Del Rey Community Services District
TCP Wellhead Treatment for Wells 4, 5, 6 and 7
Initial Study/Mitigated Negative Declaration

State Clearinghouse No. 2019120518

September 2021

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Lead Agency:
Del Rey Community Services District

Contact: Carlos Arias

Responsible Agency:
California State Water Resources Control Board

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ACRONYMS AND OTHER ABBREVIATIONS

AB 32	Assembly Bill 32 (California Global Warming Solutions Act of 2006)
APN	Assessor's Parcel Number
BMP	best management practices
CDPH	California Department of Public Health
CEQA	California Environmental Quality Act
CMU	concrete masonry unit
CO	carbon monoxide
CO2	carbon dioxide
CO2e	carbon dioxide equivalents
DBCP	1,2-Dibromo-3-chloropropane
Del Rey CSD	Del Rey Community Services District
District	Del Rey Community Services District
GAC	granular activated carbon
GHG	greenhouse gas
lb/day	pounds per day
MCL	maximum contaminant levels
mg/L	milligram per liter
MT	metric ton
OSHA	Occupational Safety and Health Administration
NOx	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
PHG	public health goal
PM	particulate matter
PM10	PM equal to or less than 10 micrometers in diameter
PM2.5	PM equal to or less than 2.5 micrometers in diameter
ROG	reactive organic gases
SB	Senate Bill
SCADA	Supervisory control and data acquisition
SJVAPCD	San Joaquin Valley Air Pollution Control District
SMAQMD	Sacramento Metropolitan Air Quality Management District
SOx	oxides of sulfur
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TCP	1,2,3-Trichloropropane
TPY	tons per year
ug/L	microgram per liter
USGS	U.S. Geological Survey
VMT	vehicle miles traveled
VOC	volatile organic compounds

1 INTRODUCTION

1.1 BACKGROUND

The community of Del Rey is in Fresno County, approximately 7 miles southeast of the city of Fresno (Figure 1). The Del Rey Community Services District (District) owns and operates the water system that provides water service to the developed parcels in the community, including residential, commercial, and industrial customers within an approximately 1.5 square mile area.

The District's water system is supplied from three active wells (Wells 4, 6, and 7), shown on Figure 2. Wells 4 and 6 have been in service since 1993; Well 7 was constructed in 2005. There are two other wells (Wells 3 and 5) in the District that are currently on standby due to contaminants such as 1,2-Dibromo-3-chloropropane (DBCP) and uranium. They were previously over the maximum contaminant levels (MCL) as regulated by the California Department of Public Health (CDPH).

In August 2009, the California Office of Environmental Health Hazard Assessment established a California public health goal (PHG) for the synthetic organic compound 1,2,3-Trichloropropane (TCP) of 0.0007 µg/L (0.7 parts per trillion) based on carcinogenicity. This is the second lowest California PHG among all drinking water contaminants. In July 2017, the California State Water Resources Control Board adopted a regulation establishing a maximum contaminant level (MCL) for TCP of 0.005 µg/L (5 parts per trillion), which is equivalent to the current detection limit for purposes of reporting (DLR). The regulation took effect on October 1, 2017 and public water systems were required to meet the standard beginning in May 31, 2021. TCP is not currently regulated at the federal level.

TCP has been detected in wells 3, 4, 5, 6, and 7 – all of the District's active and standby production wells. Levels in the contaminated wells have ranged from approximately 0.006 to 0.79 µg/L (8 to over 1,128 times the PHG). The District retained Provost & Pritchard Consulting Group to evaluate alternatives to mitigate the impact of the TCP contamination on the water system and to determine the cost to implement the most feasible mitigation alternative.

Non-wellhead treatment alternatives including well abandonment, blending of sources, consolidation, well replacement, well modification, and treating surface water were considered and determined to not be viable solutions. Wellhead treatment alternatives including air stripping, reverse osmosis, advanced oxidation, sorbents, biological treatment, and granular activated carbon (GAC) were also evaluated.

It was determined that the most feasible means of satisfying the District's mitigation objective is to treat the contaminated wells using GAC. GAC is the most economical treatment solution and, other than biological treatment, is also the only technologically viable alternative that can reliably reduce the TCP concentration to below the PHG.

1.2 PROJECT OBJECTIVE

The objective of the TCP Wellhead Treatment for Wells 4, 5, 6 and 7 project (the project) is to reduce TCP concentrations in the District's drinking water supply to below the maximum contaminate level (MCL).

1.3 OTHER REQUIRED PERMITS AND APPROVALS

The following permits and approvals are required for the project:

- State Water Resources Control Board Division of Drinking Water: Permit to Operate Treatment Facilities
- San Joaquin Valley Air Pollution Prevention District: Permit to Install/Operate Standby Generator
- County of Fresno: Encroachment Permit for installation of pipeline within County streets
- Pacific Gas & Electric: Review of and coordination for electrical service.

