

INDIAN WELLS VALLEY GROUNDWATER AUTHORITY IMPORTED WATER PIPELINE PROJECT ADMINISTRATIVE DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

JULY 2023

PREPARED FOR:

Indian Wells Valley Groundwater Authority 100 W. California Avenue Ridgecrest, CA 93555

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
AFY	acre feet per year
AVEK	Antelope Valley-East Kern Water Agency
Basin	Indian Wells Valley Groundwater Basin
BLM	United States Bureau of Land Management
BMP	Best Management Practices
CALFIRE	
CDFW	California Fish and Wildlife
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CH ₄	
со	
CO ₂	Carbon dioxide
CO2e	Carbon Dioxide Equivalent
County	
DOC	Department of Conservation
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EKAPCD	East Kern Air Pollution Control District
EOP	Emergency Operations Plan
GHG	Greenhouse Gas
GSP	Groundwater Sustainability Plan
GWP	Global Warming Potential
IS	Initial Study
IS/MND	Initial Study/Mitigated Negative Declaration
IWVGA	Indian Wells Valley Groundwater Authority
IWVWD	Indian Wells Valley Water District
MDAB	Mojave Desert Air Basin
MND	Mitigated Negative Declaration
MTCO2e	

NAWS	Naval Air Weapons Station
ND	
NO ₂	Nitrogen Dioxide
NOx	Nitrogen Oxides
O ₃	Ozone
0&M	
Pb	Lead
PM ₁₀	particulate matter 10 microns in size
PM _{2.5}	particulate matter 2.5 microns in size
рvс	polyvinyl chloride
ppb	
ppm	
Project	Indian Wells Valley Groundwater Authority Imported Water Pipeline Project
ROW	right of way
SCAQMD	South Coast Air Quality Management District
SCE	
SGMA	Sustainable Groundwater Management Act
SO ₂	
SR	
SRA	State Responsibility Area
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
UST	underground storage tank
VMT	
VRCR	
VRM	
μg/m3	micrograms per cubic meter

CHAPTER 1 INITIAL STUDY

Provost & Pritchard Consulting Group (Provost & Pritchard) has prepared this Initial Study (IS) on behalf of the Indian Wells Valley Groundwater Authority (Authority) to identify environmental effects of the Imported Water Pipeline Project (Project) and to determine if there is substantial evidence that any aspect of the Project, either individually or cumulatively, may cause a significant effect on the environment, regardless of whether the overall effect of the Project is adverse or beneficial. The information within this IS will assist the lead agency to determine whether an Environmental Impact Report (EIR) is the appropriate document for the Project based on the substantial evidence and analysis of each resource topic. This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq. The Authority is the CEQA lead agency for this Project.

The site and the Project are described in detail in Chapter 2 Project Description.

CHAPTER 2 PROJECT DESCRIPTION

2.1 PROJECT BACKGROUND

2.1.1 Project Title

Indian Wells Valley Groundwater Authority Imported Water Pipeline Project.

2.1.2 Lead Agency Name and Address

Indian Wells Valley Groundwater Authority 100 W California Avenue Ridgecrest, California, 93555

2.1.3 Contact Person and Phone Number

Lead Agency Contact

Carol Thomas-Keefer General Manager 805-764-5452

CEQA Consultant

Provost & Pritchard Consulting Group Dena Giacomini, Project Manager 661-616-5900

2.1.4 Project Location

The Project is located between California City and Ridgecrest, California (see Figure 2-1, Figure 2-2, and Figure 2-3). The Project begins in California City at 35°06′55.20″ N and 117°56′07.10″ W. The centroid of the Project site is 35°22′37.4″ N and 117°52′06.46″ W. The Project ends in Ridgecrest at 35°35′09.20″ N and 117°42′14.61″ W.

2.1.5 **Description of Project**

Project Description

The Indian Wells Valley Groundwater Authority (IWVGA) proposes up to a 24" diameter, 50-mile imported water pipeline, three booster pump stations, and a regulating station from the Antelope Valley-East Kern Water Agency (AVEK) California City Feeder pipeline in California City to the Indian Wells Valley Water District's (IWVWD) Ridgecrest Heights Water Storage Tank facility southwest of Ridgecrest, California, in Kern County (Project). The three booster pump stations are necessary to pump the water over the El Paso Mountains located between California City and Ridgecrest. The pipeline would terminate at a new receiving water storage tank at IWVWD's Ridgecrest Heights Tank Facility. Approximately 20.6 miles of pipeline would pass though land owned by the United States Bureau of Land Management (BLM).

Objectives and Goals

The pipeline is necessary to comply with the Sustainable Groundwater Management Act (SGMA), which requires the Indian Wells Valley Basin to be sustainably managed. In July 2016, the IWVGA was formed through a Joint Exercise of Powers Agreement for the purpose of forming a Groundwater Sustainability Agency to manage the Indian Wells Valley Groundwater Basin (Basin) and to implement Sustainable Groundwater Management Act (SGMA) requirements, including the development of a Groundwater Sustainability Plan (GSP). The IWVGA consists of the following voting member agencies: City of Ridgecrest, Indian Wells Valley Water District, County of Kern, County of Inyo, and County of San Bernardino. Nonvoting ex-officio members include the United States Department of the Interior Bureau of Land Management and the United States Navy, Naval Air Weapons Station (NAWS) China Lake.

The Basin is located east of the southern Sierra Nevada Mountain Range in California with an area of approximately 382,000 acres underlying portions of Inyo, Kern, and San Bernardino Counties. The Indian Wells Valley Groundwater Basin is identified by the California Department of Water Resources (DWR) as Basin No. 6-054 in Bulletin 118. The Basin has been designated by DWR as a critically overdrafted basin. Significant overdraft conditions have existed for decades as a result of groundwater pumping that exceeds the natural Basin yield. Between 2011 and 2015, pumping from the Basin was approximately four times the amount of inflow into the Basin and it is estimated to be in an annual loss of storage of approximately 25,000 ac-ft of overdraft per year. The Basin serves as the sole source of potable water supply for residents and other water users; there are currently no imported water supply sources available to the Basin. The basin is currently in severe overdraft. The IWGVA GSP for the Indian Wells Valley Groundwater Basin recommended management actions and projects, including this pipeline, that are required to achieve Basin sustainability. The GSP was approved by DWR.

The goal of the imported water pipeline is to bring as estimated 6,431 acre-ft of water per year (AFY) into the Basin by 2070 by delivering it to IWVWD and allowing it to shut off some of its groundwater wells and base load its system with the imported water. The proposed pipeline facility would be used to convey water from other sources through AVEK's system to the Indian Wells Valley Basin. In conjunction with conservation programs and a recycled water program that would inject up to 2,885 AFY of recycled water back into the Basin, the additional imported water would assist in operating the Basin within its sustainable yield. The sustainability goal is to preserve the Basin's groundwater resource as a sustainable water supply, to continue to provide the residents with quality drinking water, and to sustain the mission of the China Lake NAWS.

The route traverses or is adjacent to twenty-nine (29) parcels of private owners or trusts, twenty-three (23) parcels owned by either companies or corporations, and seven (7) private conservation parcels. It also traverses twenty-six (26) parcels on BLM land and two (2) parcels on the California Department of Fish and Wildlife (CDFW) Fremont Valley Ecological Reserve.

For much of the alignment along Redwood Boulevard and Neuralia Road, the pipeline would be constructed in either the California City road right-of-way (ROW) or Kern County ROW, but the work may require some additional temporary construction easements with private landowners for laydown of materials and stockpiling of backfill materials. The pipeline would remain within the Neuralia Road ROW to avoid parcels with existing solar farms and the parcels owned by the Honda Corporation for the Honda Test Track, north of the city limits of California City.

Up to three (3) booster pump stations and a regulating station would be required to boost water over the highpoint elevation of 3,514 feet in the El Paso Mountains along Highway 395. Booster Pump Station No. 1

(Mile 27.1 of the alignment) would be located along Redrock Randsburg Road on a private parcel. Booster Station No. 2 (Mile 33.1 of the alignment), Booster Station No. 3 (Mile 37.2 of alignment) and a regulating station (Mile 37.5 of the alignment) would be located on BLM land.

The lack of existing sub-transmission and distribution power lines adjacent to two of the three booster pump stations and the regulating station and the potential lack of available capacity in the adjacent existing sub-transmission and distributions lines near two of these locations would require IWVGA to work with Southern California Edison (SCE) to construct the necessary power facilities. This could include transmission lines and substations to power two booster pump stations and potentially each of the booster pump stations and the regulating station. There is an existing SCE 33kV transmission line along Neuralia Road, north of California City, which continues to the east on the northerly side of Redrock Randsburg Road before splitting in a southeasterly direct that parallels Redrock Randsburg Road into Randsburg. East of the Redrock Randsburg Road – Garlock Road fork, there is no existing SCE sub-transmission or distribution power lines available along the alignment until there is a 12kV overhead line that parallels Highway 395 heading north from the intersection of Highway 395 and Searles Station Road. Along portions of Highway 395, a dirt access road would be constructed through grading activities. The access road would support the movement of trucks and equipment utilized during construction of the Project and utilized for continued operational and maintenance (O&M) activities.

The Project pipeline would be approximately 20 to 24 inches in diameter and would consist of both cement mortar lined and coated steel pipe, high-density polyethylene pipe, and possibly polyvinyl chloride (PVC) pipe. PVC pipe, if used, would be utilized in locations where lower pressures exist.

For the most part, construction of the pipeline would require trench excavation. Other areas would include trenchless crossings such as auger boring, open-shield pipe jacking, horizontal directional drilling, and/or micro-tunneling. A total of fifteen (15) crossings of ephemeral water courses would be completed. Eight (8) trenchless crossings would be horizontal directional drilling and the seven (7) remaining trenchless crossing would be auger boring or open-shield pipe jacking. High density polyethylene pipe would be used where horizontal directional drilling is required to cross under a drainage crossing or creek.

Construction Equipment

Anticipated equipment to be used during construction may include the following:

- Bulldozer
- Excavator
- Backhoe loader
- Wheel loader
- Forklift
- Reach Lift
- Material handlers
- Trench shoring equipment
- Pipelayers
- Welding trucks
- Portable and towable welders
- Air compressor
- Generator
- Portable light towers

- Asphalt paving equipment
- Rollers
- Utility trucks
- Dump trucks (end dumps and belly dumps)
- Water trucks

After construction, the contractor would be required to backfill the excavation area and resurface the site to restore it to its preconstruction condition. This would include all areas of excavation including the road, the road shoulder, the ROW, any private property, and under or through desert washes.

