 Affected Environment

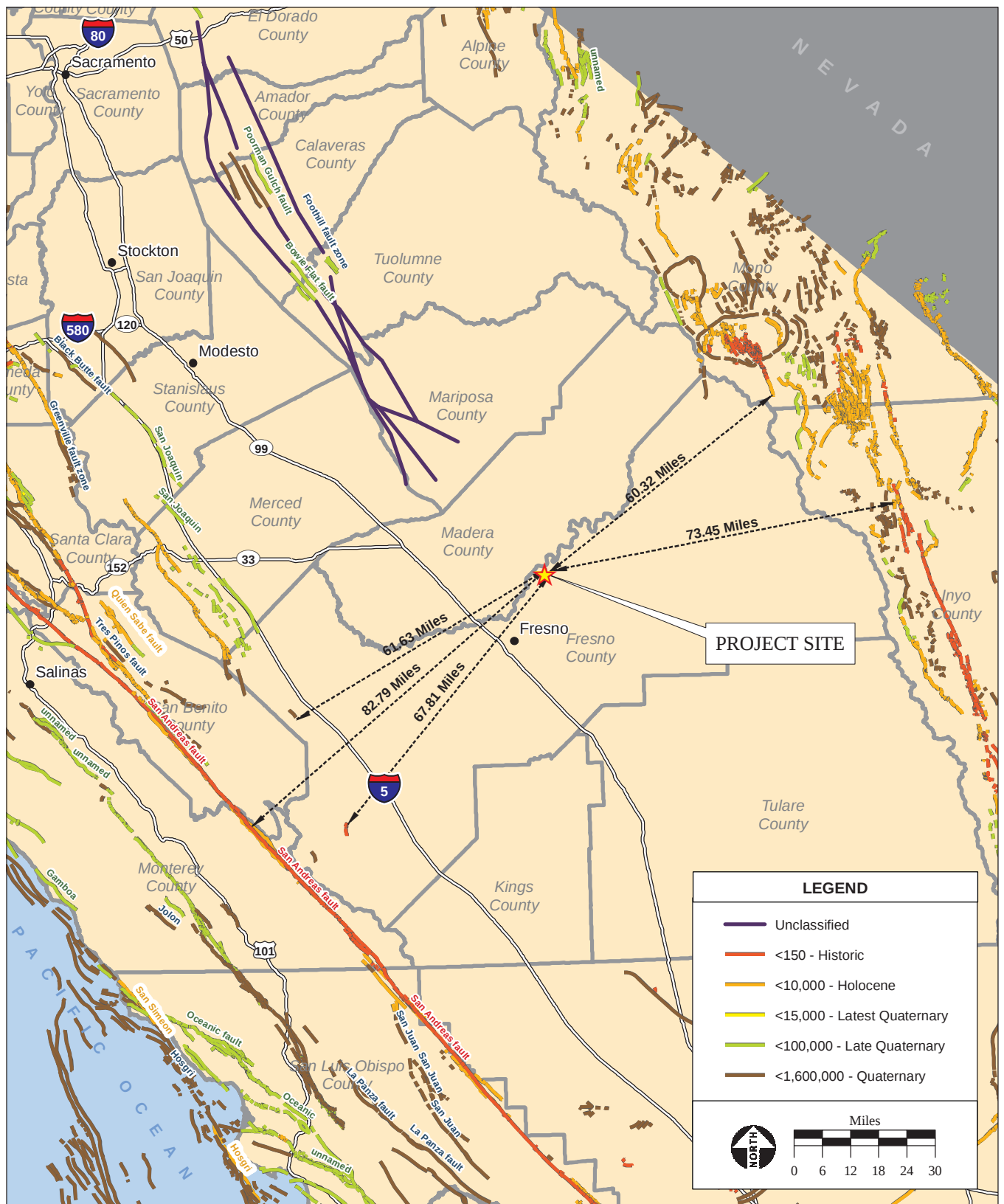
Topography

Topography within the project area consists of gradually rolling hills with elevations ranging from approximately 565 feet to 700 feet.

Seismic Conditions

There are several active and potentially active faults in and adjacent to Fresno County. **Figure 9** shows regionally active faults and their relative distances to the proposed pipeline alignment. The Alquist-Priolo Act defines active faults as those that have shown seismic activity within the past 11,000 years. The nearest active faults in the vicinity of the project area are the Owen Valley fault zone located 73.4 miles east (activity within 150 years) and the San Andreas Fault Zone Creeping section (activity within the last 150 years) located 82.8 miles southwest.

The Modified Mercalli intensity (MMI) scale is commonly used to measure earthquake effects due to ground shaking. The MMI values for intensity range from I (earthquake not felt) to XII



SOURCE: USGS Earthquake Hazards Program, 2007; AES 2010

Winchell Cove Pipeline Project/ 207518 ■

Figure 9
Regional Fault Map

(damage nearly total). MMI values ranging from IV to X could cause moderate to significant structural damage.

The proposed alignment is located within an area of minor potential shaking intensity of MMI level VII. This corresponds to the potential for considerable damage to poorly built or badly designed structures, but negligible damage in buildings of good design and construction (USGS, 1989). This low potential reduces the likelihood of liquefaction within the subject property as discussed in the soil hazards discussion below.

Soil Types and Characteristics

Portions of Fresno County occupy the western slope of the Sierra Nevada which is dominated by granitic rocks associated with the Sierra Nevada batholith. Serpentine, gabbro, and metavolcanic rocks are scattered throughout most of the western slope of the Sierra Nevada, which includes portion of Fresno County. Most of Fresno County is located within the southern portion the Great Central Valley geomorphic province which is a large, elongate, northwest-trending structural trough in the interior of California that has been filled with a thick sequence of sedimentary and non-marine sedimentary rock. These rocks are derived from erosion of the Coast Ranges and the Sierra Nevada over the last 200 million years and form the basement complex beneath the east side of the Central Valley. The project site is located in eastern Fresno County, as such; serpentine, gabbro, and metavolcanic rocks would dominate the project site. These rock formations are most prevalent throughout most of the western slope of the Sierra Nevada.

A soil survey report for the project site is available online through the ~~United States~~ U.S. Department of Agriculture (USDA) NRCS (USDA, 2008). Soil types in the vicinity of the Proposed Project alignment were determined using the online NRCS soil survey. The soil survey identifies and maps soil units and provides a summary of major physical characteristics and general recommendations based on those soil characteristics. The soil map is provided in **Figure 10** and general soil descriptions are discussed below.