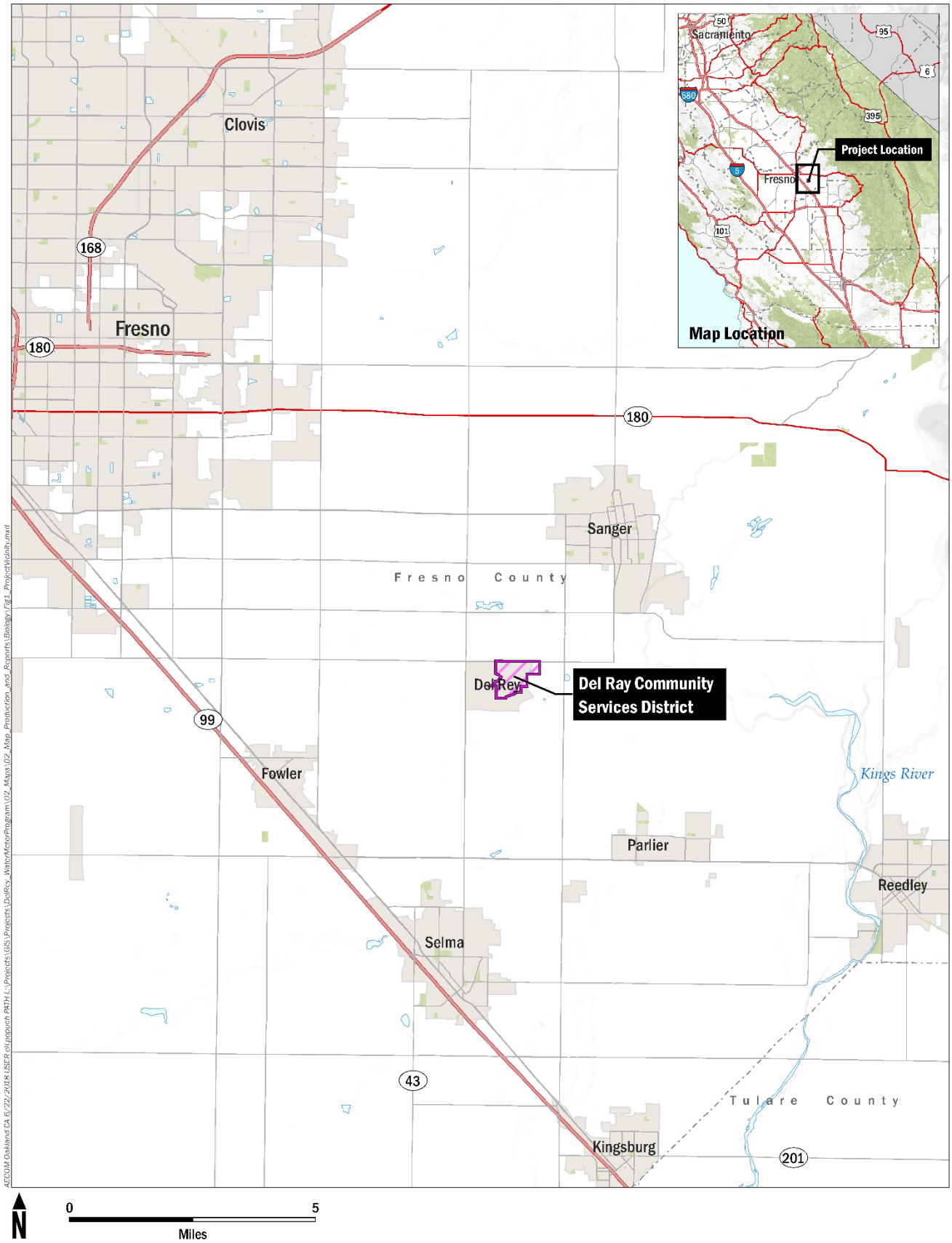


Figure 1: Project Vicinity

Figure 2: Map of Del Rey showing Existing Well Sites and Proposed Pipeline Route

2 PROJECT DESCRIPTION

2.1 PROJECT LOCATION

The community of Del Rey is in Fresno County, approximately 7 miles southeast of the city of Fresno (Figure 1). The Del Rey Community Services District (District) owns and operates the water system that provides water service to the developed parcels in the community, including residential, commercial, and industrial customers within an approximately 1.5 square mile area.

The proposed project would involve construction at the District's existing well sites 4, 6, and 7, as well as modifications to existing infrastructure at existing well site 5 and installation of a pipeline within County right-of-way along East Pismo Avenue and South Carmel Avenue between well sites 5 and 6 (Figure 2). The total area of the project site is approximately 0.823 acres (area of the four well sites plus a 5-foot width along the proposed pipeline route).

The Assessor's Parcel Number (APN) and nearest cross-streets for each well site are:

- Well Site 4: APN 350-230-16T S Del Rey / Estrella Avenues
- Well Site 5: APN 350-080-11 Lot 28 S Melruna / E Pismo Avenues
- Well Site 6: APN 350-080-80 ST S Carmel / E Avila Avenues
- Well Site 7: APN 350-180-6T S Carmel / E Redondo Avenues

2.2 DESCRIPTION OF THE PROPOSED PROJECT

2.2.1 PROJECT COMPONENTS

The project proposes installation of GAC treatment systems at existing well sites 4, 6, and 7 as well as a buried pipeline connecting the well at existing well site 5 to the treatment system at existing well site 6. No project activities are proposed for existing well site 3.

The following design components are anticipated to be included in the construction:

1. Civil site improvements and grading. Approximately 0.75 acres would be disturbed during project construction, with a total of approximately 1,440 cubic yards of soil excavated across all project sites.
2. GAC treatment equipment and foundations utilizing 20,000-lb carbon vessels operating in series.
3. Sodium hypochlorite storage and feed system housed within a block building at well sites 4, and 6. (Note: well site 7 already has this system for disinfection although it is not currently in use.)
4. Backwash water recovery tank and recycle pumping appurtenances at well sites 4, 6 and 7.
5. Process piping and valving.
6. Piping to connect the treatment facilities at well site 6 to the nearby well site 5.
7. Plant control, monitoring, telemetry, and alarm systems as required at well sites 4, 6, and 7 to accommodate the new treatment equipment. New or upgraded supervisory control and data acquisition (SCADA) cellular connections will be made at all GAC treatment sites.

8. Site electrical and lighting upgrades necessary to support new equipment.
9. Landscaping improvements at well sites 6 and 7.

More details for each site are provided in Tables 2-1a through 2-1d, below.