Operation and Maintenance

O&M would be performed on an as-needed basis. Activities associated with O&M may include, but are not limited to, the following:

- Regular verification for leaks in pipelines, pipe joints, and valves and replacement of parts when/where necessary.
- Regular flushing, cleaning, and disinfecting the mains that carry water.
- Servicing of valves (to prevent corrosion) and replacement when needed.
- Testing of cathodic test stations along reaches where steel pipe is used and at the cased trenchless crossings.
- Verification of valve chambers for appropriate covers and water logging.
- Repairs of pipelines when/where damaged.
- Flushing of pipelines.

Schedule

Project construction is anticipated to begin in mid-2026 and be completed by the end of 2030.

Chapter 2: Project Description Indian Wells Valley Groundwater Authority Imported Water Pipeline Project



Figure 2-1: Regional Location Map



Figure 2-2: Project Area Map

Chapter 2: Project Description Indian Wells Valley Groundwater Authority Imported Water Pipeline Project



Figure 2-3: Topo Quad Map



Figure 2-4: General Plan Designation Map



Figure 2-5: Zoning Map

CHAPTER 3 DETERMINATION

3.1 POTENTIAL ENVIRONMENTAL IMPACTS

The environmental factors not checked below would have no impacts or less than significant impacts resulting from the project. Environmental factors checked below would be potentially affected by the Project, and involve at least one impact that is a "potentially significant impact" as indicated by the checklist on the following pages.

Aesthetics	Agriculture and Forestry Resources	🔀 Air Quality
🔀 Biological Resources	🔀 Cultural Resources	Energy
Geology/Soils	Greenhouse Gas Emissions	Hazards and Hazardous Materials
🔀 Hydrology / Water Quality	Land Use/Planning	Mineral Resources
🔀 Noise	Population/Housing	Public Services
Recreation	Transportation	🔀 Tribal Cultural Resources
Utilities and Service Systems	🔀 Wildfire	Mandatory Findings of Significance

CHAPTER 4 ENVIRONMENTAL IMPACT ANALYSIS

4.1 AESTHETICS

Table 4-1: Aesthetics Impacts

Except as provided in Public Resources Code Section 21099, would the project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Have substantial adverse effect on a scenic vista?			\boxtimes	
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	\boxtimes			

4.1.1 Baseline Conditions

The Project would be located in eastern Kern County (County) and spans from inside the city limits of California City to an area just outside of the southwestern city limits of Ridgecrest. The Project would be located in developed areas of California City and would terminate in a rural residential area outside of Ridgecrest. The portion of the Project located in the unincorporated areas of Kern County would be located in existing road ROW, BLM lands, and some private parcels. Within California City and areas near Ridgecrest, the Project would be located within the vicinity of developed residential, commercial, and industrial land. In the unincorporated County areas, the Project would pass by areas within the vicinity of research and technology uses, solar fields, open space, and rural residences.

The Project lies approximately 60 miles south-southeast of Bakersfield in the northern portion of the Fremont Valley. The Project region is characterized by a large sloping valley floor, bordered on the east by the southern end of the Sierra Nevada Mountains, which reach to approximately 4,000 feet above the valley floor, and to the northeast by the Rand and El Paso Mountains, which stand about 2,000–3,000 feet above the Project area. The area east of the Project is interspersed by occasional low rolling desert hills. The soil of these hills is often a distinctive dark red that contrasts with the tan and orange soils of the valley

landscape. The Project region is home to a variety of primarily low-growing desert vegetation, such as creosote, juniper, and sagebrush. This portion of the valley also hosts occasional Joshua trees, which punctuate the lower growing bushes with distinctive character. Residential and commercial development occur within California City and the neighboring areas of Ridgecrest. There are several solar facilities located in the vicinity of the Project area. Other notable developments include, Union Pacific rail lines, city and county roads, and State and United States highways such as State Route (SR) 14 and United States Highway 395. SR 14 is designated as an eligible State scenic highway. The nearest officially-designated State Scenic Highway is SR 190, which is approximately 52 miles north of the Project.¹

4.1.2 Impact Analysis

a) Have substantial adverse effect on a scenic vista?

Less than Significant Impact. The Project would construct a 50-mile pipeline, three booster pump stations, a regulating station, and a receiving tank. The booster pumps would be required to pump water up areas that contain an uphill gradient, while the receiving tank would be used to store imported water to equalize the imported water delivery with fluctuations in IWVWD's water demands, and to allow additional treatment of the imported water, if needed. The pipeline would, for the most part, be constructed within public ROW. The Project would pass through private parcels that would require easements for temporary construction and permanent operational needs. The pipeline would be underground and any above ground infrastructure, such as the booster pump stations, regulating station, and receiving tank, would be consistent with the standards required under the BLM Visual Resources Management (VRM) System. In addition, the Project would not alter any views in the Project area. Impacts would be less than significant. No further discussion or evaluation of this topic would be provided in the EIR.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The Project is not located along or near a State Scenic Highway, as determined by the California Department of Transportation. As identified previously, the nearest State Scenic Highway is SR 190, which is located 52 miles north of the nearest portion of the Project alignment. Therefore, the Project would not damage scenic resources within a State Scenic Highway. Thus, there would be no impact. No further discussion or evaluation of this topic would be provided in the EIR.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Potentially Significant Impact. The Project is wholly located in a non-urbanized area, as defined in the CEQA Statute and Guidelines. For the most part, the Project would be located underground. The only Project features located above ground would be the booster pump stations, regulating station, air and vacuum valves, and the receiving tank. The booster pump stations, regulating station, air and vacuum valves, and receiving tank would not be constructed at a height that would have the potential to significantly degrade the quality of any public view. The pump stations and receiving tank would not be

¹ (California Department of Transportation 2023)

in a location that would degrade visual character or the quality of public views. The BLM's VRM System Manual 8431 contains design techniques for mitigating visual impacts from proposed project activities. These techniques include the following:

- Minimize the number of visible structures;
- Minimize structure contrast;
- Redesign structures that do not blend/fit;
- Minimize impact of utility crossings; and
- Recognize the value and limitations of color.

In addition, the Project proposes a new access road which would require minor vegetation removal. Once the access road is constructed, it would be maintained for O&M purposes, resulting in a potentially significant change to the existing visual character.

Due to the requirements set forth by the BLM's VRM, and the potential for a significant impact regarding the scenic character, this topic will be further analyzed in the Project's EIR.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Potentially Significant Impact. Although the Project pipeline would not require lighting, the pump stations, regulating station, and receiving tank would. In order to limit impacts from light and glare, the Project would implement the objectives of the VRM System Manual 8431 – Visual Resources Contrast Rating (VRCR). The VRCR contains objectives for four types of activities that have the potential to be implemented on BLM land.² Due to the proposed construction of the booster pump stations, regulating station, and the receiving tank, the Project would fall under the Objective III. Objective III states:

"The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape."³

Due to the requirements set forth by the BLM's VRM, this topic will be further analyzed in the Project's EIR.

² (Bureau of Land Management 1986)

³ Ibid.

4.2 AGRICULTURE AND FORESTRY RESOURCES

Table 4-2: Agriculture and Forest Impacts

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?				
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				\boxtimes
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				\boxtimes
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?				

4.2.1 **Baseline Conditions**

The Project would be located in California City and portions of eastern Kern County to the southwest of Ridgecrest, an area characterized by open, dry landscapes that are less suitable for agricultural production than areas of western Kern County which is in part due to the rain shadow effect that impacts the eastern side of the Sierra Nevada mountain range. The Project would not be located in the immediate vicinity of any land currently being utilized for agricultural production.

4.2.2 Impact Analysis

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. According to the California Department of Conservation (DOC), the Project would be located on land that is designated as Urban and Built-Up Land, Vacant and Disturbed Land, Non-Agricultural and Natural Vegetation, and Rural Residential Land under the DOC's Farmland Mapping and Monitoring

Program.⁴ The Project would not be located on or in the immediate vicinity of any land that has been designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, nor does it propose to alter any existing farmland, regardless of designation. Construction associated with the Project would be primarily located within existing ROW, connecting a new pipeline from AVEK facilities in California City to IWVWD facilities southwest of the City of Ridgecrest. Construction associated with the booster pump stations, regulating station, and receiving tank would be located outside of the ROW, but not on lands that are dedicated for agricultural uses. Therefore, there would be no impact. No further discussion or evaluation of this topic would be provided in the EIR.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The Project would be located primarily within the existing ROW, connecting AVEK facilities in California City to IWVWD facilities southwest of the City of Ridgecrest. While County zoning designations for some parcels fronting the roadway in which the Project would be built are zoned for agricultural use, the zoning designation for these lands would not be changed, nor would there be any loss or conversion of farmland.⁵ Additionally, the Project would not be located on a parcel with an existing Williamson Act contract. Therefore, there would be no impact. No further discussion or evaluation of this topic would be provided in the EIR.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The Project would not be located in an area that is zoned for timberland or timberland production by either California City or Kern County.^{6 7} Additionally, the CDFW has not designated the Project site as a forest or timberland.⁸ Therefore, there would be no impact. No further discussion or evaluation of this topic would be provided in the EIR.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. As discussed above, the Project site does not include any land that is zoned or otherwise designated as forest or timberland. No conversion of forest land or timberland to another use would result from this Project. Therefore, there would be no impact. No further discussion or evaluation of this topic would be provided in the EIR.

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?

No Impact. As discussed above, the Project would not be located on land that is currently being used for agricultural production, nor has it been designated as forest land or timberland. While the Project would be located within the road ROW of parcels which are zoned for agricultural use, the Project does not

⁴ (California Department of Conservation 2022)

⁵ (Kern County 2023)

⁶ (City of California City 2022)

⁷ (Kern County 2023)

⁸ (California Department of Fish and Wildlife 2015)

propose the conversion or rezoning of any land zoned for agriculture. Therefore, there would be no impact. No further discussion or evaluation of this topic would be provided in the EIR.



Figure 4-1: Farmland Designation Map

4.3 AIR QUALITY

Table 4-3: Air Quality Impacts

	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?	\boxtimes			
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?				
c)	Expose sensitive receptors to substantial pollutant concentrations?	\boxtimes			
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	\boxtimes			

4.3.1 Baseline Conditions

The Project is located in eastern Kern County, extending from California City to the southwest of the City of Ridgecrest. The Project site is within the boundary of the East Kern Air Pollution Control District (EKAPCD) and the Mojave Desert Air Basin (MDAB). The MDAB is made up of mountain ranges interspersed with long broad valleys, many of which contain dry lakes. Winds in the MDAB are typically out of the west and southwest and exist due to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada Mountains to the north; air masses pushed onshore in Southern California by differential heating are channeled through the MDAB. The MDAB is separated from the Southern California coastal and Central California valley regions by mountains (the highest elevation of which is about 10,000 feet) whose passes form the main channels for these air masses. During the summer, the MDAB is generally influenced by a pacific subtropical high cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska as these frontal systems are weak and diffuse by the time that they reach the desert. Most desert moisture arrives from infrequent warm, moist, and unstable air masses from the south.