Sesame sandy loam (SkC) is described as a Class C, well-drained soil that occurs mostly along slopes of 9 to 15 percent at elevations of 500 to 2,000 feet ~~above mean sea level (amsl)~~. Sesame sandy loam occurs over restrictive layer of paralithic bedrock 20 to 40 inches below surface level (bsl), has a slight susceptibility to sheet and rill erosion, and a moderate risk of corroding steel.

Vista course sandy loam (VfC) is described as a Class C, well-drained soil that occurs mostly along slopes of 9 to 15 percent at elevations of 500 to 2,000 feet ~~above amsl~~. VfC occurs over restrictive layer of paralithic bedrock 20 to 40 inches bsl, has slight susceptibility to sheet and rill erosion and a moderate risk of corroding steel.

Vista very rocky course sandy loam (VID) is described as a Class C, well-drained soil that occurs mostly along slopes of 3 to 30 percent at elevations of 500 to 2,000 feet ~~above amsl~~. VID occurs over restrictive layer of paralithic bedrock 4 to 20 inches bsl, has a moderate susceptibility to sheet and rill erosion, and a moderate risk of corroding steel.

As shown in **Figure 10** and described in **Section 2.0**, the northern portion of the proposed pipeline alignment ~~will~~would be constructed within the lake bed of Millerton Lake. The NRCS



SOURCE: USDA NRCS Soil Survey Geographic (SSURGO) database for Eastern Fresno Area County, California, 2000-2008; Aerial Express aerial photograph, 6/15/2007 AES, 2010

Winchell Cove Pipeline Project / 207518 ■

Figure 10
Soils Map

soil survey does not provide characteristics for submerged soils at this time. However, as Millerton Lake storage began in 1944, it can be assumed that the upper layer of soils submerged under Millerton Lake consists of sedimentation from upstream and run off from the surrounding areas which as settled to the bottom of the lake over time while underlying soils have a similar composition to surrounding soil types.

Soil Hazards

Soil Erosion

Soil erosion is the wearing and removal of soil materials from the ground surface and the transportation of these soil materials resulting in deposition elsewhere. Mechanisms of soil erosion include natural phenomenon such as storm water runoff and wind, as well as human activities, such as changes in drainage patterns and removal of vegetation. Factors that influence soil erosion include physical properties of the soil, topography (slope), and annual rainfall and peak intensity. The USDA rates the erosion potential of a map unit by taking all of the above into consideration. The ratings range from “Slight” to “Very Severe”. The erosion ratings of the soils in the vicinity of the proposed alignment are included in their descriptions above.

Land Slides

Areas susceptible to land slides are comprised of weak soils on sloping terrain. Landslides can be induced by weather, such as heavy rains, or strong seismic shaking events. According to the USGS Landslides Hazards Program, which documents landslide prone areas throughout the United States, the proposed alignment is located within an area designated as having low landslide probability (USGS, 1982).

Liquefaction

Soil liquefaction can occur during seismic events. When subjected to energy associated with the shaking intensity of a considerably sized earthquake (MMI VIII and above), certain soils when saturated with water may lose their solid structure and act as liquids. Soils comprised of sand and sandy loams, in areas with high groundwater tables or rainfall, are subject to liquefaction. Ground subject to liquefaction may sink or pull apart. Liquefaction may lead to lateral spreading, where slopes even out, changing the topography of the area. Soils along the proposed alignment are classified by the NRCS as well-drained Class C soils that are not overly susceptible to liquefaction. In addition, much of the project area has already been developed, thus the threat of liquefaction occurring along the proposed alignment is considered low.

4.1.6.2 Environmental Consequences

No Action

Under the No Action Alternative, no construction activities would take place, and no impacts to soil resources would occur.

Proposed ActionProject

Questions A-D: Seismic Hazards

The project alignment is not located within ~~aan~~ Alquist-Priolo Special Studies or Earthquake Fault Zone. Consequently, the ground rupture, liquefaction, and landslides resulting from strong fault rupture and seismic shaking is considered low.

The proposed pipeline would be designed and constructed in conformance with the IBC Guidelines to avoid or minimize potential damage from seismic shaking on the site. Impacts under CEQA are considered ***less than significant***.

Questions E-G: Soils

Generally, construction activities such as mass grading and excavation increase the risk of sheet and rill erosion and the subsequent loss of topsoil. Construction activities have the potential to result in adverse effects associated with excessive erosion and the resulting loss of top soil. Potential adverse effects would occur if disturbed areas are not stabilized with temporary erosion control measures. Implementation of BMPs for erosion control and a site specific SWPPP for temporary construction impacts would avoid potential adverse effects. The BMPs and SWPPP would be implemented according to the requirements of the NPDES Construction General Permit, Waste Discharge Requirements for Discharges of Stormwater Runoff Associated with Construction Activity" (Order No.99-08-DWQ, NPDES No. CAS000002). These measures are included as **Mitigation Measure GS-1** below. Through compliance with the Construction General Permit; preparation of a site specific SWPPP, and incorporation of BMPs, short-term construction impacts under CEQA are considered ***less than significant with mitigation***.

All of the soils within the proposed pipeline alignment have a moderate risk for corroding steel. **Mitigation Measure GS-2** will ensure that underground facilities are designed using durable materials, reducing the potential for damage. Impacts under CEQA are considered ***less than significant with mitigation***.

Question H: Wastewater

The Proposed Project would not include the installation of septic tanks or alternative wastewater disposal systems. Under CEQA, ***no impact*** would occur.

Cumulative Impacts

Construction of other projects in the area would have the potential to contribute to erosion. These impacts are fully mitigable with implementation of construction-period erosion control programs and with standard seismic safety measures incorporated in design. The Proposed Project will incorporate the mitigation measures below to ensure adverse project related effects do not occur; therefore, the Proposed Project would not contribute to cumulative effects associated with geology and soils. Under CEQA, no cumulative impacts would occur.