Table 2-1 a. Proposed Project Elements – Well Site 4

Project Element	Details
Anticipated Excavation Volume	**657 cubic yards total excavation**
- Gravel excavation volume	153 cubic yards
- Asphalt excavation volume	413 cubic yards
- Concrete excavation volume	91 cubic yards
New Site Components	-
- GAC Treatment Vessels	Four vessels, each approximately 12 feet in diameter and up to 16 feet in height
- Backwash Tank	One aboveground tank, approximately 22 feet in diameter and 16 feet in height
- Chemical Building	Concrete Masonry Unit (CMU) block building approximately 12 x 8 feet, up to 9 feet in height, with 200-gallon sodium hypochlorite tank.
- Standby Generator	125 kW diesel driven generator with double-walled 300-gallon diesel tank underneath
- Pipes and Valves	To connect new and existing components.
Modifications to Existing Components	-
- Diesel Engine	Existing engine and drive on concrete pad to be decommissioned
- Electrical Panel	Existing electrical panel on concrete pad to be removed
- Well #4	Existing well pump to be inspected, cleaned and/or replaced.
- Electrical, lighting, and control systems	To be modified/upgraded as needed.
- Pipes and Valves	Existing pipework to be modified to connect with new.

Note: "-" indicates blank cell

Table 2-1 b. Proposed Project Elements – Well Site 5

Project Element	Details
New Site Components	-
- Pipeline	12-inch influent waterline connecting Well 5 to Well 6 treatment facilities, installed underground along County right-of-way along Pismo and Carmel Avenues.
Modifications to Existing Components	-
- Well #5	Existing well pump to be inspected, cleaned and/or replaced.
- Pipes and Valves	Modifications to discharge piping & connection of new pipeline to existing.

Table 2-1 c. Proposed Project Elements – Well Site 6

Project Element	Details
Anticipated Excavation Volumes	**293 cubic yards total excavation**
- Gravel excavation volume	160 cubic yards
- Asphalt excavation volume	116 cubic yards
- Concrete excavation volume	117 cubic yards
New Site Components	-
- GAC Treatment Vessels	Four vessels, each approximately 12 feet in diameter and up to 16 feet in height. Two additional vessels may be installed in the future.
- Backwash Tank	One aboveground tank, approximately 22 feet in diameter and 16 feet in height
- Chemical Building	Concrete Masonry Unit (CMU) block building approximately 12 x 8 feet, up to 9 feet in height with 200-gallon sodium hypochlorite tank.
- Pipes and Valves	To connect new and existing components.
Modifications to Existing Components	-
- Electrical, lighting, and control systems	To be modified/upgraded as needed.
- Pipes and Valves	Existing pipework to be modified to connect with new. Existing 8-inch watermain connecting to Avila Avenue to be abandoned.

Note: "-" indicates blank cell

Table 2-1 d. Proposed Project Elements – Well Site 7

Project Element	Details
Anticipated Excavation Volumes	**395 cubic yards total excavation**
- Asphalt excavation volume	325 cubic yards
- Concrete excavation volume	70 cubic yards
New Site Components	-
- GAC Treatment Vessels	Four vessels, each approximately 12 feet in diameter and up to 16 feet in height.
- Backwash Tank	One aboveground tank, approximately 22 feet in diameter and 16 feet in height
- Pipes and Valves	To connect new and existing components.
- Fencing	New chain link fencing around GAC vessels and backwash tank.
Modifications to Existing Components	-
- Chemical Building	Remove existing 350-gallon sodium hypochlorite tank and replace with 200-gallon tank.
- Electrical, lighting, and control systems	To be modified/upgraded as needed.
- Pipes and Valves	Existing pipework to be modified to connect with new.
- Fencing	Remove fence between existing well site and adjacent District storage area.

Note: "-" indicates blank cell

2.2.2 CONSTRUCTION PHASING AND SCHEDULE

Construction of the proposed project is anticipated to take approximately 8 months, and work on all sites is anticipated to occur concurrently. Construction hours would be standard – no nighttime construction would be required.

2.2.3 OPERATION AND MAINTENANCE

Operation of the wellhead treatment systems would be similar to existing operations at the well sites, except that well water would pass through proposed GAC treatment system. Operational activities would require, on average, one additional well site visit per week by Del Rey CSD employees, and approximately one additional truck trip per year to the site to deliver new carbon and pick up the spent carbon material for disposal.

2.2.4 ENVIRONMENTAL PROTECTION MEASURES

The following environmental protection measures and best management practices (BMPs) would be incorporated into the project to avoid or minimize effects on the environment. These measures will be included in contractor specifications and will be implemented during construction.

2.2.4.1 General BMPs

1. The number and size of access routes and staging areas and the total area of the disturbance will be limited to the minimum necessary to achieve the projects' purpose and goals.
2. Before work begins, the contractor will clearly delineate (e.g., stake, fence, or flag) the disturbance boundaries at the well sites.
3. The contractor will confine all equipment to designated work zones (including access roads and staging areas) in the project footprint.
4. Vehicle equipment maintenance or fueling will occur in designated staging areas. Prior to initiating any onsite work, the contractors will prepare a Hazardous Material Spill Prevention, Control, and Countermeasure Plan. This plan will minimize the potential for, and the effects of, spills of hazardous, toxic, or petroleum substances. All fencing, flagging, debris, trash, and materials from work areas and access roads will be removed following completion of project activities each season.
5. Biodegradable erosion control measures will be used whenever possible. Synthetic erosion control material, including monofilament and plastics, will not be used.
6. All project contractors must take measures to minimize fugitive dust and dirt emissions resulting from the project activities and implement measures to minimize any project effects on nearby aquatic and other sensitive habitats.

2.2.4.2 Erosion and Sediment Controls

Prior to initiation of onsite project activities, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared to prevent erosion, sedimentation, and the discharge of runoff that violates agency-specified

water quality standards. Erosion and sediment control measures will include, but are not limited to, those outlined below.

1. Access roads will be maintained throughout onsite project activities. Temporary roads and project footprint entrances will be stabilized using nontoxic materials to minimize tracking of mud and dirt.
2. Erosion and sedimentation controls will be tailored to the site and project.
3. Stockpiled soils will be protected from wind and rain.
4. Silt fences, mulches, hydro-mulches, fiber rolls, erosion control fabrics, and other necessary erosion control devices will be properly installed and maintained.