Pollutant	Averaging Time	California Standards*		National Standards*	
		Concentration*	Attainment Status	Primary	Attainment Status
Ozone (O ₃)	1-hour	0.09 ppm	Nonattainment/ Severe	_	No Federal Standard
	8-hour	0.070 ppm	Nonattainment	0.075 ppm	Nonattainment (Extreme)**
Particulate	AAM	20 μg/m³	Nonattainment	-	Attainment
Matter (PM ₁₀)	24-hour	50 μg/m³		150 μg/m³	

Table 4-4: Summary of Ambient Air Quality Standards and Attainment Designation

Chapter 4: Environmental Impact Analysis Indian Wells Valley Groundwater Authority Imported Water Pipeline Project

	Averaging Time	California Standards*		National Standards*		
Pollutant		Concentration*	Attainment Status	Primary	Attainment Status	
Fine Particulate	AAM	12 μg/m³	Nonattainment	12 μg/m³	Nonattainment	
Matter (PM _{2.5})	24-hour	No Standard		35 μg/m³		
Carbon	1-hour	20 ppm	Attainment/	35 ppm	Attainment/	
Monoxide	8-hour	9 ppm	Unclassified	9 ppm	Unclassified	
(CO)	8-hour (Lake Tahoe)	6 ppm		-		
Nitrogen	AAM	0.030 ppm	Attainment	53 ppb	Attainment/	
Dioxide (NO ₂)	1-hour	0.18 ppm		100 ppb	Unclassified	
Sulfur Dioxide	AAM	-	Attainment		Attainment/	
(SO ₂)	24-hour	0.04 ppm			Unclassified	
	3-hour	-		0.5 ppm		
	1-hour	0.25 ppm		75 ppb		
Lead (Pb)	30-day Average	1.5 μg/m³	Attainment	_	No	
	Calendar Quarter	-	_		Designation/	
	Rolling 3-Month Average	_		0.15 μg/m ³	Classification	
Sulfates (SO ₄)	24-hour	25 μg/m³	Attainment	No Federal S	tandards	
Hydrogen Sulfide (H ₂ S)	1-hour	0.03 ppm (42 μg/m ³)	Unclassified			
Vinyl Chloride (C ₂ H ₃ Cl)	24-hour	0.01 ppm (26 μg/m³)	Attainment			
Visibility- Reducing Particle Matter	8-hour	Extinction coefficient: 0.23/kilometer- visibility of 10 miles or more due to particles when the relative humidity is less than 70%.	Unclassified			

* For more information on standards visit: <u>https://ww3.arb.ca.gov/research/aaqs/aaqs2.pdf</u>

** No Federal 1-hour standard. Reclassified extreme nonattainment for the Federal 8-hour standard [6/14/23].

***Secondary Standard

Source: <u>http://www.valleyair.org/aqinfo/attainment.htm. Accessed 2015</u>

Ambient Air Quality Data

California's ambient air monitoring network is one of the most extensive in the world, with more than 250 sites and 700 individual monitors measuring air pollutant levels across a diverse range of topography, meteorology, emissions, and air quality. Existing levels of ambient air quality and historical trends and projections in the area are best documented by measurements made by these monitoring sites. The nearest monitoring site to the Project is approximately 18 miles southeast in the City of Mojave at 923 Poole Street (Mojave Station). The site measures O₃, PM₁₀, and PM_{2.5}. Data presented in **Table 4-5** summarize monitoring data from the California Air Resource Board's Aerometric Data Analysis and Management System for the Mojave Station published from 2016 to 2018.

Table 4-5. Antibient Air Quality Monitoring Summary							
Criteria Air Pollutant	Average Time	Item	2016	2017	2018		
	1 hour	Max 1 hour (ppm)	0.104	0.097	0.111		
	1-nour	Days > State Standard (0.09 ppm)	2	1	8		
$O_{\text{Topp}}(O)$	8-hour	Max 8 Hour (ppm)	0.093	0.086	0.095		
$OZONE(O_3)$		Days > State Standard (0.070 ppm)	60	37	56		
		Days > National Standard (0.070 ppm)	52	35	53		
		Days > National Standard (0.075 ppm)	29	16	23		
	Annual	National Annual Average (µg/m ³)		25.3	26.7		
Inhalable coarse		National 24 Hour Average (µg/m ³) ¹	130.3	85.7	86.5		
particles (PM ₁₀)	24-hour	Days > State Standard (50 μg/m ³)	18.9	ID	ID		
		Days > National Standard (150 μ g/m ³)	0	ID	0		
Fine mentionlate	Annual	National Annual Average (µg/m ³) ²		5.5	7.1		
Fine particulate	24	National 24 Hour Average (µg/m3)	25.7	26.9	39.0		
matter (Pivi _{2.5})	24-nour	Days > National Standard (35 μg/m³)	0	0	2		
¹ From the Federal PM ₁₀ Standard ² From the Federal PM _{2.5} Standard ID = insufficient data National Standard = NAAQS							

Table 4-5: Ambient Air Quality Monitoring Summary

4.3.2 Impact Analysis

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

Potentially Significant Impact. The Project would result in the generation of emissions that could exceed the set thresholds of EKAPCD. Water obtained from either California City, IWVWD, private agricultural wells, or potentially water used for the hydrostatic testing of the newly constructed pipeline reaches, would be used for dust control, helping to diminish any potential impacts resulting from dust emissions. An air quality technical study will be prepared to quantify the emissions that would be generated by the Project. In the event that an emission threshold is exceeded by the Project, mitigation would be necessary to lessen any significant impacts. The EIR will provide further analysis of the Project's consistency with the EKAPCD.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Potentially Significant Impact. The Project would result in the generation of emissions that could exceed the set thresholds of EKAPCD. An air quality technical study will be prepared to quantify the emissions that would be generated by the Project. In the event that an emission threshold is exceeded by the Project, mitigation would be necessary to lessen any significant impacts. The EIR will provide further analysis of the Project's construction and operational air pollutant emissions.

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

Potentially Significant Impact. The Project has the potential to expose sensitive receptors to substantial pollutant concentrations. Residential homes, schools, and other uses are located within the vicinity of the Project site. An air quality technical study will be prepared to analyze the impact of the project on sensitive receptors. Any potential impacts and required mitigations will be analyzed within the upcoming EIR.

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

Potentially Significant Impact. The Project has the potential to result in other pollutants which could adversely or substantially affect a significant number of people. An air quality technical study will be prepared to analyze the effect of other emissions, such as odor, on people within the vicinity of the Project and would be analyzed further in the EIR.

4.4 BIOLOGICAL RESOURCES

Table 4-6: Biological Resources Impacts

	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 species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife 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 resident 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?			\boxtimes	
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?				

4.4.1 **Baseline Conditions**

The Project site extends from within California City to portions of Kern County to the southwest of the City of Ridgecrest. There are several special status species which are known to occur in the region, most notably burrowing owl (*Athene cunicularia*), desert tortoise (*Gopherus agassizii*), and Mohave ground squirrel (*Xerospermophilus mohavensis*). The Project site also passes through desert tortoise critical habitat and is located near the Desert Tortoise Research Natural Area. The pipeline alignment crosses through BLM and CDFW owned land and abuts Red Rock Canyon State Park.

4.4.2 Impact Analysis

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant Impact with Mitigation Incorporated. The Project site contains suitable habitat for special status species including, but not limited to American badger (*Taxidea taxus*), burrowing owl, Crotch bumble bee (*Bombus crotchii*), desert tortoise, Mohave ground squirrel, monarch butterfly (*Danaus plexippus*), pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), various nesting raptors, migratory birds, special status bird species, Barstow woolly sunflower (*Eriophyllum mohavense*), beavertail cactus (*Opuntia basilaris*), Charlottes' phacelia (*Phacelia nashiana*), Redrock poppy (*Eschscholzia minutiflora*), silver cholla (*Cylindropuntia echinocarpa*), and western Joshua Tree (*Yucca brevifolia*). Implementation of appropriate mitigation measures would reduce potential impacts to these species to a less than significant level under CEQA and ensure compliance with State and federal laws protecting these species. The EIR will provide further analysis and provide appropriate mitigation to address potential adverse impacts to species.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Potentially Significant Impact. Creosote bush - white bursage - desert senna scrub association (*Larrea tridentata – Ambrosia dumosa – Senna armata*) is a natural community of special concern present within the Project alignment. Potential impacts to this plant community and appropriate mitigation measures would need to be identified in the EIR. Riparian habitat is not present within the Project alignment. The EIR will provide further analysis and provide appropriate mitigation to address potential adverse impacts to natural communities.

c) Would the project 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?

No Impact. There are no federally protected wetlands as defined by Section 404 of the Clean Water Act within the Project alignment. Consultation with the agencies and technical surveys have been performed and support a no adverse effect. No further evaluation of this topic will be required in the EIR.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant Impact with Mitigation Incorporated. The Project area does not contain suitable features to act as native wildlife nursery sites; therefore, there would be no impact to native wildlife nursery sites. Project disturbances to wildlife movement corridors would be temporary and minimal because the wildlife movement corridors would likely return to pre-Project conditions after construction is completed, and the Project alignment is located in towns, along rights-of-way, or within open space. During construction, the implementation of mitigation measures and Best Management Practices (BMPs) such as covering or providing escape ramps in steep walled holes and trenches to ensure wildlife, including desert

tortoise, are not entrapped, would reduce any potential impacts to less than significant under CEQA. The EIR will provide further analysis and provide appropriate mitigation and BMPs to address potential adverse impacts to movement corridors.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than Significant Impact. There would be less than significant impacts under CEQA because the Project is consistent with the goals and policies of the California City General Plan, City of Ridgecrest General Plan, and the Kern County General Plan. No further evaluation of this topic will be required in the EIR.

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?

Less than Significant Impact. There would be less than significant impacts under CEQA because the Project is consistent with the goals and policies of the Desert Renewable Energy Conservation Plan, and Incidental Take Permits would be acquired for Mohave ground squirrel and desert tortoise. No further evaluation of this topic will be required in the EIR.



Figure 4-2: Wetland Map

4.5 CULTURAL RESOURCES

Table 4-7: Cultural Resources Impacts

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 pursuant to in § 15064.5?	\boxtimes			
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	\boxtimes			
c)	Disturb any human remains, including those interred outside of dedicated cemeteries?	\boxtimes			

4.5.1 **Baseline Conditions**

The Project area is located in eastern Kern County, east of the Sierra Nevada Mountain Range. Eastern Kern County contains a vast expanse of desert land that is comprised of thousands of acres of undeveloped land. Due to the amount of undeveloped land, there is potential for unknown cultural resources to be located within the Project area and its vicinity.