4.1.6.3 Mitigation

GS-1: To eliminate potential impacts resulting from excessive erosion and loss of topsoil, NPDES ~~Construction General Permit~~ (General Permit) shall be complied with, including implementation of appropriate erosion and sediment control measures. Compliance with the General Permit requires developing a site specific SWPPP that shall identify the location of temporary erosion control features necessary to direct and filter stormwater runoff during construction activities. Temporary erosion control features used during construction may include, but are not limited to, silt fences, fiber rolls, erosion control blankets, temporary sediment basins, and rock bag dams. The SWPPP shall also identify BMPs that would reduce the transportation of pollutants offsite. The SWPPP shall be implemented during the construction and operation of the project. The above mitigation

is also included in **Section 3.1.3** (Water Resources). **Mitigation Measure WQWR-1**, included in **Section 3.1.3**, is intended to complement the mitigation presented above.

GS-2: All underground facilities shall be designed using durable materials. All project facilities shall be designed in accordance with the NACE standards for special coatings and/or cathodic protection systems using specific soils data.

4.1.7 Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☒	☐	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☒	☐	☐

4.1.7.1 Affected Environment

Refer to **Section 3.7.1** for a discussion of the affected environment in regards to ~~greenhouse gas~~GHG emissions.

4.1.7.2 Environmental Consequences

No Action

Under the No Action Alternative, no impacts associated with ~~greenhouse gas~~GHG emissions would occur.

Proposed ActionProject

Refer to **Section 3.7.2** for a discussion of the Proposed Project's potential environmental consequences associated with ~~greenhouse gas~~GHG emissions. A brief summary is provided below.

Questions A and B, Cumulative

The Proposed Project would emit an estimated 144.83 tons of carbon dioxide equivalent (CO₂e) during construction. With the implementation of **Mitigation Measure AQ-2** in **Section 3.7.3**, the Proposed Project's GHG emissions would be reduced, consistent with the State and SJVAPCD's GHG reduction goals; therefore, impacts to climate change from project-related GHG emissions would be ***less than significant with mitigation***.

Cumulative Impacts

~~As discussed in Section 3.7.2.3, project emissions of NO_x and ROG do not exceed SJVAPCD thresholds and, due to the distance of the nearest sensitive receptor, the project would not expose sensitive receptors to high cumulative concentrations of CO and PM₁₀.~~

4.1.8 Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
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?	☐	☒	☐	☐
c) Emit hazardous emissions or handles hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
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 for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working within the project area?	☐	☐	☐	☒

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☒	☐	☐

4.1.8.1 Affected Environment

Hazardous wastes sites within the project study area were searched in an effort to identify sites that could affect project construction. Database searches were conducted for records of known storage tank sites and known sites of hazardous materials generation, storage, or contamination (Environmental Data Resources, Inc. [EDR], 2010; **Appendix B**). Databases were searched for sites and listings up to 1 mile from a point roughly equivalent to the center of the proposed pipeline alignment. The environmental database review was accomplished by using the services of a computerized search firm EDR. EDR uses a geographical information system to plot locations of past or previous hazardous materials involvement. ~~AES reviewed the~~ The EDR report was reviewed to determine if the proposed pipeline corridor and properties along the proposed alignment are listed on regulatory agency databases. The database search did not identify any sites within the search radius with known histories of storage and/or use of hazardous materials.

4.1.8.2 Environmental Consequences

No Action

Under the No Action Alternative, no impacts associated with hazards and hazardous materials would occur.

~~Proposed Action~~Project

Question A and B: Hazardous Materials

During construction, limited quantities of miscellaneous hazardous substances such as fuels, solvents, oils, and paint could potentially be used during trenching, jack and bore activities and pipeline installation. If properly used, stored, and disposed of, these materials would not be a hazard to people or the environment. The use of such materials during construction would be considered minimal and would not require these materials to be stored in bulk form. Since hazardous materials would not be stored in bulk form, no impacts are expected regarding potential upset and accidental conditions involving the release of hazardous materials into the environment. As such, the project would not create a significant hazard to the public through the routine use, transport, or disposal of hazardous materials.

Construction contractors are required to implement BMPs for the storage, use, and transportation of hazardous materials. The BMPs would be outlined within a site specific SWPPP that would be required as part of a NPDES Construction General Permit. **Mitigation Measure WR-1, listed in Section 3.1.3,** requires the preparation of a SWPPP according to the Construction

General Permit. Compliance with the Construction General Permit and implementation of a site specific SWPPP ~~will~~would ensure adverse effects are avoided. Impacts under CEQA are considered ***less than significant with mitigation***.

Question C: Public Health and Safety

The Proposed Project would not result in long-term use or distribution of hazardous material that might create a potential health hazard to the public. The Proposed Project is not within a quarter-mile of existing elementary schools, middle and high schools. Compliance with Federal, State and local hazardous materials laws and regulations would minimize the risk to the public presented by potential hazards. Under CEQA, ***no impacts*** would occur to existing or proposed schools.

Question D: California Government Code 65962.5

The Proposed Project facilities would not be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The Proposed Project would not create a significant hazard to the public or the environment. Under CEQA, ***no impacts*** would occur.

Question E and F: Airports

The Proposed Project is not located within two miles of a public or private airport. Neither temporary construction activities nor the permanent installation of the pipelines would affect the safe operation of any local airport or result in a safety hazard for people residing or working in the project area; therefore, under CEQA, ***no impacts*** would occur.

Question G: Emergency Plans

Temporary construction activities within Winchell Cove Road would be expected to create temporary delays in traffic. Such delays would be minimized through implementation of a traffic control plan, as recommended by **Mitigation Measure T-1, listed in Section 4.1.16**. With implementation of these measures, the Proposed Project would not have the potential to interfere with an adopted emergency response plan or emergency evacuation plan. Under CEQA, impacts would be considered ***less than significant with mitigation***. Potential traffic impacts are discussed further in the Traffic/Transportation section.

Question H: Fire Hazards

The Proposed Project is located in an area that is susceptible to wildland fires. Operation of the Proposed Project facilities would not present an increased fire hazard. During construction, vehicles and equipment such as welders, torches, and grinders may accidentally spark and ignite vegetation within the study area. The increased risk of fire during the construction of the proposed pipeline alignment would be similar to that found at other construction sites and would be considered potentially significant. **Mitigation Measure HZ-1, listed below, ~~will~~would** reduce the risk of wildland fires to a less than significant level. Impacts under CEQA would be considered ***less than significant with mitigation***.