3 ENVIRONMENTAL CHECKLIST

The environmental factors listed below would be potentially affected by this project, involving at least one impact that is a "potentially significant impact", as discussed further in the analysis within this section:

- Biological Resources

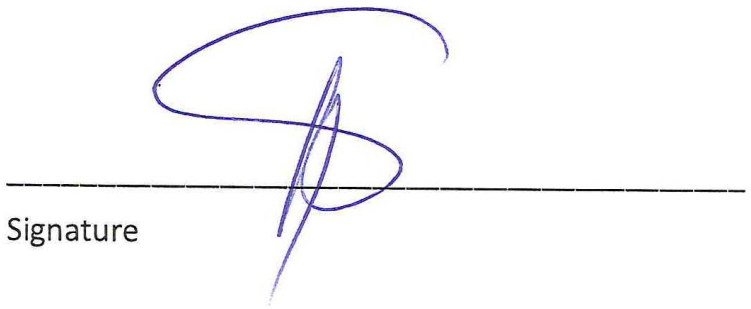
The environmental factors listed below would have no impact or a less than significant impact, , as discussed further in the analysis within this section:

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

DETERMINATION:

On the basis of this initial evaluation:

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.



Signature

9/24/2021

Date

3.2 AESTHETICS

Table 3.1-1. Potential Impacts on Aesthetics

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

Note: "-" indicates blank cell

a) Have a substantial adverse effect on a scenic vista?

There are no scenic vistas in proximity to the project sites. There would be no impact.

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

There are no state scenic highways in proximity to the project sites. There would be no impact.

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

While the proposed project would involve construction of new facilities at the project sites, the character of the new structures would be compatible with existing infrastructure at the well sites. There are no applicable zoning or other regulations governing scenic quality. There would be no impact.

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

Construction activities would occur during the day and would not require nighttime lighting or other sources of light or glare. Although some additional site security lighting would be installed at the well sites as part of the project, this would be at a similar level to existing lighting and would be directed downward to avoid light spill to adjacent properties. There would be no impact.

3.3 AGRICULTURE AND FORESTRY RESOURCES

Table 3.2-1. Potential Impacts on Agriculture and Forestry Resources

ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
II. Agriculture and Forestry Resources. Would the project:	-
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
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	No Impact
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
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
e) Involve other changes in the existing environment that, 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

Note: "-" indicates blank cell

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?

All four well sites are designated as "urban" land within the Farmland Mapping and Monitoring Program maps (California Department of Conservation 2018a). Therefore, there would be no conversion of lands designated as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland as a result of the proposed project. There would be no impact.

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

The project sites are not located on lands subject to Williamson Act contracts (County of Fresno 2019a). Although well sites #4 and #6 are zoned for agriculture (AL20 – Limited Agricultural and AE20 – Exclusive Agricultural, respectively), the sites are not currently used for agricultural purposes (County of Fresno 2019b). Both the AL20 and AE20 zoning designations allow for construction of infrastructure (County of Fresno 2018), therefore the proposed project would not conflict with the existing agricultural zoning. There would be no impact.

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))?

The proposed project sites are not zoned as forest land or timberland (County of Fresno 2019b). There would be no impact.

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

The proposed project sites do not contain forest land. There would be no impact.

e) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

As noted above, the project sites are not currently used for agriculture and do not contain forest land. There would be no impact.

3.4 AIR QUALITY

Table 3.3-1. Potential Impacts on Air Quality

ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
III. Air Quality. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied on to make the following determinations. Would the project:	–
a) Conflict with or obstruct implementation of the applicable air quality plan?	Less than Significant
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?	Less than Significant
c) Expose sensitive receptors to substantial pollutant concentrations?	Less than Significant
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than Significant

Note: "-" indicates blank cell

a) Conflict with or obstruct implementation of the applicable air quality plan?

The San Joaquin Valley Air Pollution Control District (SJVAPCD) regulates and monitors air quality in the Basin. The SJVAPCD has developed air quality plans to attain California and National Ambient Air Quality Standards for ozone and PM, as discussed in more detail in the Air Quality and Greenhouse Gas Emissions memorandum prepared for the project (AECOM 2020). The air quality plans include emissions inventories to measure the sources of air pollutants, to evaluate how well different control methods have worked, and to show how air pollution will be reduced. The currently applicable attainment plans for the San Joaquin Valley Air Basin address ozone, PM_{10}, and $PM_{2.5}$. The air quality plans present comprehensive strategies to reduce emissions from stationary, area, mobile, and indirect sources. Such strategies include the adoption of rules and regulations; enhancement of CEQA participation; implementation of a new and modified indirect-source review program; adoption of local air quality plans; and stationary, mobile, and indirect source control measures. The air quality plans describe air pollution control strategies to be implemented by a city, county, or region. The plans account for projections of population growth and vehicle miles traveled (VMT) provided by the San Joaquin Council of Governments in the San Joaquin Valley Air Basin and identify strategies for bringing

regional emissions into compliance with federal and state air quality standards. Because population growth and projected VMT are the basis of the air quality attainment plan strategies, a project would conflict with a plan if it would result in more growth or VMT than projected in the applicable plan.

Assumptions for off-road equipment emissions in the air quality plans are developed based on category-specific economic indicators such as employment, expenditures, and fuel use. Since project construction is limited to short-term activities, and construction activities would not involve unusual characteristics that would necessitate the use of extensive off-road equipment usage, the project would not increase the assumptions for off-road equipment use in the air quality plans. Further, construction activities would be short-term and would comply with the applicable SJVAPCD rules and regulations that are designed to reduce and control pollutant emissions from the project's construction activities.