4.5.2 Impact Analysis

- a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?
- b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?
- c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

a-c) Potentially Significant Impact. The Project would require trenching and excavations to install the pipeline, pump stations, a regulating station, and a receiving tank. Therefore, the potential exists for the Project to significantly impact a historical resource, an archaeological resource, or human remains that are interred outside of a dedicated cemetery. A Cultural Resources Technical Report will be prepared to determine whether or not cultural resources are located within or near the Project area, and what steps should be taken to avoid any potential resources of value. Therefore, impacts would potentially be significant, and further evaluation of this topic will be analyzed in the EIR.

4.6 ENERGY

Table 4-8: Energy Impacts

Would the project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				

4.6.1 Baseline Conditions

The Project site would be served by SCE for its energy needs.⁹ In the vicinity of the Project site there are several energy producing areas, including solar fields to the south and west of the Honda Proving Center of California, along Neuralia Road, approximately 2.25 miles south of where it connects with SR 14. Additionally, the Los Angeles Department of Water and Power Beacon Solar Plant is located approximately 2.25 miles northwest of the intersection of Neuralia Road and Anne Avenue.

4.6.2 Impact Analysis

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

Less than Significant Impact. The Project would result in the consumption of fuels and the use of energy in order to construct the proposed pipeline, booster pump stations, regulating station, and receiving tank. The contractor would be in charge of managing energy usage during construction periods. While inefficiencies in energy use are possible to occur as a result of the Project, industry BMPs would limit any resulting inefficiencies. Energy would also be required to operate the facilities once constructed. Energy usage during operation would be as a result of necessary functions to operate and maintain the constructed facilities. Therefore, impacts would be less than significant. No further evaluation of this topic will be required in the EIR.

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

No Impact. State and local authorities regulate energy use and consumption. These regulations at the State level are intended to reduce energy use and greenhouse gas (GHG) emissions. These include, among others, Assembly Bill (AB) 1493 – Light-Duty Vehicle Standards; California Code of Regulations Title 24, Part 6 – Energy Efficiency Standards; and California Code of Regulations Title 24, Parts 6 and 11 – California Energy Code and Green Building Standards. The Project would not conflict with or obstruct a

⁹ (Southern California Edison 2023)

State or local plan for renewable energy or energy efficiency. Therefore, there would be no impact. No further evaluation of this topic will be required in the EIR.

4.7 GEOLOGY AND SOILS

Table 4-9: Geology and Soils Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
 Rupture of a known earthquake fault, as delineated on the most recent Alquist- Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. 				
ii. Strong seismic ground shaking?	\square			
iii. Seismic-related ground failure, including liquefaction?			\boxtimes	
iv. Landslides?	\square			
b) Result in substantial soil erosion or the loss of topsoil?			\boxtimes	
C) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
 Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial direct or indirect risks to life or property? 				
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?				
 f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature? 				

4.7.1 Baseline Conditions

Geology and Soils

The Project is located in Kern County and spans both the Basin and Range and the Mojave Desert Geomorphic Province. The Basin and Range Geomorphic Province is the westernmost part of the Great Basin. The province is characterized by interior drainage with lakes and playas, and the typical horst and graben structure (subparallel, fault-bounded ranges separated by down dropped basins). Death Valley, the lowest area in the United States (280 feet below sea level at Badwater), is one of these grabens. Another graben, Owens Valley, lies between the bold eastern fault scarp of the Sierra Nevada and Inyo Mountains.
The northern Basin and Range Province includes the Honey Lake Basin. The Mojave is a broad interior region of isolated mountain ranges separated by expanses of desert plains. It has an interior enclosed drainage and many playas.

Based on criteria established by the California Geological Survey (CGS), faults can be classified as active, potentially active, or inactive. Active faults are those having historically produced earthquakes or shown evidence of movement within the past 11,000 years (during the Holocene Epoch). Potentially active faults have demonstrated displacement within the last 1.6 million years (during the Pleistocene Epoch) while not displacing the Holocene Strata. Inactive faults do not exhibit displacement younger than 1.6 million years before the present. In addition, there are buried thrust faults, which are faults with no surface exposure Due to their buried nature, the existence of buried thrust faults are usually not known until they produce an earthquake.

The CGS establishes regulatory zones around active faults, called Alquist-Priolo Earthquake Fault Zones. These zones, which extend from 200 to 500 feet on each side of a known fault, identify areas where a potential surface fault rupture could prove hazardous for buildings.

There are two important fault trends that control topography: a prominent Northwest to Southeast trend and a secondary east-west trend (apparent alignment with Transverse Ranges is significant). The Mojave province is wedged in a sharp angle between the Garlock Fault (southern boundary Sierra Nevada) and the San Andreas Fault, where it bends east from its northwest trend. The northern boundary of the Mojave is separated from the prominent Basin and Range by the eastern extension of the Garlock Fault.¹⁰

Faults and Seismicity

The Project area is located within an Alquist-Priolo Earthquake Fault Zone and the Project would pass over a known fault within the area. The Project would be constructed over the Garlock Fault.¹¹

Liquefaction

Liquefaction takes place when loosely packed, water-logged sediments at or near the ground surface lose their strength in response to strong ground shaking. Liquefaction occurring beneath buildings and other structures can cause major damage during earthquakes. According to the DOC Earthquake Zones of Required Investigation map, no portions of the Project are located in areas susceptible to liquefaction.¹²

Soil Subsidence

There are two types of subsidence: land subsidence and hydro compaction subsidence. Land subsidence occurs when an extensive amount of ground water, oil, or natural gas is withdrawn from below the ground surface. This includes land subsidence resulting from groundwater overdraft. Hydro compaction subsidence occurs when a large land area settles due to over-saturation. According to the United States Geological Survey, the Project area is not located in a region that experiences severe subsidence.¹³

¹⁰ (California Department of Conservation 2002)

¹¹ (California Department of Conservation 2022)

¹² Ibid.

¹³ (United States Geological Survey 2023)

Dam and Levee Failure

The Project is not located in an area that would be susceptible to dam and levee failure. According to the Dam Breach Inundation Map Web Publisher, the closest dam with a high likelihood to breach would be the BAP Pond 8 dam located approximately 14.5 mile southeast near the Borax Visitor Center.¹⁴

4.7.2 Impact Analysis

- a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Potentially Significant Impact. The Project is located in an Alquist-Priolo Earthquake Fault Zone and would cross the Garlock Fault. The Project will require a geotechnical report to be prepared to further address the potential for fault rupture impacts. These findings will be provided as part of the EIR.

ii. Strong seismic ground shaking?

Potentially Significant Impact. The Project is located in an Alquist-Priolo Earthquake Fault Zone and would cross the Garlock Fault. The pump stations, regulating station, receiving tank, and pipeline would require a geotechnical study to characterize hazards from any potential surface ruptures. Although the Project must comply with the most current Building Code regulations and specifies structural requirements for different types of building in a seismically active area, there is a potentially significant impact and further analysis of the potential for strong seismic ground shaking will be provided in the EIR.

iii. Seismic-related ground failure, including liquefaction?

Less than Significant Impact. Although the Project is located in an Alquist-Priolo Earthquake Fault Zone, the Project is not located in an area that is affected by liquefaction. Liquefaction is a form of earthquake-induced ground failure that occurs primarily in a relatively shallow, loose, granular, water saturated soils. The Mohave desert is not known for water saturated soils. There are times during and following a rain event where water can move quickly through desert washes and cause flash flooding. Water is quick to evaporate or sinks into the surrounding sand. Impacts would be less than significant. However, a geotechnical report will be prepared to confirm this finding and ensure that potential impacts associated with liquefaction would be less than significant. These findings will be provided as part of the EIR.

iv. Landslides?

Potentially Significant Impact. Due to a segment of the Project alignment traversing near the El Paso Mountains, the Project would be located in areas that are susceptible to landslides. Therefore, this impact is potentially significant, and this topic will be further analyzed in the Project's EIR.

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

¹⁴ (California Department of Water Resources 2022)

Less than Significant Impact. The Project would involve trenching and excavation work in order to lay the pipelines in the ground, and grading activities for the concrete slab for the pump stations. These activities have the potential to disturb existing soils and expose soils to rainfall and wind, thereby potentially resulting in soil erosion. However, soil erosion would be reduced by implementation of standard erosion controls imposed during site preparation and grading activities as directed by a State Water Resources Control Board (SWRCB) approved Stormwater Pollution Prevention Plan (SWPPP). Additionally, all grading activities would require grading permits issued by Kern County. Once construction activities have concluded, O&M activities would not add to any soil erosion or the loss of topsoil. With compliance with all applicable regulatory requirements, impacts regarding soil erosion or the loss of topsoil would be less than significant. No further analysis of this topic is required in the EIR.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Potentially Significant Impact. Substantial grade change would not occur in the topography to the point where the Project would expose people or structures to potential substantial adverse effects on, or offsite, such as landslides, lateral spreading, subsidence, liquefaction or collapse. However, as discussed above, the Project is susceptible to ground shaking. Thus, lateral spreading or collapse has the potential to occur. A geotechnical report will be prepared to confirm this finding and ensure that potential impacts associated with instability of Project soils would be less than significant. These findings will be provided as part of the EIR.

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

No Impact. Expansive soils are typically associated with fine-grained clayey soils that have the potential to shrink and swell with repeated cycles of wetting and drying. The Project is in a sandy region with a low expansion potential. Furthermore, the Project would be consistent with the standards of the California Building Code and the American Water Works Association. There would be no impact. No further analysis of this topic is required in the EIR.

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

No Impact. The Project would include the construction of a restroom at Booster Pump Station No. 2. The restroom would connect to an on-site septic system constructed along with the rest of the booster pump station facility. The soils at the location of Booster Pump Station No.2 have not been identified as being incapable of supporting a septic system. Therefore, there would be no impact. No further analysis of this topic is required in the EIR.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Potentially Significant Impact. Paleontological resources are the fossilized remains of organisms that have lived in a region in the geologic past and whose remains are found in the accompanying geologic strata. This type of fossil record represents the primary source of information on ancient life forms. Although most of the Project alignment has been previously graded, the Project would require additional grading and excavation activities and could be at greater depths than those having previously occurred which

would have the potential to disturb undiscovered paleontological resources that may exist within the Project area. A Cultural Resources Technical Report will be prepared and any potential impacts to paleontological resources will be discussed and mitigated properly. Therefore, the EIR will provide further analysis of the Project's potential impacts to paleontological resources.