Cumulative Impacts

Development of the project in combination with other projects has the potential to increase the risk for accidental release of hazardous materials. Each individual project would require an evaluation as to potential hazardous materials risks and threat to public safety including risks

associated with transportation/use/disposal of hazardous materials, accidental release of hazardous materials into the environment, and listed hazardous materials sites that could affect environmental conditions. Each related project would be required to follow local, state, and federal laws pertaining to hazards and hazardous materials. Through compliance with these laws, future potential cumulative impacts would be minimized. Therefore, through full compliance with local, state, and federal laws pertaining to hazardous materials, cumulative impacts would be considered less than significant.

4.1.8.3 Mitigation

HZ-1: The following measures are recommended to decrease the risk of fire during construction of the Proposed Project:

- Any construction equipment that normally includes a spark arrester shall be equipped with an arrester in good working order. This includes, but is not limited to, vehicles, heavy equipment, and chainsaws.
- During construction, staging areas and/or areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fuel for combustion. To the extent feasible, the contractor shall keep these areas clear of combustible materials to maintain a firebreak.

4.1.9 Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☒	☐	☐
f) Otherwise substantially degrade water quality?	☐	☒	☐	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☒	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

4.1.9.1 Affected Environment

Refer to **Section 3.1.1** for a discussion of the affected environment in regards to hydrology and water quality.

4.1.9.2 Environmental Consequences

No Action

Under the No Action Alternative, no construction activities would take place, and no impacts to hydrology and water quality would occur.

Proposed Action~~Project~~

Refer to **Section 3.1.2** for a discussion of the Proposed Project's potential environmental consequences associated with hydrology and water quality. A brief summary is provided below.

Questions A, E, and F: Surface Water Quality

Construction activities associated with the proposed project could result in temporary changes to on-site drainage patterns, potentially resulting in increased erosion or siltation associated with construction. To mitigate these potential effects, required erosion and pollutant control measures would be employed in compliance with the ~~National Pollution Discharge Elimination System (NPDES)~~ General Construction Permit prior to and throughout construction, as identified in **Mitigation Measure WR-1** listed in **Section 3.1.3**. With implementation of these measures, the potential for adverse effects to surface and ground water quality as a result of construction activities would be reduced. Under CEQA, impacts would be considered ***less than significant with mitigation***.

Question B: Groundwater

The Proposed Project would not deplete groundwater supply nor affect groundwater recharge, ***no impact*** would occur.

Questions C and D: Drainage Patterns

All project features ~~will~~would be located underground, and all surfaces ~~will~~would be graded and restored to existing elevations and conditions after construction is completed; therefore, ***less than significant*** impacts to drainage patterns would occur.

Question G: Flood Hazards on Housing

The Proposed Project would not place housing within a 100-year flood plain, ***no impact*** would occur.

Questions H and I: Flood Hazards

As discussed in **Section 2.0**, the Proposed Project would not increase the quantity of diversion from Millerton Lake beyond that previously approved by Reclamation. Approximately 0.56 miles of the proposed pipeline would be located within the Millerton Lake bed, which is designated as Flood Zone A, subject to inundation by the 100-year flood. All work within the designated flood zones will conform to provisions established in Chapter 15.48 Flood Hazard Areas of the Fresno County Ordinance as appropriate. A grading voucher may also be required for the project where there may be impacts on surrounding properties or present or future structures per Fresno County Ordinance Code Title 15 Chapter 15.28 Grading and Excavation Section 15.28.020.H. ~~However~~Furthermore, all project features ~~will~~would be located

underground, and all surfaces ~~will~~would be graded and restored to existing elevations and conditions after construction is completed and, therefore, impacts to flood plains and from flooding would be ***less than significant***.

Question J: Seiche, Tsunami, and Mudflow

The project area is not subject to a seiche, tsunami, or mudflow; therefore, ***no impacts*** are anticipated to occur.

Cumulative Impacts

As discussed in **Section 3.1.2.3**, the Proposed ~~Action~~Project would not result in additional stormwater run-off or contribute to cumulative effects associated with drainage. Similar to the Proposed ~~Action~~Project, cumulative development projects would be subject to local, state, and federal regulations designed to minimize cumulative impacts to water resources. Mitigation measures for the Proposed ~~Action~~Project in combination with compliance with City, state, and federal regulations, are expected to reduce cumulatively considerable impacts to water quality.

Operation of the Proposed ~~Action~~Project would not introduce new impervious surfaces which would result in additional off-site flows; therefore, the Proposed ~~Action~~Project would not contribute to cumulative flood related impacts.

4.1.10 Land Use and Planning

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

4.1.10.1 Affected Environment

Refer to **Section 3.2.1** for a discussion of the affected environment in regards to land use and planning.

4.1.10.2 Environmental Consequences

No Action

Under the No Action Alternative no impacts associated with land use and planning would occur.

Proposed ActionProject

Refer to **Section 3.2.2** for a discussion of the Proposed Project's potential environmental consequences associated with land use and planning. A brief summary is provided below.

Question A: Established Communities

The Proposed Project is underground and, therefore, does not divide an established community and **no impact** would occur.

Question B: Land Use Plans

The proposed pipeline alignment would be underground and, therefore, would only have temporary impacts to land use during construction. Impacts regarding consistency with applicable land use plans are considered **less than significant** under CEQA.

Question C: Conservation Plans

The Proposed Project would have **no impact** on habitat conservation plans because none exist within the pProposed actionProject area.

Cumulative Impacts

As discussed in **Section 3.2.2.3**, the proposed pipeline alignment is consistent with the existing zoning, the Fresno County General Plan, the Sierra North Regional Plan, and the Millerton Specific Plan; therefore no adverse cumulative impacts would occur. All ground disturbances would be temporary.

4.1.11 Mineral Resources

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

4.1.11.1 Affected Environment

Fresno County produces several significant mineral resources including aggregate products (sand and gravel), fossil fuels (oil and coal), metals (chromite, copper, gold, mercury, and tungsten), and other minerals used in construction and various industry (asbestos, high-grade clay, diatomite, granite, gypsum and limestone). Several active sand and gravel mining quarries

operate along the San Joaquin River. The ~~California Department of Conservation~~ CDC has classified the Fresno Production Consumption (P-C) Region according to the presence of significant Portland cement-concrete (PCC)-grade aggregate deposits. The boundary of the Fresno P-C Region covers an area of approximately 1,400 square miles and is primarily located along the San Joaquin River, beginning southwest of Friant Dam at the Madera and Fresno County line; continuing southwest toward the City of Fresno. The nearest aggregate quarry within the P-C Region is the Friant Road Redimix Plant operated by Vulcan Materials Company. The Friant Road Redimix plant is located approximately 3.5 miles southwest of the Millerton Road and Friant Road intersection in an area classified as a MRZ-2 (Fresno County, 2000b). According to the Fresno County General Plan Background Report (Fresno County, 2000b), the Friant Road Redimix Plant is the nearest active quarry; there are no significant mineral resources present within the proposed pipeline alignment.