Following construction, day-to-day operations of the project would not add any substantial new operational activities or result in more growth or VMT than projected in the air quality plans. The project is limited to minor alterations to existing facilities and installation of small, new facilities to improve water quality. The standby generator would also comply with SJVAPCD rules and regulations. As such, operational emissions are not anticipated to increase beyond existing conditions or conflict with the assumptions of the applicable air quality plans. Further, implementation of the project would not result in short-term or long-term increases in emissions that would exceed applicable thresholds of significance. Therefore, the impact would be less than significant.

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

Project construction would temporarily generate ROG, NOx, CO, SOx, PM10, and PM2.5 emissions from the use of off-road construction equipment, on-road motor vehicles, soil excavation and material transport. ROG, NOx, CO, and SOx emissions are associated primarily with exhaust from mobile equipment. Fugitive dust emissions (PM10 and PM2.5) occur primarily during site preparation and grading and vary based on parameters such as soil silt content, soil moisture, wind speed, acreage of disturbance area, and miles traveled by construction vehicles on- and off-site. The results of the analysis are summarized in Table 3.3.2 below along with a comparison to the established significance thresholds developed by the SJVAPCD. As shown in Table 3.3-2, the project's construction-related emissions would not exceed the annual and daily SJVAPCD thresholds of significance for criteria pollutants.

The SJVAPCD thresholds indicate whether an individual project's emissions have the potential to affect cumulative regional air quality (SJVAPCD 2015). As shown in Table 3.3-2, construction-related emissions would not exceed that thresholds; thus, construction emissions would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment.

Table 3.3-2: Estimated Daily and Annual Construction-Related Emissions

Description	CO	NO_x	ROG	SO_x	PM_{10}[1]	$PM_{2.5}$[1]
Daily Emissions (lbs/day)	8.58	11.83	1.05	0.02	2.85	0.98
Daily Screening Thresholds (lbs/day)	100	100	100	100	100	100
Annual Emissions (tpy)	0.65	0.77	0.08	<0.01	0.07	0.05
Annual Threshold of Significance (tpy)	100	10	10	27	15	15
Exceeds Thresholds?	No	No	No	No	No	No

Notes: CO = carbon monoxide; NOx = oxides of nitrogen; PM2.5 = fine particulate matter 2.5 micrometers or less in diameter; PM10 = respirable particulate matter 10 micrometers or less in diameter; ROG = reactive organic gases; SOx = oxides of sulfur; tpy = tons per year; lbs/day = pounds per day

1 Fugitive dust emission estimates of PM10 and PM2.5 would be further reduced with implementation of fugitive dust control practices per SJVAPCD Regulation VIII.

As discussed previously, maintenance and operational activities are anticipated to remain similar to existing conditions. The analysis quantified operational emissions associated with the project related to the maintenance and testing of the new standby generator, additional security lighting, and maintenance equipment. The operational emissions are summarized in Table 3.3-3.

Table 3.3-3: Estimated Daily and Annual Operational-Related Emissions

Description	CO	NO_x	ROG	SO_x	PM_{10}[1]	$PM_{2.5}$[1]
Daily Emissions (lbs/day)	1.00	0.77	0.28	<0.01	0.04	0.04
Daily Screening Thresholds (lbs/day)	100	100	100	100	100	100
Annual Emissions (tpy)	0.03	0.02	<0.01	<0.01	<0.01	<0.01
Annual Threshold of Significance (tpy)	100	10	10	27	15	15
Exceeds Thresholds?	No	No	No	No	No	No

Notes: CO = carbon monoxide; NOx = oxides of nitrogen; PM2.5 = fine particulate matter 2.5 micrometers or less in diameter; PM10 = respirable particulate matter 10 micrometers or less in diameter; ROG = reactive organic gases; SOx = oxides of sulfur; tpy = tons per year; lbs/day = pounds per day

As shown in Table 3.3-3, operational emissions would not exceed the SJVAPCD's thresholds of significance. Therefore, this impact would be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Sensitive receptors typically are defined as facilities where sensitive populations (e.g., children, elderly, acutely and chronically ill individuals) are likely to be located. Land uses considered to be sensitive receptors include residences, schools, playgrounds, childcare centers, retirement homes, and hospitals. The nearest sensitive receptor to the project site is approximately 185 feet away.

Health Effects of Criteria Air Pollutants

As previously discussed, criteria air pollutants may adversely human or animal health, reduce visibility, damage property, and reduce the productivity or vigor of crops and natural vegetation. As shown in Tables 3.3-2 and 3.3-2, construction-related and operational activities would result in emissions of criteria air pollutants, but at levels that would not exceed the SJVAPCD thresholds of significance. The thresholds of significance were designed to identify those projects that would result in significant levels of air pollution and to assist the region in attaining the applicable state and federal ambient air quality

standards (SJVAPCD 2015), which were established using health-based criteria to protect the public with a margin of safety from adverse health impacts due to exposure to air pollution. As such, the criteria air pollutant emissions associated with construction and operation of the project would not expose sensitive receptors to substantial criteria pollutant concentrations. In addition, the project would comply with applicable SJVAPCD rules, including but not limited to Rule 4601 (Architectural Coatings), which restricts the VOC/ROG content of coatings, and Regulation VIII (Fugitive PM10 Prohibitions) which reduces the amount of PM entrained in the ambient air.

Toxic Air Contaminants

The greatest potential TAC emissions would be related to diesel PM emissions associated with activity by heavy-duty construction equipment. The total duration of construction activities is anticipated to be approximately 8 months; the exposure of sensitive receptors to construction emissions would be short term, intermittent, and temporary in nature. Health effects from TACs are often described in terms of individual cancer risk, which is based on a 30-year lifetime exposure to TACs (OEHHA 2015). Therefore, the total exposure period for construction activities would be approximately two percent of the total exposure period used for typical health risk calculations (i.e., 30 years). Further, considering that construction activities would vary and span across the different well sites, it is not anticipated that construction activities would be in proximity of sensitive receptors for an extended period of time.