4.8 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?	\boxtimes			
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

4.8.1 Baseline Conditions

Commonly identified GHG emissions and sources include the following:

- Carbon dioxide (CO₂) is an odorless, colorless natural greenhouse gas. CO₂ is emitted from natural and anthropogenic sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic out gassing. Anthropogenic sources include the burning of coal, oil, natural gas, and wood.
- Methane (CH₄) is a flammable greenhouse gas. A natural source of methane is the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain methane, which is extracted for fuel. Other sources are from landfills, fermentation of manure, and ruminants such as cattle.
- Nitrous oxide (N₂O), also known as laughing gas, is a colorless greenhouse gas. Nitrous oxide is produced by microbial processes in soil and water, including those reactions that occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load.
- Water vapor is the most abundant, and variable greenhouse gas. It is not considered a pollutant; in the atmosphere, it maintains a climate necessary for life.
- Ozone (O₃) is known as a photochemical pollutant and is a greenhouse gas; however, unlike other greenhouse gases, ozone in the troposphere is relatively short-lived and, therefore, is not global in nature. Ozone is not emitted directly into the atmosphere but is formed by a complex series of chemical reactions between volatile organic compounds, nitrogen oxides, and sunlight.
- Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.
- Chlorofluorocarbons (CFCs) are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were first synthesized in 1928 for use as

refrigerants, aerosol propellants, and cleaning solvents. CFCs destroy stratospheric ozone; therefore, their production was stopped as required by the Montreal Protocol in 1987.

- Hydrofluorocarbons (HFCs) are synthetic chemicals that are used as a substitute for CFCs. Of all the greenhouse gases, HFCs are one of three groups (the other two are perfluorocarbons and sulfur hexafluoride) with the highest global warming potential. HFCs are human-made for applications such as air conditioners and refrigerants.
- Perfluorocarbons (PFCs) have stable molecular structures and do not break down through the chemical processes in the lower atmosphere; therefore, PFCs have long atmospheric lifetimes, between 10,000 and 50,000 years. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.
- Sulfur hexafluoride (SF₆) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It has the highest global warming potential of any gas evaluated. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

There are uncertainties as to exactly what the climate changes will be in various local areas of the earth, and what the effects of clouds will be in determining the rate at which the mean temperature will increase. There are also uncertainties associated with the magnitude and timing of other consequences of a warmer planet: sea level rise, spread of certain diseases out of their usual geographic range, the effect on agricultural production, water supply, sustainability of ecosystems, increased strength and frequency of storms, extreme heat events, air pollution episodes, and the consequence of these effects on the economy.

Emissions of GHGs contributing to global climate change are largely attributable to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. About three-quarters of human emissions of CO_2 to the global atmosphere during the past 20 years are due to fossil fuel burning. Atmospheric concentrations of CO_2 , CH_4 , and N_2O have increased 31 percent, 151 percent, and 17 percent respectively since the year 1750 (CEC 2008). GHG emissions are typically expressed in carbon dioxide-equivalents (CO_2e), based on the GHG's Global Warming Potential (GWP). The GWP is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. For example, one ton of CH_4 has the same contribution to the greenhouse effect as approximately 21 tons of CO_2 . Therefore, CH_4 is a much more potent GHG than CO_2 .

EKAPCD has not established a CEQA significance threshold for construction- or operation-related GHG emissions where it is not the Lead Agency. EKAPCD has established a threshold of 25,000 tons per year of CO₂e for projects where it is the Lead Agency.¹⁵ This threshold focuses on emissions from stationary sources. Lacking other more local guidance consideration is given to the South Coast Air Quality Management District (SCAQMD) which has also adopted a threshold for industrial projects of 10,000 MTCO₂e per year for the sum of annual operational GHG emissions plus construction emissions. SCAQMDs Draft Guidance Document – *Interim CEQA Greenhouse Gas Significance Threshold*, recognizes that construction-related GHG emissions from projects "occur over a relatively short-term period of time" and that "they contribute a relatively small portion of the overall lifetime project GHG emissions". This guidance recommends that construction GHG emissions should be "amortized over a 30-year project lifetime, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG

¹⁵ (Eastern Kern Air Pollution Control District 2012)

reduction strategies".¹⁶ Therefore, in reliance on this best-available guidance, GHG emissions from Project construction are amortized over the 30-year lifetime of the Project and added to Project operational emissions.

4.8.2 Impact Analysis

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Potentially Significant Impact. The Project would result in the generation of construction related emissions that could exceed the applicable thresholds set by the EKAPCD or the SCAQMD. In order to quantify the amount of GHG emission that would result from the construction and operations of the Project, an Air Quality Technical study will be prepared. Should emissions exceed the applicable thresholds, mitigation measures would be required to diminish any significant impacts to less than significant. Therefore, the EIR will provide further analysis of the Project's greenhouse gas emissions.

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

Potentially Significant Impact. The Project would result in the generation of construction and operational related emissions that would have the potential to emit GHGs and exceed the applicable thresholds set by the EKAPCD or the SCAQMD. In order to quantify the amount of GHG emission that would result from the construction of the Project, an Air Quality Technical study will be prepared. Should emissions exceed the applicable thresholds, mitigation measures would be required to diminish any significant impacts and the EIR will include further evaluation of Project related emissions and associated emission reduction strategies to determine whether the Project conflicts with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

¹⁶ (South Coast Air Quality Management District 2008)

4.9 HAZARDS AND HAZARDOUS MATERIALS

Table 4-11: Hazards and Hazardous Materials Impacts

	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 handle 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 or excessive noise for people residing or working in the project area?				
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
g)	Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?				

4.9.1 **Baseline Conditions**

Hazardous Materials

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires the California Environmental Protection Agency to develop at least annually an updated Cortese List. The Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List. DTSC's EnviroStor database provides DTSC's component of Cortese

List data (DTSC, 2010). In addition to the EnviroStor database, the SWRCB Geotracker database provides information on regulated hazardous waste facilities in California, including underground storage tank (UST) cases and non-UST cleanup programs, including Spills-Leaks-Investigations-Cleanups sites, Department of Defense sites, and Land Disposal program.

A search of the DTSC EnviroStor database and the SWRCB Geotracker performed on May 1, 2023 determined that there are no known active hazardous waste generators or hazardous material spill sites within the Project area or immediate surrounding vicinity.¹⁷

Airports

The nearest public airport to the Project is the California City Airport, located approximately 1.15 miles west of the Project site. The northernmost portion of the Project is also located approximately eight miles southeast of Inyokern Airport. While not a public airport, Armitage Airfield, located on NAWS China Lake, is located approximately six miles to the north of the northernmost point of the Project.

Emergency Response Plan

Kern County adopted a new Emergency Operations Plan (EOP) in March of 2022.¹⁸ The purpose of the EOP is to provide the basis for a coordinated response before, during and after a disaster affecting Kern County or other jurisdictions in its Operational Area, as defined in the EOP. This plan establishes policies and an emergency management organization and assigns roles and responsibilities to ensure the effective management of emergency operations. The plan also identifies sources of external support which might be provided through mutual aid and specific statutory authorities by other jurisdictions, State and federal agencies, and the private sector.

Sensitive Receptors

The Project alignment begins in California City. In this location, the Project passes by various sensitive receptors along Redwood Boulevard and Neuralia Road. Once the alignment departs California City, the Project traverses mostly open space that contains little to no sensitive receptors.

4.9.2 Impact Analysis

- a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

a and b) Less than Significant Impact. Equipment and materials used during construction activities could include fuels, oils and lubricants. The routine use or an accidental spill of hazardous materials used in construction could result in inadvertent releases, which could adversely affect construction workers, the public, and the environment.

Construction activities would be required to comply with numerous hazardous materials regulations designed to ensure that hazardous materials are transported, used, stored, and disposed of in a safe

¹⁷ (California Department of Toxic Substances Control 2020); (State of California 2020)

¹⁸ (Kern County Office of Emergency Services 2022)

manner to protect worker safety, and to reduce the potential for a release of construction-related fuels or other hazardous materials into the environment. Due to the Project's size, the Project would be required to prepare and implement a SWPPP for construction activities.

The required compliance with applicable laws and regulations that govern the transportation, use, handling, and disposal of hazardous materials would limit the potential for creation of hazardous conditions due to the use or accidental release of hazardous materials. Therefore, impacts would be less than significant. No further analysis of this topic is required in the EIR.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant Impact. The Project alignment, which would be primarily constructed within the public ROW, would front Hacienda Elementary School within California City. Although the Project would be located within one-quarter mile of a school, construction would take place at a distance far enough away to avoid impacting the school with any potential hazardous substances from the Project. Any potential accidental hazardous materials spills during construction would comply with industry BMPs and State and county regulations to ensure that impacts would be less than significant. No further analysis of this topic is required in the EIR.

d) Would the project 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?

No Impact. The Project would not be constructed on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, there would be no impact. No further analysis of this topic is required in the EIR.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The nearest public airport to the Project is the California City Airport, located approximately 1.15 miles west of the Project site. While the Project is located within two miles of this airport, it doesn't propose to construct any habitable structures where people would reside or work within two miles of the airport. Therefore, there would be no impact. No further analysis of this topic is required in the EIR.

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

Less than Significant Impact. During O&M of the Project, no full or partial road closures would be required for routine inspections and maintenance activities. These activities would occur periodically and would require few vehicles so they would not alter the traffic volumes on roads in the Project area.

Construction activities associated with the Project would require the temporary closure of traffic lanes in some areas on public roadways. Construction of the Project would add truck and vehicle traffic to roadways in the Project area during times of construction. Most of the alignment is located on multi-lane roadways. Additionally, the installation of the pipeline would be done in segments and would not require road closures or necessitate alternative routes for vehicle passing. A temporary Traffic Control Plan will

be prepared and approved by Kern County and other responsible agencies in accordance with their regulations. Impacts would be less than significant. No further analysis of this topic is required in the EIR.

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

Potentially Significant Impact. As discussed further in **Section 4.20 Wildfire**, due to the Project's proximity to a State Responsibility Area (SRA) and the fact that welding activities would occur during construction of the Project, potentially significant impacts could occur. As a result, this topic will be further addressed in the Project's EIR

4.10 HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? 				
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
C) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. result in substantial erosion or siltation on- or off-site;			\boxtimes	
substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;			\boxtimes	
 create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or 				
iv. impede or redirect flood flows?			\square	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				\boxtimes

4.10.1 Baseline Conditions

Kern County includes two hydrologic regions, the South Lahontan Hydrologic Region and the Tulare Lake Hydrologic Region.