4.1.11.2 Environmental Consequences

No Action

Under the No Action Alternative the project area would remain undeveloped and no impacts to mineral resources would occur.

Proposed ActionProject

Questions A and B: Mineral Resources

No significant mineral resources are located in the vicinity of the proposed pipeline alignment; therefore, no affects to mineral resources would result, and **no impact** would occur.

Cumulative Impacts

No significant mineral resources are located in the vicinity of the proposed pipeline alignment; therefore, the Proposed Project would not contribute to the cumulatively considerable impacts to mineral resources.

4.1.12 Noise

Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
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 expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

4.1.12.1 Affected Environment

Ambient Noise Level

The ambient noise level is defined as the existing range of noise levels from all sources near and far. A similar term is background noise level, which usually refers to the ambient noise level that is present when any intermittent noise sources are absent. Noise exposure contours or noise contours are lines drawn about a noise source representing constant levels of noise exposure. Community Noise Equivalent Level (CNEL) or Day-Night Average Sound Level (Ldn) contours are frequently utilized to graphically portray community noise exposure. The CNEL is calculated from hourly Noise Equivalence Level (Leq) values, after adding a “penalty” to the noise levels measured during the evening (7 p.m. to 10 p.m.) and nighttime (10 p.m. to 7 a.m.) periods. The penalty for evening hours is a factor of 3, which is equivalent to 4.77 decibel (dB). The penalty for nighttime hours is a factor of 10, which is equivalent to 10 dB. To calculate the ~~day-night average sound level (Ldn)~~, the evening penalty is omitted. The Leq is used to describe noise over a specified period of time, typically one hour, in terms of a single numerical value.

Table 4-1 shows typical noise level in the Leq (dBA) designator. The land use surrounding the project site is rural with no commercial uses and limited residential and recreational uses. Ambient noise levels in the project area are estimated to be approximately 55 dBA (refer to **Table 4-1**).

Construction Noise

Construction activities generally dominate the noise environment during the construction of a ~~P~~proposed ~~P~~project. The primary noise source during construction is from the operation of heavy construction equipment. Typical construction equipment noise levels are shown in **Table 4-2**. Noise from construction attenuates at a rate of 5 to 7.5 dB per doubling of distance (Caltrans, 2009).

TABLE 4-1
TYPICAL A-WEIGHTED SOUND LEVELS OF COMMON NOISE SOURCES

dBA (Leq)	Description
120	Jet aircraft take-off at 100 feet.
110	Riveting machine at operator's position.
100	Rail Transit at 50 mph
88	Shop tools
80	Rail Transit At-Grade at 50 mph
76	City Bus Idling
75	Food Blender
73	Lawn Mower
63	Cloth Washer
62	Air Conditioner (outdoor)
55	Air Conditioner (indoor), Rural Residential (outdoor)
48	Refrigerator
40	Background level within a residence.
30	Soft whisper at 2 feet.
20	Interior of recording studio.

Source: Federal Transit Administration (FTA), 2006.

TABLE 4-2
TYPICAL NOISE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment Description	Predicted Lmax @ 50 ft (dBA, slow)
All Other Equipment > 5 HP	85
Backhoe	80
Compactor (ground)	80
Dozer	85
Dump Truck	84
Front End Loader	80
Paver	85
Roller	85

Source: FHWA Roadway Construction Noise Model, 2006.

Sensitive Receptors

Some land uses are considered more sensitive to noise than others due to the amount of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities typically involved. Residences, motels and hotels, schools, libraries, churches, hospitals, nursing homes, auditoriums, and parks and other outdoor recreation areas generally are more sensitive to noise than are commercial and industrial land uses (U.S. DOT, 1995). A sensitive receptor is defined as any living entity or aggregate of entities whose comfort, health, or well being could be impaired or endangered by the existence of noise.

The land surrounding the project alignments is primarily uninhabited open space. The proposed pipeline alignment would go through the Millerton Lake Marina located at the northern end of Winchell Cove Road (**Figure 2, Section 2.0**). The nearest sensitive receptor to the project

alignment is a residence located 450 feet south of Millerton Lake and approximately 550 feet from pipeline, it should be noted that the pipeline is located underwater at this distance. The on-shore distance to this receptor is 1,880 feet. The next closest residence is in the Eagle Springs Golf Course complex and is located 1,950 feet southeast of the proposed pipeline alignment across Millerton Road. No schools or hospitals are located along the proposed pipeline alignment. Construction activity would only occur within 20 feet of the proposed pipeline alignment.

Fresno County Policies

Policy HS-G.6 of the Fresno County General Plan states that the County shall regulate construction-related noise to reduce impacts on adjacent uses in accordance with the County's Noise Control Ordinance. The County's Noise Ordinance (Ordinance 8.40.060) requires that:

“Noise sources associated with construction shall be exempt from the County's Noise Control Ordinances, provided such activities do not take place before ~~six~~6 a.m. or after ~~nine~~9 p.m. on any day except Saturday or Sunday, or before seven a.m. or after five p.m. on Saturday or Sunday.”

4.1.12.2 Environmental Consequences

No Action

Under the No Action Alternative, the project would not be developed and no noise impacts would occur.

Proposed ActionProject

Question A-D: Noise levels

Noise from construction of the Proposed Project could potentially pose a significant impact to sensitive residential noise receptors near the project site. Noise impacts resulting from construction depend on: 1) the noise generated by various pieces of construction equipment; 2) the timing and duration of noise generating activities; 3) the distance between construction noise sources and noise sensitive receptors; and 4) existing ambient noise levels. Trenching, repaving, and other construction activities would generate maximum noise levels of 85 dBA Leq at a distance of 50 feet from the project site (refer to **Table 4-2**). Using a conservative attenuation factor of 6 dBA per doubling of distance from the project site, the noise level at the nearest sensitive receptor would be 49 dBA, Leq, which is less than the existing noise level of 55 dBA, Leq. Construction of the pipeline would result in less than significant effects associated with increases in ambient noise level.