Given the construction schedule, buffer distance to the nearest sensitive receptor, and the highly dispersive nature of diesel PM emissions, construction of the project would not expose sensitive receptors to substantial TAC concentrations. In addition, TAC emission exposure would also be reduced with implementation of California Air Resources Board regulations, such as the Airborne Toxic Control Measure (ATCM), which limits idling of diesel-fueled commercial motor vehicles. As a result, trucks and off-road equipment would not operate in the immediate vicinity of any sensitive receptor for an extended period of time and the potential exposure to TAC emissions would be limited.

As discussed previously, following construction, operation and maintenance of the project is anticipated to remain similar to existing conditions. As such, the project is not anticipated to result in an increase in vehicle trips and off-road equipment usage associated with staff or maintenance. The standby diesel generator would be a source of TAC emissions; however, the emergency generator would not be operated for extended periods of time and emissions would be limited to operation during maintenance and testing and infrequent power outages. Therefore, the project would not result in an increase in TAC emissions beyond existing conditions and the project would not expose sensitive receptors to substantial pollutant concentrations. The impact would be less than significant.

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

The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies. Projects with the potential to frequently expose individuals to objectionable odors

are deemed to have a significant impact. Typical facilities that generate odors include wastewater treatment facilities, sanitary landfills, composting facilities, petroleum refineries, chemical manufacturing plants, and food processing facilities.

Construction activities associated with the project could result in short-term odor emissions from diesel exhaust associated with construction equipment. However, the project would utilize typical construction techniques, and the odors would be typical of most construction sites and temporary in nature.

Operation of the project is anticipated to remain similar to existing operations on-site. Since the project will not increase water supply capacity or increase the pumping rate, the project would not create objectionable odors affecting a substantial number of people. Therefore, this impact would be less than significant.

3.5 BIOLOGICAL RESOURCES

Table 3.4-1. Potential Impacts on Biological Resources

ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
IV. Biological Resources. Would the project:	-
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Less than Significant with Mitigation
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	No Impact
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	No Impact
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 with Mitigation
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact
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?	No Impact

Note: "-" indicates blank cell

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 Game or U.S. Fish and Wildlife Service?

According to the biological study prepared for the project (AECOM 2018a), there are no federally listed plant species within the project sites. While the project area is within the potential dispersal range of San Joaquin kit foxes, none have been observed or reported in the project area (CDFW 2021). The nearest reported occurrence was 2.5 miles northeast of Del Rey, which was reported in the 1980s. One additional occurrence from the 1990s was reported approximately 12.5 miles to the northwest.

The biological study concluded that San Joaquin kit fox has a very low potential to occur in the project area. Urban environments outside of Bakersfield are not known to support populations of San Joaquin kit fox. Because well sites 4, 5, 6, and 7 (Figure 2) are located on the edge of the Del Rey Community Services District, outside of which there are areas of lower disturbance levels and large open lots, there is some potential for the species to forage or disperse around the well sites. There is marginally suitable foraging habitat in the urban and barren habitat; however, the prey base in the project footprint is limited by the sparse evidence of ground squirrel activity throughout the study area. No small- or medium-sized mammal burrows with the potential to provide suitable denning habitat for San Joaquin kit fox were observed in the study area during site reconnaissance undertaken for the biological study. Further, it is noted that San Joaquin kit fox needs loose-textured sandy soils for burrowing, and that the soils in the study area are too compacted for dens.

Construction activities have potential to cause direct effects to San Joaquin kit foxes, such as injury or mortality if hit by construction equipment or vehicles or from construction noise affecting foraging success or predator detection, which could cause kit foxes to permanently emigrate from the vicinity of construction areas to areas more susceptible to predation or with a lower prey base. Construction activities also have the potential to cause indirect effects such as degradation of foraging habitat because of increased trash that could attract predators, introduction of noxious weeds, or accidental spills and leaks from maintenance equipment and vehicles.

However, because kit foxes are primarily active at night and construction activities for the Project would be limited to daytime hours, vehicular strikes are not expected. The project also includes BMPs (see Section 2.2.4 above) which include preparation of a Hazardous Material Spill Prevention, Control, and Countermeasure Plan to minimize the potential for accidental spills and ensure that any accidental spills will be cleaned up immediately. Although the potential for kit foxes to occur in the project area is low, these impacts are conservatively identified as potentially significant.

Mitigation Measure BIO-1 is recommended, in addition to the general BMPs described in Section 2.2.4, to reduce this potentially significant impact.

> ***Mitigation Measure BIO-1: San Joaquin Kit Fox Protection Measures.***
> *Del Rey Community Services District shall include the following measures in the contractor specifications for the Project and ensure that the measures are implemented throughout all construction phases.*
>
> - *Exclusion fencing will be used to establish non-disturbance exclusion zones to restrict project equipment and personnel from sensitive areas and restrict wildlife species from*

entering the project footprint. Sensitive areas shall be identified by a qualified biologist and shall include habitats that may support federally listed species, such as small mammal burrows and burrow complexes and areas identified as buffers for potential occurrences of federally listed species. Two types of fencing—high-visibility construction fence and wildlife exclusion fencing (i.e., ERTEC)— will be used for these purposes. Exclusion fencing will be identified and depicted on the project plans and delineated in the field by a qualified biologist. The contractor will ensure that all areas outside of the project footprint are off-limits to project personnel and equipment. Species-appropriate wildlife exclusion fencing will be installed along the outer perimeter of environmentally sensitive areas, buried at least 6 inches below ground, to prevent intrusion below the fence line.