The Project is located within the South Lahontan Hydrologic Region. The South Lahontan Hydrologic Region encompasses the area from the drainage divide between the Walker River and Mono Lake Basin to the divide south of the Mojave River. The region is bordered on the east by the Nevada State line and on the west by the crest of the southern Sierra Nevada and San Gabriel Mountains. The region also includes all of Inyo County and parts of Mono, San Bernardino, Kern, and Los Angeles Counties. Prominent geographic

features of the region are Owens Valley and Death Valley. The region contains the highest and lowest points in the lower 48 States – Mount Whitney (elevation 14,495 feet) and Death Valley (elevation 282 feet below mean sea level)".¹⁹

Although the South Lahontan Hydrologic Region contains various waterways, none are located within the confines of Kern County. Due to this, the Project area solely relies on groundwater and imported water.

The Project traverses over the Indian Wells Valley Groundwater Basin and the Fremont Valley Groundwater Basin. IWVGA manages the Indian Wells Groundwater Basin.

4.10.2 Impact Analysis

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

Potentially Significant Impact. As mentioned in **Section 4.9 Hazards and Hazardous Materials**, the SWRCB requires that a SWPPP be prepared for projects that disturb over an acre of land, which the Project would. A SWPPP involves site planning and scheduling, limiting disturbed soil areas, and determining BMPs to minimize the risk of pollution and sediments being discharged from construction sites. Implementation of the SWPPP would minimize the potential for the Project to substantially alter the existing drainage pattern in a manner that would result in substantial erosion or siltation on or offsite.

As mentioned above, construction activities would require implementation of a SWPPP and compliance with all California Division of Occupational Safety and Health regulations in order to reduce the potential for accidental release of pollutants or hazardous substances into surface water or groundwater. While compliance with regulatory requirements would reduce potential impacts to water quality, further analysis of this issue will be included in the EIR.

Once the pipeline is constructed, hydrostatic testing would take place. Hydrostatic tests are performed to determine the structural integrity and fitness for use of a variety of objects, which in this case would be the proposed pipeline. The test works by filling the pipe with water until it is completely full and then pressurizing it–ensuring that it can hold up under pressure without bursting at any seams nor allowing leaks from within the pipeline.²⁰ As typical, the hydrostatic test water used for the Project would be discharged to surface waters such as nearby washes and used for dust control. Generally, hydrostatic test water is made up of potable/domestic water supplied by municipalities or potable water purveyors. Contingent upon further discussion with permitting agencies, in order to be discharged to surface waters or used for dust control, the Project would either be required to obtain a Low-Threat Discharge Permit under the National Pollution Discharge Elimination System or a permit under the Waste Discharge Requirements Program, both of which are issued by the SWRCB. Discharges of hydrostatic test water can potentially cause minor impairments of existing beneficial uses of the receiving water such as turbidity. It may be necessary in certain circumstances to provide treatment, such as filtration or sedimentation, to hydrostatic test water prior to discharging to remove any pollutants introduced by the pipeline.

¹⁹ (Kern County Planning Department 2004)

²⁰ (Precision Companies 2021)

During operation of the Project, Project water to be transferred within the proposed water pipeline may be potable well water or chlorinated water. Once the Project water makes it way to the receiving tank, it would be dechlorinated, if applicable, prior to distribution by the IWVWD for use in its service area, .

Although meeting regulatory compliance would result in less than significant impacts to water quality, further discussion is necessary. This topic will be addressed in the Project's EIR.

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

Potentially Significant Impact. According to the IWVGA GSP, the Indian Wells Valley Groundwater Basin was estimated to be in overdraft of its water budget by 24,990 AFY in 2020. The objective of the Project is to comply with SGMA, which ultimately requires the Indian Wells Valley Groundwater Basin to be sustainably managed. The goal of the Project is to bring 6,431 AFY by 2070 by delivering it to the IWVWD, allowing them to shut off some of the groundwater wells in their system and base load their system with the imported water. The Project would provide infrastructure to convey water from other sources through AVEK's system to the Indian Wells Valley Basin. In conjunction with conservation programs and a recycled water program that would provide up to 2,885 AFY of recycled water back into the groundwater, the additional imported water would assist in restoring the Basin back into its sustainable yield of 7,650 AFY. The sustainability goal is to preserve groundwater resources as a sustainable water supply and to preserve the quality of life of those residing within the basin.

In order to fulfill the Project's goal of recharging the critically overdrafted Indian Wells Valley Basin, the IWVGA must first secure rights to water. To accomplish this, water transfer agreements, which require approval from DWR, would need to be initiated. These water transfer agreements would be analyzed as their own project and are not a part of this Project. The first of these agreements is already in the approval process. If water cannot be secured, then the Project would have no water to transfer. Therefore, this impact is potentially significant, and this topic will be further analyzed in the Project's EIR.

- c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - i. result in substantial erosion or siltation on- or off-site;
 - ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
 - iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
 - iv. impede or redirect flood flows?

c-i – **iv)** Less than Significant Impact. Drainage patterns would not significantly change as a result of Project implementation. Once constructed, the proposed pipeline would be located underground. The proposed pump stations and receiving tank would be constructed on foundations providing small areas of impermeable surfaces. The Project would not alter the run-off from the surrounding areas resulting in

substantial erosion, siltation, flooding, or the impedance or redirection of flood flows. Impacts would be less than significant. No further analysis of this topic is required in the EIR.

d) Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundations?

Potentially Significant Impact. The Project is not located in a tsunami or seiche zone. The Project potentially crosses flood zones. Therefore, this impact could potentially be significant. This topic will be addressed in the Project's EIR.

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

No Impact. As mentioned previously, the Project's objective is to comply with SGMA, which ultimately requires the Indian Wells Valley Basin to be sustainably managed. The Project was identified as an action item within the IWVGA GSP; therefore, the Project would be consistent with the applicable GSP. There would be no impact. No further analysis of this topic is required in the EIR.



Figure 4-3: FEMA 100-Year Flood Zone Map

4.11 LAND USE AND PLANNING

Table 4-13: Land	Use and Planning	Impacts

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f)	Physically divide an established community?				\boxtimes
g)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				

4.11.1 Baseline Conditions

The Project would be located in eastern Kern County and would span from inside the city limits of California City to just outside of the southwestern city limits of the City of Ridgecrest. The Project would be located in developed areas of California City and end in a rural residential area southwest of Ridgecrest. The portion of the Project located in the unincorporated areas of Kern County would be located in primarily agricultural, open space, and federal lands. Within California City and areas near Ridgecrest, the Project would be located within the vicinity of residential, commercial, and industrial uses. Where in County jurisdiction, the Project would be located within the vicinity of research and technology uses, solar fields, and rural residences.

4.11.2 Impact Analysis

a) Would the project physically divide an established community?

No Impact. The Project would not physically divide an established community. The Project would result in the construction of a new pipeline to deliver water from AVEK facilities in California City to IWVWD facilities southwest of the City of Ridgecrest. Construction would be completed primarily within existing road ROW and would not result in a physical barrier within a community. Completion of the Project would result in improved water supply reliability within the Indian Wells Valley Basin. Therefore, there would be no impact. No further analysis of this topic is required in the EIR.

b) Would the project cause a significant environmental conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The Project would not result in a conflict with any adopted land use plan, policy, or regulation which has been adopted for the purpose of avoiding or mitigating an environmental effect. No change in land use designation or zoning has been proposed as a result of the Project. Completion of the Project would support efforts in the Indian Wells Valley Basin to achieve a balanced water budget and decrease reliability on groundwater pumping through an improved water supply. Therefore, there would be no impact. No further analysis of this topic is required in the EIR.

4.12 MINERAL RESOURCES

Table 4-14: Mineral Resources Impacts

	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?				

4.12.1 Baseline Conditions

Kern County is one of the largest producers of mineral products in California with a production value of almost one-quarter of the State's total. The principal mineral product is petroleum (an organic derivative material) and related products, which contributes about 75% of the total valuation of all County mineral products. The remainder is comprised of borax, cement products, sand and gravel, and other construction and gem-like minerals. Kern County currently has 71 active oil fields.²¹ The oils fields are primarily found in areas that are west of the Sierras. The Project area is located on the eastern side of the Sierra Nevada Mountains which do not contain oil fields used for mining.

Borates, which is a term used to describe the combination of Boron and oxygen, are minerals that are mined in eastern Kern County. Borates are used in both commercial and non-commercial settings, most commonly used in cleaners such as household products like toothpastes and mouthwashes. The nearest Borate mine to the Project area is located approximately 14 miles southeast.

Kern County contains major resources of sand and gravel. These resources are primarily found in stream deposits along the east side of the San Joaquin Valley and in the Sierra Nevada foothills; and in alluvial fan deposits along the north flank of the San Emigdio and Tehachapi Mountains at the southern end of the County. Most of the sand and gravel deposits being mined in the County are located in the Bakersfield area.²² The Project area is not located in an area that contains major resources of sand and gravel.

The Project alignment traverses lands that are in the vicinity of multiple mining claims. A mining claim is a parcel of land for which the claimant has asserted a right of possession and the right to develop and extract a discovered, valuable, mineral deposit.²³ These mining claims consist of land used for mining gold, tungsten, copper, silver, and uranium.²⁴

²¹ (Kern County Planning Department 2004)

²² Ibid.

²³ (U.S. Department of the Interior Bureau of Land Management 2023)

²⁴ (The Diggings 2023)

4.12.2 Impact Analysis

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. Although Kern County is a major resource for mineral resources and the Project is located in proximity to various mining claims, neither construction nor operation of the Project would impede access to or result in the loss of mineral resources. Implementation of the Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. There would be no impact. No further analysis of this topic is required in the EIR.

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. As identified previously, there are various mining claims in proximity to the Project. The Project would not traverse any existing mining claims or lands that are known to contain a known mineral resource. Implementation of the Project would not impact mineral resources. Therefore, the Project would not 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. There would be no impact. No further analysis of this topic is required in the EIR.

4.13 NOISE

Table 4-15: Noise Impacts

	Would the project result in:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b)	Generation of excessive ground borne vibration or ground borne noise levels?	\boxtimes			
c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				

4.13.1 Baseline Conditions

The Project would be located in unincorporated areas of Kern County, within California City, and southwest of the City of Ridgecrest. Although the Project traverses through a portion of California City near residential homes and commercial retailers, the majority of the Project alignment traverses through rural areas with limited sensitive receptors.

4.13.2 Impact Analysis

a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Potentially Significant Impact. The Project has locations that are near to residential and retail buildings. The temporary construction noise associated with the Project, such as heavy equipment (e.g., bulldozers, backhoes, dump trucks, etc.), would generate noise on a short-term basis. In addition, the pump stations would have some permanent noise associated with those facilities. While the pump stations would contribute to a permanent increase of existing noise levels within their vicinity, these locations are situated in remote areas that would not be accessible by the public. Additional noise from construction traffic may contribute to increased noise levels along adjacent roadways. A Noise and Ground-Borne Vibration Impact Assessment will be prepared to determine the level of noise impacts associated with the construction and operational activities associated with the Project. Therefore, this impact is potentially significant, and this topic will be further analyzed in the Project's EIR.

b) Would the project result in generation of excessive ground borne vibration or ground borne noise levels?