Once the construction phase of the project is completed, the water pipelines would require periodic maintenance. Maintenance of the pipeline would require approximately 1 truck trip per week. It takes a doubling of traffic volume to audible increase the ambient noise level. No roadway in the project area has a traffic volume of one vehicle per week or less; therefore, the Proposed Project would not increase the ambient noise level. Maintenance of the pipelines may require use of some construction equipment, such as backhoes, trenchers, or hand tools; however, these activities would be temporary and due to the distance of the nearest sensitive receptor to the pipeline alignment, noise from maintenance activities would be less than the existing ambient noise level (refer to Construction analysis above).

Noise levels from construction and operation of the Proposed Project would not exceed noise ordinances or adversely affect the ambient noise level of the surrounding area. Impacts under CEQA would be considered ***less than significant***.

Questions E and F: Airports

The Proposed Project is not located within two miles of a public or private airport. Neither temporary construction activities nor the permanent installation of the pipelines would affect the safe operation of any local airport or result in a safety hazard for people residing or working in the project area; therefore, ***no impacts*** would occur.

Cumulative Impacts

There are no foreseeable construction projects within 1,000 feet of the Proposed Project area, which would occur during the time of project construction; therefore, cumulative construction noise impacts would not occur. Operational activities would not increase the ambient noise under cumulative conditions. During operation the project would add one maintenance vehicle to the roadway, which would not double the vehicle volumes on Winchell Cove or Millerton Road; therefore, the project would not change the cumulative noise environment. This would be a ***less than significant*** cumulative impact.

4.1.13 Population and Housing

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through the extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

4.1.13.1 Affected Environment

The project site is located within a rural area. Land uses within the project area are guided by the Fresno County General Plan and Millerton New Town Specific Plans.

4.1.13.2 Environmental Consequences

No Action

Under the No Action Alternative, the project area would not be developed and no impact to housing or population would occur.

Proposed ActionProject

Question A: Growth-Inducing

All growth and development regulations within the project area are controlled through the Fresno County General Plan. Implementation of the Proposed Project would not result in a direct increase in population or housing. No affects to population and housing would occur as a result of the Proposed Project beyond those identified in the General Plan. Under CEQA, **no impact** would occur.

Questions B and C: Housing

Implementation of the Proposed Project would not affect or displace existing housing or people. Under CEQA, **no impact** would occur.

Cumulative Impacts

Cumulative growth in the region has been addressed in the Fresno County General Plan and Millerton New Town Specific Plan for the project area. The Proposed Project would not increase growth beyond that projected in those plans, therefore no cumulative impacts would occur.

4.1.14 Public Services

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☐	☒
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

4.1.14.1 Affected Environment

Fire Protection and Emergency Medical Service

The Fresno County Fire Protection District (FCFPD) and the California Department of Forestry and Fire Protection (CalFire) provide primary fire protection and emergency medical services to the project area. Service along Millerton Road is provided by Engine 72, located at the Millerton Fire Station at 4091 E. Millerton Road. As a result of surrounding development, FCFPD and CalFire anticipate the need for a new fire station located within the proposed Millerton New Town Specific Plan area. Provisions and planning guidelines within the Millerton New Town Specific Plan have been created to provide for this facility. The construction plan for the proposed facility would require FCFPD approval.

Emergency medical transport for the project area is provided by American Ambulance, which serves Fresno and Kings Counties. Skyline provides aeromedical transportation to the project area, with air ambulance service located at Fresno International Airport.

The nearest medical center to the proposed pipeline alignment is located at 2755 Herndon Ave, in Clovis. The Clovis Community Medical Center provides a 24-hour emergency, urgent, and critical care center.

Law Enforcement

Public, private, and trust lands surrounding the proposed pipeline alignment are under the jurisdiction of the Fresno County Sheriff's Department. The Area IV patrol district covers the eastern region of Fresno County, with the nearest Sheriff's station located in the town of Auberry, approximately 15 miles south of the proposed pipeline alignment. The California Highway Patrol (CHP) is the chief law enforcement agency for traffic-related issues on public highways and roads. Area offices are located in Madera and Fresno.

Energy Resources

Pacific Gas & Electric (PG&E) provides electrical service to the surrounding region. An easement follows Winchell Cove Road with existing overhead electric facilities along the roadway between Millerton Road and Millerton Lake. The PG&E easement crosses Winchell Cove Road at various locations, at times located to the east or west of the roadway.

Other Public Facilities

The project study area is located within the Sierra Unified School District. The closest schools to the project site are Sierra High School in Tollhouse, Foothill Middle School in Prather, and Auberry Elementary in the town of Auberry. Additionally, located within the community of Friant is the Friant Elementary School (Clovis Unified School District).

4.1.14.2 Environmental Consequences

No Action

Under the No Action Alternative, the project would not be developed, and no impacts to public would occur.

Proposed ActionProject

Question A-E: Public Services

Operation and maintenance activities associated with the Proposed Project would not alter or restrict public service routes, create impacts to area schools and parks, or increase the potential demand for public services in the Fresno County. The proposed pipeline alignment would be built within a public utility easement located within land held in federal trust for the Table Mountain Rancheria, the public right-of-way along Winchell Cove Road, and in accordance with a license agreement with Reclamation within Millerton Lake. Operational activities would not affect police or fire protection, schools, government services, or public facilities. Under CEQA, **no impact** to public services from operation of the Proposed Project would occur.

Cumulative Impacts

The Proposed Project would not contribute to cumulative impacts to public services in the project area.

4.1.15 Recreation

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

4.1.15.1 Affected Environment

A portion of the project alignment is located within the ~~Millerton Lake State Recreation Area~~ MLSRA and extends through the Millerton Lake Marina. Millerton Lake Marina, accessed by Winchell Cove Road, provides recreational services through concessions and boat rentals.

4.1.15.2 Environmental Consequences

No Action

Under the No Action Alternative the project area would remain undeveloped and recreational facilities would not be impacted.