- *Exclusion fencing will be inspected on a weekly basis during construction for signs of tears, sagging, or other damage, and any such damage will be repaired immediately. Exclusion fencing will be removed and properly disposed upon completion of construction.*
- *All excavated, steep-walled holes or trenches more than 2 feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals.*
- *If the San Joaquin kit fox is observed in the project footprint, work will not resume until the species moves away from the work area on its own.*
- *The contractor will provide closed garbage containers for the disposal of food-related trash items (e.g., wrappers, cans, bottles, or food scraps). Garbage will be removed daily from the project footprint. Project personnel will not feed or otherwise attract wildlife to the project footprint. No pets will be allowed in the project footprint.*

Implementation of mitigation measure MM-BIO-1 would reduce the likelihood of direct and indirect impacts to San Joaquin kit foxes during project construction, by preventing construction personnel from entering environmentally sensitive areas, and reducing the likelihood of San Joaquin kit fox entering active construction areas or being trapped. Therefore, with implementation of mitigation measure MM-BIO-1, in addition to the BMPs described in Section 2.2.4, the project would have a less-than-significant with mitigation impact on special-status species.

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

The well sites are in a predominately urban and built area, which contains no riparian habitat or other sensitive natural communities. Adjacent lands to the west are utilized for agriculture, which have also been disturbed and provide no habitat. No native habitats exist in the vicinity of the project area (AECOM 2018a). Therefore, there would be no impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

There are no wetlands in or in the vicinity of the project area (AECOM 2018a). Therefore, there would be no impact.

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?

As discussed previously, the project area is within the potential dispersal range of San Joaquin kit foxes, but none have been observed or reported in the project area (AECOM 2018a; CDFW 2021). An individual San Joaquin kit fox has an average home range of 1 to 2.5 square miles (Knapp 1978, Morrell 1972, Haight et al. 2002). The San Joaquin kit fox inhabits arid valley and foothill grasslands, sparsely vegetated scrub/shrub habitats (O'Farrell 1983, USFWS 1998), and some agricultural and urban areas (Jensen 1972, Morrell 1972). San Joaquin kit fox are quite tolerant of human disturbances and will, to a minimal extent, use oil fields and developed and agricultural lands, particularly for foraging and movement or migration. However, the use of agricultural lands by San Joaquin kit fox is dependent on prey availability and refugia opportunities.

The biological report prepared for the project (AECOM 2018a) concluded that there is very low potential for San Joaquin kit fox to occur in the study area, but that the area could serve as a migratory and dispersal corridor for kit foxes. As discussed previously, construction activities have the potential to adversely affect kit foxes; therefore, this impact is conservatively identified as potentially significant.

Mitigation Measure BIO-1 is recommended to reduce this potentially significant impact.

> ***Mitigation Measure BIO-1: San Joaquin Kit Fox Protection Measures.***
> *[Full text of mitigation measure described for impact a) above.]*

Implementation of mitigation measure MM-BIO-1 would reduce the likelihood of direct and indirect impacts to San Joaquin kit foxes during project construction, by preventing construction personnel from entering environmentally sensitive areas, and reducing the likelihood of San Joaquin kit fox entering active construction areas or being trapped. Therefore, with implementation of mitigation measure MM-BIO-1 the project would have a less-than-significant with mitigation impact on the movement of wildlife species or migratory wildlife corridors.

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

During project construction, some ground cover vegetation will be removed but no trees would be impacted. Therefore, the project would not conflict with local policies or ordinances protecting trees or other biological resources, and no such policies or ordinances are applicable to the project area. There would be no impact.

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?

The proposed project is not within a habitat conservation plan or natural community conservation plan. Therefore, there would be no impact.

3.6 CULTURAL RESOURCES

Table 3.5-1. Potential Impacts on Cultural Resources

	ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
V.	**Cultural Resources. Would the project:**	-
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	No Impact
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	No Impact
c)	Disturb any human remains, including those interred outside of formal cemeteries?	No Impact

Note: "-" indicates blank cell

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

According to the Historic Property Inventory Report prepared for the project (AECOM 2018b), there are no historical resources within a half-mile radius of the study area. Therefore, there would be no impacts to historical resources.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Soils in the project area a predominately underlain by Exeter series. As discussed in Historic Property Inventory Report (AECOM 2018b), Exeter soils have been demonstrated to date from the Pleistocene, and thus are too old to reasonably contain buried archaeological deposits (AECOM 2018b). Furthermore, the project area is in an urbanized area with lands that have been disturbed. Thus, the project area would have paleontological low sensitivity and there would be no impact.

c) Disturb any human remains, including those interred outside of formal cemeteries?

It is unlikely that the proposed project would disturb any human remains, as the project area is on previously disturbed land. However, if previously unidentified cultural resources are unearthed during construction, standard accidental discovery protocols would be implemented: work would be halted in the area until a qualified archaeologist can assess the significance of the find. If human remains are encountered during construction, all work in that area must halt and the Fresno County Coroner must be contacted pursuant to California Public Resources Code Sections 5097.94, 5097.98, and 5097.99 (AECOM 2018b). Therefore, there would be no impacts.

3.7 ENERGY

Table 3.6-1. Potential Impacts on Energy

ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
VI. Energy. Would the project:	-
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

Note: "-" indicates blank cell

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

Construction of the proposed project would require energy for the manufacture and transportation of construction materials, preparation of the site for grading and building activities, and construction/installation of equipment and infrastructure. All or most of this energy would be derived from non-renewable resources. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. However, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the proposed project. The proposed project would use standard construction methodology and equipment; therefore, the project is not anticipated to be more wasteful or inefficient than other similar construction projects. Energy (i.e., fuel) usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources.

Typically, the consumption of energy during the operation of a project is associated with fuel used for vehicle trips and natural gas and energy use within the development. The proposed project is anticipated to require one additional vehicle trip per week to the well sites, therefore, the project would result in a slight increase in fuel consumption. Operation of the project would have similar electricity demand to existing operations; any increase would be negligible compared to existing electricity use in the Fresno County area. There would be no natural gas consumption proposed as a result of implementation of the project.