Potentially Significant Impact. Construction of the Project would generate ground borne noise and vibration associated with site grading, trenching, and other construction activities. As such, the Project would have the potential to generate and expose people to excessive ground borne vibration and noise levels during short-term construction activities near California City and Ridgecrest. A Noise and Ground-Borne Vibration Impact Assessment will be prepared to determine the level of ground borne vibration and noise levels. Therefore, impacts would potentially be significant, and further evaluation of this topic will be analyzed in the EIR.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The nearest public airport to the Project is the California City Airport, located approximately 1.15 miles west of the Project site. While the Project is located within two miles of this airport, it doesn't propose to construct any habitable structures where people would reside or work within two miles of the airport. Therefore, there would be no impact. No further analysis of this topic is required in the EIR.

4.14 POPULATION AND HOUSING

Table 4-16:	Population	and H	ousing	Impacts
	- opalation		Cusing	mpacts

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				

4.14.1 **Baseline Conditions**

The Project would be located within the city limits of California City and traverse through unincorporated areas of eastern Kern County, before ending just southwest of the City of Ridgecrest. According to the United States Census Bureau, California City had a population of 14,973 people in 2020, Ridgecrest had a population of 27,959 in 2020, and Kern County had a total population of 909,235 people in 2020.²⁵

4.14.2 Impact Analysis

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less than Significant Impact. The Project would result in the construction of a pipeline that would allow for the delivery of water from AVEK facilities to IWVWD facilities in the Indian Wells Valley Basin. The Project also includes three booster pump stations, a regulating station, and a receiving tank. The Indian Wells Valley Basin is in severe overdraft of its water budget due to reliance within the Basin on groundwater pumping for residential, commercial, agricultural, and industrial uses.²⁶ While the Project would promote water supply reliability which would better support development projects, housing or otherwise, forecasting that the Project would substantially, and indirectly, result in unplanned population growth would be speculative due to the fact that housing development is reliant on market forces, and the availability of a water supply that is influenced on a year by year basis by a fluctuating State Water Project Table A water allocation percentage. The Project would be sized to convey a water supply that would meet the ultimate buildout population of the Ridgecrest area based on existing population projections. Any further growth would cause the Basin to be out of balance and hence would not be in compliance with SGMA. Additionally, the Project is not expected to be completed until 2030, leaving the

²⁵ (United States Census Bureau 2023)

²⁶ (Indian Wells Valley Groundwater Authority 2020)

outlook of the aforementioned factors purely speculative at this time. Therefore, impacts would be less than significant. No further analysis of this topic is required in the EIR.

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

No Impact. The Project does not propose either the construction of new housing, or the demolition of existing housing. The Project would result in the construction of a pipeline to deliver water from AVEK facilities in California City, to IWVWD facilities southwest of the City of Ridgecrest. Construction from AVEK facilities to IWVWD facilities would be primarily completed within existing road ROW. Therefore, there would be no impact. No further analysis of this topic is required in the EIR.

4.15 PUBLIC SERVICES

Table 4-17: Public Services

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	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:				
	i. Fire protection?				
	ii. Police protection?				
	iii. Schools?				
	iv. Parks?			\square	
	v. Other public facilities?			\boxtimes	

4.15.1 Baseline Conditions

The Project traverses lands within the jurisdiction of California City, Kern County, and Ridgecrest.

Fire Protection: The nearest Kern County fire station to the Project site is the Kern County Fire Station 77, located in the City of Ridgecrest at 139 East Las Flores Avenue. The City of Ridgecrest receives its fire protection services from Kern County Fire Department. The nearest California City fire station to the Project site is the California City Fire Department station, located at 20890 Hacienda Boulevard.

Police Protection: The nearest Kern County Sheriff Department to the Project site is located in the City of Ridgecrest at 128 East Coso Avenue. The nearest California City police station to the Project site is located at 21130 Hacienda Boulevard in California City. The nearest Ridgecrest police station to the Project site is located at 100 West California Avenue in the city of Ridgecrest.

Schools: There are various schools within the vicinity of the Project's alignment. The Project would be constructed along the ROW that fronts Hacienda Elementary School within California City. The closest school to the Project within Ridgecrest is the Faller Elementary School. Faller Elementary School is located approximately two miles north of the proposed receiving tank site.

Parks: There are various parks within the vicinity of the Project's alignment. The closest park to the Project is Huntington Park located at the intersection of Neuralia Road and California City Boulevard in California City. The City of Ridgecrest contains multiple parks within its boundary. The closest Ridgecrest park is Kerr McGee Youth Sports Complex, located approximately 2.4 miles northeast of the Project.

Landfills: The nearest landfill is the California City Dump Station located approximately 1.7 miles north of where the Project begins. The Ridgecrest Landfill is located approximately 2.2 miles northwest of the proposed receiving tank site.

4.15.2 Impact Analysis

- a) 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:
 - i. Fire Protection:
 - ii. Police Protection:
 - iii. Schools:
 - iv. Parks:
 - v. Other public facilities:

Less than Significant Impact. The Project would not result in the addition to or alteration of any public services. The Project would not require additional public facilities beyond those that already exist. No aspect of the Project would require personnel for the operation as it would be passive once constructed. The Project would have minimal needs for public services during construction and would receive any needed services from existing agencies and departments on a routine basis during maintenance operations. There would be no impact. No further analysis of this topic is required in the EIR.

4.16 RECREATION

Table 4-18: Recreation Impacts

	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)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				

4.16.1 Baseline Conditions

The Project is located within California City and eastern Kern County to the southwest of the City of Ridgecrest, an area with a variety of recreational opportunities. There are several City owned and maintained parks within California City. The nearest City park to the Project site is Huntington Park. Huntington Park is located at the intersection of California City Boulevard and Neuralia Road. The Project would run within the Neuralia Road ROW, in front of the park. The Project would also be located within a half mile of several other recreation areas within the State and County's jurisdiction. This includes Red Rock Canyon State Park and Recreation Area, approximately 16 miles northwest of California City, as well as El Paso Hills Brown Road Trailhead, Rademacher Hills, Brady Trailhead to the southwest of the City of Ridgecrest. While the Project would not be located within the City of Ridgecrest, the City of Ridgecrest also owns and operates several parks and open space facilities to the northeast of the northernmost point of the Project. The nearest of these facilities is Kerr McGee Youth Sports Complex, located approximately 2.4 miles northeast of the Project.

4.16.2 Impact Analysis

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The Project would not result in the increase of use of existing neighborhood and regional parks or other recreational facilities, which could potentially cause increased deterioration of such facilities. The Project would result in the construction of a water pipeline that would exist primarily in existing road ROW. The Project would be located in the vicinity of land owned by the California Department of Parks and Recreation near the intersection of Redrock Randsburg Road and Cantil Road. This land is a part of the Red Rock Canyon State Park and Recreation Area. The Project would also be located within the vicinity of Huntington Park in California City. The Project does not propose any construction in either of these areas, nor does it propose any construction activities within an existing park space. Therefore, there would be no impact. No further analysis of this topic is required in the EIR.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The Project would result in the construction of a water pipeline from AVEK facilities in California City to IWVWD facilities to the southwest of the City of Ridgecrest. The Project does not propose the construction or expansion of any recreational facilities. Therefore, there would be no impact. No further analysis of this topic is required in the EIR.

4.17 TRANSPORTATION

Table 4-19: Transportation Impacts

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

4.17.1 **Baseline Conditions**

The Project would be located in eastern Kern County and residential areas in the city limits of California City to areas just outside of the southwestern city limits of the City of Ridgecrest. The Project pipeline route would follow Redwood Boulevard, Neuralia Road, Redrock Randsburg Road, Garlock Road, United States Highway 395, and China Lake Boulevard and the alignment would for the most part remain within public ROW, private lands, and BLM land.

4.17.2 Impact Analysis

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

Less than Significant Impact. The Project requires the construction of a newly graded access road and would utilize existing paved and dirt roads. The proposed access road would be graded, but would remain a dirt road. No other physical improvements would be required. The Project's O&M activities would occur periodically and would require few vehicles. These activities would not alter the traffic volumes on existing roads. Construction would occur in segments over the span of several years and would be temporary in nature. In California City, the Project would result in construction within a 500-foot stretch of pedestrian facilities on the north side of Redwood Boulevard, east of Hacienda Boulevard. While this would result in the temporary closure of these pedestrian facilities, pedestrian access would be maintained along the southern portion of Redwood Boulevard. Additionally, the California City. This would ensure that proper access and safety is maintained during construction. These impacts would be less than significant.

Construction associated with the Project would be restricted to the Project area primarily within public ROW. Following standard protocol, the Project would be required to obtain an encroachment permit

from the appropriate local agency when constructing in the ROW. Any construction-related impacts would be temporary and there would be no impacts to the surrounding transportation network.

The Project would result in the construction of a pipeline that would allow for the delivery of water from AVEK facilities to IWVWD facilities in the Indian Wells Valley Basin. The Indian Wells Valley Basin is in severe overdraft of its water budget due historical increase in use of groundwater for agricultural, industrial, and municipal needs. The Project, in theory, has the potential to result in unplanned population growth as a result of providing additional water to the region. Although the potential exists, a result in unplanned population growth would be speculative due to the fact that housing development is reliant on market forces, and the availability of a water supply can fluctuate on an annual basis dependent on the hydrologic conditions for any given year. Therefore, an increase in population growth through 2070 in Ridgecrest based on current projections. It is anticipated that the 2070 population will approximate the ultimate build-out population of Ridgecrest.

During Project operations, area maintenance staff of approximately four employees would operate the facilities. The operation of the facilities by this staff would not induce substantial stress on the roadway network in the Project vicinity. Therefore, implementation of the Project would not significantly increase the demand for any changes to congestion management programs or interfere with existing levels of traffic. Impacts would be less than significant. No further analysis of this topic is required in the EIR.

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

No Impact. The Project primarily spans rural lands, with the exception of the portions of the pipeline located within the ROWs of California City and outside of Ridgecrest, and would not result in development that would constitute an increase in vehicle miles traveled (VMT). A temporary increase in construction related traffic would occur but said traffic would not result in permanent impacts. No structures are proposed that would permanently change the number of VMT by persons traveling the Project area. The Project proposes a 50-mile underground water conveyance pipeline, three booster pump stations, a regulating station, and a receiving tank. These Project features would not result in an increase in VMT. The Project would not be inconsistent or conflict with CEQA Guidelines section 15064.3 subdivision (b). There would be no impact. No further analysis of this topic is required in the EIR.