Proposed ActionProject

Question A and B: Recreation

As discussed in **Section 4.1.16**, Transportation/Traffic, construction along Winchell Cove Road would be temporary in nature and the County shall ensure, though contractual obligations, that at

least one lane on Winchell Cove and Millerton Road is open to through traffic, which would provide uninterrupted access to the ~~Millerton Lake State Recreation Area~~ MLSRA. Boating activities in the project area may be regulated to maintain a safety buffer around the construction areas. Because the Proposed Project would not increase recreational demand or result in the expansion of recreational facilities, under CEQA, ***no impacts*** to recreational facilities would occur.

Cumulative Impacts

Construction activities within the MLSRA and Millerton Lake Marina would be temporary in nature and not impact recreation in the area; therefore, the Proposed Project would not contribute to cumulative impacts to recreational facilities.

4.1.16 Transportation/Traffic

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☒	☐	☐
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☒	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☒	☐	☐

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒	☐	☐
e) Result in inadequate emergency access?	☐	☒	☐	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☒	☐	☐

4.1.16.1 Affected Environment

The pipeline alignment is located near the community of Friant in Fresno County, which is considered a rural, low-density area. The dominant mode of transportation is by automobile. The roadway network that would be affected by the project is located in the north central portion of Fresno County, near the Madera County border.

Millerton Road is a major east-west route and intersects Winchell Cove Road between Friant and Auberry Roads. Winchell Cove Road extends approximately 1 mile from Millerton Road north to the Millerton Lake Marina at Winchell Cove. Winchell Cove Road is a two lane rural collector road that is used mainly used for accessing Millerton Lake recreation facilities.

4.1.16.2 Environmental Consequences

No Action

Under the No Action Alternative, the project would not be developed and no impact to traffic would occur.

Proposed Action**Project**

Question A-F: Transportation/Traffic

A portion of the pipeline alignment would be constructed within the right-of-way of Winchell Cove Road. Construction activities associated with the Proposed Project would have the potential to result in traffic-related impacts associated with construction-related employee trips, heavy equipment deliveries, and construction material importation/exportation. Additionally, trenching and pipeline installation within the Winchell Cove Road right-of-way would temporarily impede traffic flows. Adverse impacts to transportation resulting from the construction would be minimal given the scope of the project, temporary nature of construction, and limited existing traffic in the project area. Implementation of **Mitigation Measure T-1**, listed below, would ensure that a traffic control plan is developed and implemented during construction to reduce potential adverse effects to traffic circulation.

Operational activities would consist of, at most, one vehicle maintenance trip per week on Winchell Cove and Millerton Roads. The addition of one trip per week on these two roads would be less than a one percent increase in traffic volume. The addition of one trip would not

substantially increase or affect the existing traffic load and capacity or cause and exceedance of the existing level of service on Winchell Cove or Millerton Roads during operation of the pipeline alignment project. Impacts associated with construction and operational traffic under CEQA would be considered ***less than significant with mitigation***.

Cumulative Impacts

There are no foreseeable construction projects within the Proposed Project area that would occur during the time of project construction; therefore, no cumulative construction traffic impacts would occur.

During operation, the project would add up to one maintenance vehicle trip to area roads. In combination with other traffic on Winchell and Millerton Road, the one maintenance trip would not substantially increase the cumulative traffic load or capacity or decrease the existing level of service on Winchell Cove or Millerton Roads in the cumulative environment.

4.1.16.3 Mitigation

T-1: The County shall ensure, through contractual obligations, that the following measures to reduce or eliminate construction-related traffic impacts are implemented.

- A Traffic Control Plan shall be provided to the County upon submittal of construction drawings. At a minimum, the plan shall identify all construction access and parking areas, temporary pavement markings, and temporary construction signage requirements (e.g., speed limit, temporary loading zones).
- All construction activities within vehicle right-of-ways shall be coordinated with local emergency service providers at least two weeks in advance. Emergency service providers shall be notified of the timing, location, and duration of construction activities. All roads shall remain passable to emergency service vehicles at all times.
- Construction contractors shall ensure that all open trenches at the end of each workday are covered with metal plates to accommodate traffic and access.
- Construction contractors shall ensure that at least one lane on Winchell Cove ~~and Millerton Road~~ is open to through traffic.
- Construction contractors shall implement safety measures (i.e. flag person(s), cones, and signage), consistent with Fresno County and Caltrans guidelines.

4.1.17 Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider that 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?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste.	☐	☐	☒	☐

4.1.17.1 Affected Environment

As described in **Section 2.0**, the proposed pipeline alignment follows the alignment of the existing water supply line. The project area contains a number of service utility easements along Millerton Road. Ponderosa Telephone Company provides telecommunications to the surrounding region.

4.1.17.2 Environmental Consequences

No Action

Under the No Action Alternative, the project would not be developed, and no impacts to public utilities and service systems would occur.

Proposed ActionProject

Question A-G: Utilities and Service Systems

Construction and operation of the proposed pipeline would not adversely impact water supply or wastewater services in the project area. During construction a small amount of solid waste would be generated, however due to the nature and the temporary timeframe of construction, this waste would not exceed the capacity of the local landfill.

Construction contractors through contractual obligations with the appropriate agency with project approval authority shall notify Underground Service Alert one week prior to the beginning of excavation activities, or within an appropriate timeline so the entire roadway alignment can be properly surveyed in order to minimize the risk of exposing or damaging underground utilities. Impacts under CEQA would be considered ***less than significant***.

Cumulative Impacts

The Proposed Project would not contribute to cumulative impacts to public utilities and service systems in the project area.

4.2 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to 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, 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?	☐	☐	☒	☐

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 probably future projects)?	☐	☐	☒	☐
c) Does the project have environment effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

With the implementation of mitigation measures identified in the issue area sections discussed in **Sections 3.0 and 4.0**, all potential impacts of the Proposed Project would be reduced to ***less than significant*** levels. Cumulative impacts and indirect effects for each resource area have been considered within the analysis of each resource area (see **Section 3.0 and 4.0**). As discussed in **Section 3.10**, because no off-site mitigation is necessary to minimize the potential effects of the Proposed Project and because the Winchell Cove Pipeline Project is needed under existing conditions to guarantee the capacity originally anticipated for the existing pipeline and, therefore, would not, in itself, have a growth inducing effect on the surrounding community, no analysis of indirect impacts is required under CEQA. The Proposed Project would not result in environment effects that would cause substantial adverse effects on human beings, either directly or indirectly. Refer to **Appendix C** for the CEQA Checklist signature page.