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

No Impact. The proposed access road would be graded to a level to support trucks and construction equipment during the construction period and would not include any hazardous features, nor would it support incompatible uses. Therefore, there would be no impact. No further analysis of this topic is required in the EIR.

d) Would the project result in inadequate emergency access?

Less than Significant Impact. During O&M of the Project, no full or partial road closures would be required for routine inspections and maintenance activities. These activities would occur periodically and would require few vehicles so they would not alter the traffic volumes on roads in the Project area.

Construction activities associated with the Project would require the temporary closure of traffic lanes in some areas on public roadways. Construction of the Project would add truck and vehicle traffic to

roadways in the Project area during construction. Most of the alignment is located on multi-lane roadways. Additionally, the installation of the pipeline would be done in segments and road closures are not anticipated. A temporary Traffic Control Plan will be prepared and approved by Kern County and other responsible agencies in accordance with their regulations. Impacts would be less than significant. No further analysis of this topic is required in the EIR.

4.18 TRIBAL CULTURAL RESOURCES

Table 4-20: Tribal Cultural Resources Impacts

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 tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: 				
 Listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code section 5020.1(k), or 				
 A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. 				

4.18.1 Baseline Conditions

Kern County contains various tribal groups within its historical landscape. Although information on the aboriginal life of the Kawaiisu tribe is unsystematic and scattered over various recordings and reports, the Kawaiisu have been known to settle within the Project area.²⁷ The Kawaiisu were of Shoshonean lineage who spoke the Southern Numic subgroup of the Uto-Aztecan language.

4.18.2 Impact Assessment

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

²⁷ (Kern County Planning Department 2004)

- i. Listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

a-i – **a-ii) Potentially Significant Impact.** Approved by Governor Jerry Brown on September 25, 2014, AB 52 established a formal consultation process for California Native American Tribes to identify potential significant impacts to Tribal Cultural Resources, as defined in Public Resources Code Section 21074, as part of CEQA. AB 52 applies to projects that file a Notice of Preparation. Lead agencies must provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if the tribe has submitted a written request to be notified.

The Project would require trenching and excavations to install the pipeline, pump stations, regulating station, and a receiving tank. Therefore, the potential exists for the Project to significantly impact a site, feature, cultural landscape, sacred place, or object with cultural value to a California native American Tribe. In compliance with AB 52, IWVGA will notify all necessary tribes and the Project will participate in any requested consultations. Further analysis of this topic will be provided in the EIR.

4.19 UTILITIES AND SERVICE SYSTEMS

Table 4-21: Utilities and Service Systems Impacts

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			\boxtimes	
c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				\boxtimes

4.19.1 Baseline Conditions

California City

The Project would start in California City, before extending north into unincorporated Kern County. California City is served by SCE for its electric needs. Southern California Gas Company is the natural gas provider for residents of California City. California City is the water and wastewater provider for residents within its jurisdiction. California City also provides storm drainage infrastructure within the city.

Kern County

The majority of the Project would traverse unincorporated Kern County. Areas within the County are within the service area of SCE for both electric and natural gas energy services. The Project would be in an area of the County in which development relies upon septic systems and alternative wastewater disposal methods. In addition, development in this area relies upon private wells for water supplies. Within the County, there are several energy producing sites including solar fields to the south and west of the Honda Proving Center of California, along Neuralia Road, approximately 2.25 miles south of where it connects with SR 14. Additionally, the Los Angeles Department of Water and Power Beacon Solar Plant is located approximately 2.25 miles northwest of the intersection of Neuralia Road and Anne Avenue.

Ridgecrest

While the Project would not be located within the City of Ridgecrest, the Project's northernmost point would be located within the City of Ridgecrest Planning Area. The City of Ridgecrest is served by SCE for both electric energy and natural gas resources. The City of Ridgecrest is the wastewater service provider for residents within its jurisdiction. Ridgecrest also provides stormwater infrastructure within the city. IWVWD is the water service provider for residents within the City of Ridgecrest.

4.19.2 Impact Analysis

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

Potentially Significant Impact. The Project proposes to construct a water pipeline to connect AVEK facilities in California City to IWVWD facilities to the southwest of the City of Ridgecrest. In order to serve the booster pump stations associated with the new pipeline, appropriate energy connections would need to be made, which could result in the construction of new facilities. IWVGA would be required to work with SCE to determine the extent of the facilities required to serve the new booster pump stations, their location, and any necessary permits that would be required. This would result in potentially significant impacts. The extent of these potential impacts, and the mitigation measures that may be implemented as a result of them, will be analyzed further within the EIR for this Project.

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

Less than Significant Impact. The Project proposes to construct a water pipeline to connect AVEK facilities in California City to IWVWD facilities to the southwest of the City of Ridgecrest. Completion of the Project would result in improved water supply reliability within the Indian Wells Valley Basin. The Project is an infrastructure project that would not directly result in an increase in population over any phase of the Project that would be reliant on water supplies. The goal of the Project is to help the Indian Wells Valley Basin reach a balance between water extraction and recharge in compliance with the requirements of SGMA, not to increase future land development in the area. This would be done through the transference of water to the Indian Wells Valley Basin via the Project at a rate of up to 6,431 AFY by 2070. No further analysis of this topic is required in the EIR.

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

Less than Significant Impact. The Project would result in the construction of a 50-mile pipeline, including up to three booster pump stations. Booster Pump Station No. 2 would include a restroom for use by staff. The restroom would connect to an on-site septic system constructed along with the rest of the booster pump station facility. Due to the limited use of this septic system by staff, the amount of wastewater produced is expected to be negligible and would not have a substantial adverse effect on the ability of a wastewater provider to meet its capacity. The Project would also produce wastewater resulting from hydrostatic testing of the newly constructed pipeline. Hydrostatic testing would be completed in segments and wastewater produced as a result would be used for dust control on-site, or would be

discharged into nearby washes, following the acquisition of the appropriate permits. No further analysis of this topic is required in the EIR.

d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

No Impact. The Project would result in the construction of a new water pipeline, the operation of which would not result in an increase in solid waste generation. Any waste generated during construction would be the responsibility of the contractor and disposed of in compliance with current regulations, but would be minimal as a result of a temporary construction pipeline project. Construction would result in solid waste disposal needs, but would not be in excess of landfill capacity. Therefore, there would be no impact. No further analysis of this topic is required in the EIR.

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

No Impact. The Project would create a temporary increase in the amount of solid waste generated. The Project would comply with all federal, State, and local rules, regulations, and statutes related to the reduction of solid waste. Therefore, there would be no impact. No further analysis of this topic is required in the EIR.

4.20 WILDFIRE

Table 4-22: Wildfire Impacts

re	If located in or near state sponsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?	\boxtimes			
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrollable spread of wildfire?				
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				

4.20.1 **Baseline Conditions**

The Project site is located in portions of California City, from which point it traverses northeast through unincorporated Kern County to a location just outside of the southwestern city limits of the City of Ridgecrest. While much of the proposed pipeline would be located in areas that are relatively flat, especially near California City, the Project would traverse the El Paso Mountains, where it would experience slope. According to the California Department of Forestry and Fire Control (CALFIRE), the Project would be located in areas that are protected by local jurisdictions or are the responsibility of the federal government for fire protection. The nearest SRA is located approximately 200 feet northwest of the Project site at the intersection of Neuralia Road and Redrock Randsburg Road.²⁸ Additionally, according to CALFIRE, the Project would be located approximately 12.5 miles east from the nearest Very High Fire Hazard Severity Zone (at the intersection of Neuralia Road and Dodson Avenue).²⁹ Fire stations within the vicinity of the Project would include the following:

- California City/Kern County Fire Station 85, located at 20890 Hacienda Blvd, California City, CA 93505
- Kern County Fire Station 75, located at 26804 Butte Ave, Randsburg, CA 93554
- Kern County Fire Station 74, located at 139 E Las Flores Ave, Ridgecrest, CA 93555

²⁸ (California Department of Forestry and Fire Protection 2022)

²⁹ (California Department of Forestry and Fire Protection 2022)
4.20.2 Impact Analysis

- a) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?
- b) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
- c) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
- d) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Potentially Significant Impact. The Project would be located approximately 200 feet from the nearest SRA. While it would be located in an area that experiences slope, is characterized by dry vegetation, and could experience some prevailing winds, the Project site would be approximately 12.5 miles east (at its nearest point) from the closest Very High Fire Hazard Severity Zone. The Project would result in the construction of a water pipeline that would deliver water from AVEK facilities in California City to IWVWD facilities located outside of the southwestern city limits of the City of Ridgecrest. Construction would occur in the existing road ROW, private lands, and on BLM land. The Project would be required to comply with all local, State, and federal requirements regarding the prevention of wildfire, including the California Fire Code, and the use of industry BMPs. Due to the Project's proximity to an SRA and the fact that welding activities would occur during construction of the Project, potentially significant impacts could occur. As a result, this topic will be further addressed in the Project's EIR.





4.21 CEQA MANDATORY FINDINGS OF SIGNIFICANCE

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

Table 4-23: CEQA Mandatory Findings of Significance

4.21.1 Statement of Findings

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

Potentially Significant Impact. As discussed above, the Project has the potential to result in significant impacts to the following resource sections: Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire. Therefore, this impact is potentially significant, and this topic will be further analyzed in the Project's EIR.

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

Potentially Significant Impact. The Project proposes a water pipeline from California City to the southwest of Ridgecrest in order to transfer water to improve water supply reliability within the Indian Wells Valley Basin. The construction of the proposed pipeline would allow for the future conveyance of water from

AVEK facilities to IWVWD facilities. The specific timeframe and volume of these future water transfers are unknown at this time; however, these transfers would contribute to the balancing of the Basin's water budget and help to bring the Basin into compliance with the regulations of the SGMA. Bringing the Basin into water balance and compliance with the SGMA is the primary goal of the approved GSP and would be made possible, in part, by the implementation of this Project. Cumulative impacts, if any, would be considered potentially significant. The potential for cumulatively considerable impacts would be analyzed further within the Project's EIR.

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

Less than Significant Impact. The Project would include the construction of an approximately 50-mile water pipeline, three booster pump stations, a regulating station, and a receiving tank. The Project in and of itself would not create a significant hazard to the public or the environment. On the contrary, implementation of the Project would provide better access to water to landowners, local communities, and the Navy within the Indian Wells Basin. Implementation of mitigation measures and basic regulatory requirements to be identified in the Project's EIR would ensure that impacts would be less than significant. No further analysis of this topic is required in the EIR.

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