Section 5 Consultation and Coordination

Several Federal laws, permits, licenses and policy requirements have directed, limited or guided the NEPA analysis and decision making process of this EA/IS.

5.1 Public Review Period

Reclamation and the County ~~intend to concurrently provide~~ the public with an opportunity to comment on the Draft EA/IS during a 30-day review period that began on July 18, 2011 and ended on August 18, 2011. Reclamation and the County received three written comment letters during the comment period for the Draft EA/IS. **Appendix E** contains the comment letters received during the public review period and responses thereto. ~~Reclamation shall provide the public with an additional opportunity to comment should a FONSI be adopted.~~

5.2 Fish and Wildlife Coordination Act (16 USC § 661 et seq.)

The Fish and Wildlife Coordination Act (FWCA) requires that Reclamation consult with fish and wildlife agencies (federal and state) on all water development projects that could affect biological resources. The Proposed Action does not involve federal water development projects; therefore, the FWCA does not apply.

5.3 Endangered Species Act (16 USC § 1531 et seq.)

Section 7 of the FESA requires Federal agencies, in consultation with the Secretary of the Interior (Secretary), to ensure that their actions do not jeopardize the continued existence of endangered or threatened species, or result in the destruction or adverse modification of the critical habitat of these species. The Proposed Action has the potential to affect the CTS through temporary construction activities within critical habitat. Pursuant to Section 7, Reclamation has consulted with and received a Biological Opinion from the USFWS that the proposed project “is not likely to jeopardize the continued existence of the species, and is not likely to cause an appreciable reduction in the likelihood of both the survival and recovery of the central CTS in the wild. A copy of the BO is provided in Appendix F. ~~Formal consultation with the Service is being conducted for this project.~~

5.4 National Historic Preservation Act (16 USC § 470 et seq.)

Section 106 of the NHPA requires Federal agencies to take into account the effects of their undertakings on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register of Historic Places. The process for implementing Section 106 of the NHPA is found at 36 CFR Part 800. Pursuant to 36 CFR § 800.4(d)(1), Reclamation has consulted with and received concurrence from the California State Historic Preservation Officer (SHPO) on a finding of no historic properties affected for the Proposed Action. A copy of the SHPO concurrence letter is provided in Appendix G. ~~Section 106 of the NHPA requires federal agencies to evaluate the effects of federal undertakings on historical, archaeological, and cultural~~

~~resources. Because excavation for the Proposed Action will be in previously disturbed areas, the potential for effects on any historical, archaeological, or cultural resources is low. Formal consultation with the State Historic Preservation Officer (SHPO) is being conducted for this project.~~

5.5 Migratory Bird Treaty Act (16 USC § 703 et seq.)

The MBTA implements various treaties and conventions between the U.S. and Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Unless permitted by regulations, the Act provides that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried, or received any migratory bird, part, nest, egg, or product, manufactured or not. Subject to limitations in the Act, the Secretary may adopt regulations determining the extent to which, if at all, hunting, taking, capturing, killing, possessing, selling, purchasing, shipping, transporting, or exporting of any migratory bird, part, nest, or egg will be allowed, having regard for temperature zones, distribution, abundance, economic value, breeding habits, and migratory flight patterns.

The Proposed Action is not likely to have an effect on birds protected by the MBTA due to timing of construction activities during the fall, outside of the nesting season. In the event that construction occurs within the nesting season, mitigation requires that nesting surveys shall be conducted, and that any identified nests shall be avoided. The Proposed Action ~~will~~would be in compliance with the MBTA.

5.6 Executive Order 11988 – Flood Plain Management and Executive Order 11990 – Protection of Wetlands

EO 11988 requires Federal agencies to prepare flood plain assessments for actions located within or affecting flood plains, and similarly, EO 11990 places similar requirements for actions in wetlands. The project would not affect flood plains as all project facilities would be located underground and surfaces would be restored to existing conditions, and would have minor, temporary effects on designated waters of the U.S. As described in **Section 3.3.2.2**, the proposed pipeline would be located within the lakebed of Millerton Lake, a designated water of the U.S. as defined by Section 404 of the CWA. Temporary construction activities within the lakebed would require obtaining a Section 404 permit from the Corps and a Section 401 Water Quality Certification from the RWQCB. Adherence to the conditions of these approvals would minimize the potential for impacts to Millerton Lake.

Section 6 List of Preparers and Reviewers

6.1 Lead Agencies

6.1.1 Bureau of Reclamation

Michael T. Inthavong, Natural Resources Specialist, South-Central California Area Office (SCCAO)

Sheryl Carter, Realty Specialist, SCCAO

David Hyatt, Supervisory Wildlife Biologist, SCCAO

Shauna McDonald, Wildlife Biologist, SCCAO

Rain Healer, Natural Resources Specialist, SCCAO

Joanne Goodsell, Cultural Resources, MP-153

Patricia Rivera, Indian Trust Assets, MP-400

6.1.2 Fresno County

Frank Fowler, Deputy Director of Public Works and Planning

Willis Robison, Project Manager, Design Division, Public Works and Planning

M. Theresa Acosta-Mena, Senior Planner, Environmental Analysis Unit, Public Works and Planning

6.2 Agencies, Organizations, and Persons Consulted

6.2.1 Federal Agencies

Kellie Berry, U.S. Fish and Wildlife Service

Rocky Montgomery, U.S. Fish and Wildlife Service

Zachary Simmons, U.S. Army Corps of Engineers

Milford Wayne Donaldson, State Historic Preservation Officer

6.2.2 State and Local Government

Jeffrey R. Single, Ph.D., Regional Manager, California Department of Fish and Game

Lisa Gymer, Environmental Scientist, California Department of Fish and Game

Kent Gresham, Acting San Joaquin Sector Superintendent, California State Parks Department

Central Valley Regional Water Quality Control Board

6.3 Environmental Consultants

6.3.1 Analytical Environmental Services

Project Director: David Zweig

Project Manager: Ryan Lee Sawyer

Technical Staff: Peter Bontadelli, Bibiana Alvarez, Kelly Buja, Melinda McCrary, Erin Quinn, David Sawyer, Anna Elzeftawy

Graphics: Dana Hirschberg, Glenn Mayfield

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