Construction or operation of the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources; therefore, there would be no impact.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Energy consumption during construction and operation would not substantially increase compared to existing conditions. Because the project's total impact on regional or State energy supplies would be negligible, the proposed project would not conflict with or obstruct California's energy conservation plans (CEC 2017). There would be no impact.

3.8 GEOLOGY AND SOILS

Table 3.7-1. Potential Impacts on Geology and Soils

ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
VII. Geology and Soils. Would the project:	-
a) 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 California Geological Survey Special Publication 42.)	No Impact
ii) Strong seismic ground shaking?	No Impact
iii) Seismic-related ground failure, including liquefaction?	No Impact
iv) Landslides?	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	Less than Significant
c) Be located on a geologic unit or soil that is unstable, or that would become unstable because of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	No Impact

Note: "-" indicates blank cell

a) 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 California Geological Survey Special Publication 42.)

The proposed project would not exacerbate the potential for rupture of a known earthquake fault. The project area is not located within a designated Alquist-Priolo Earthquake Zone (CDOC 2019a). The nearest active faults to the project area are the San Joaquin fault and Kern Canyon fault zone, which are approximately 60 miles from the project area (USGS 2019). There would be no impact.

ii) Strong seismic ground shaking?

The proposed project would not exacerbate the potential for seismic shaking, as intensity of the earthquake ground motion at the site would depend on the characteristics of the generating fault, distance to the earthquake epicenter, magnitude, and duration of the earthquake, and specific site

geologic conditions, none of which would be altered by the proposed project. Given the distance of the project area from active faults (USGS 2019), the sites would be unlikely to experience strong shaking during an earthquake. There would be no impact.

iii) Seismic-related ground failure, including liquefaction?

Soils in the project area are well-drained sandy loams (NRCS 2019). Poorly drained fine-grained soils such as sandy, silty, and gravelly soils are the most susceptible to liquefaction during the intense shaking of an earthquake. These soils types are not present within the project area; and the project area is not within an area identified as susceptible to significant risk of liquefaction. Therefore, there would be no impact.

iv) Landslides?

The project area is generally flat with little to no slopes. The project area is not susceptible to landslides, and no landslides have been reported (CDOC 2019b). Therefore, there would be no impact.

b) Result in substantial soil erosion or the loss of topsoil?

Project construction would involve excavation and grading. During soil disturbance and earthmoving activities, there is potential that exposed soils could be subject to erosional forces from water and wind. Soils on steep slopes are often more erodible, especially during heavy rain events. Since the project area is flat, it is unlikely that soils would erode significantly during construction. However, best management practices (as described in Section 2.2.4) are included as part of the project and would minimize the potential for soil erosion during construction. Therefore, impacts would be less than significant.

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

There are no unstable geologic units within the project area. The project site is not within an area identified as susceptible to significant risk of liquefaction or lateral spreading due to its distance from faults, soil types and geologic conditions.

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

Expansive soils are composed largely of clays, which greatly increase in volume when saturated with water and shrink when dried (referred to as shrink-swell potential). There are no expansive clay soils identified in the project area (NRCS 2019). Therefore, there would be no impact.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The proposed project would not require the use of septic systems or alternative waste water disposal systems. There would be no impact.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The project sites are in alluvium, lake, playa, and terrace deposits; unconsolidated and semi-consolidated deposits of the Pleistocene-Holocene age (CDOC 2018b). The project area is in an urbanized area with lands that have been previously disturbed, and therefore has low paleontological sensitivity. Excavation and grading would be limited to up to three feet in depth. There would be no impact.

3.9 GREENHOUSE GAS EMISSIONS

Table 3.8-1. Potential Impacts on Greenhouse Gas Emissions

ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
VII. Greenhouse Gas Emissions. Would the project:	-
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less Than Significant
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less Than Significant

Note: "-" indicates blank cell

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

Heavy-duty off-road equipment, materials transport, and worker commutes during construction of the project would result in exhaust-related GHG emissions. Construction of the project would result in the generation of approximately 102 MT CO2e.

As described previously, the purpose of the project is to improve the water quality. As such, the project is not anticipated to result in an increase in vehicle trips associated with operations or maintenance or increase water supply capacity. Therefore, operational emissions associated with the project would be limited to stationary source exhaust emissions from the emergency generator and landscape equipment at the new well sites, and indirect emissions from energy consumption from additional site lighting. Table 3.8-2 summarizes the construction-related and operational GHG emissions associated with the project.

Table 3.8-2: Construction and Annual Operational GHG Emissions

Description	GHG Emissions (MT CO2e)
Construction Emissions	102
Operational Emissions Per Year	4
Annual SMAQMD Threshold of Significance	1,100
Exceeds SMAQMD Threshold?	No

Notes: MT CO2e = metric tons carbon dioxide equivalent; SMAQMD = Sacramento Metropolitan Air Quality Management District

As shown in Table 3.8-2, the total construction-related and annual operational emissions of the project would not exceed the SMAQMD[1] threshold of 1,100 MT CO2e per year. Therefore, the project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. The impact would be less than significant.

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

As discussed in more detail in the Air Quality and Greenhouse Gas Emissions technical memorandum prepared for the project (AECOM 2020), in response to AB 32 and SB 32, the California Air Resources Board has approved a series of Climate Change Scoping Plans and Scoping Plan updates. While the Scoping Plan updates do include measures that would indirectly address GHG emissions associated with construction and operational activities, including the phasing in of cleaner technology for diesel engine fleets (including construction equipment) and Low Carbon Fuel Standard, successful implementation of these measures predominantly depends on the development of laws and policies at the state level. As such, none of these statewide plans or policies constitutes a regulation to adopt or implement a regional or local plan for reduction or mitigation of GHG emissions. Thus, it is assumed that any requirements or policies formulated under the mandate of AB 32 and SB 32 that would be applicable to the project, either directly or indirectly, would be implemented consistent with statewide policies and laws.

In March 2017, the California State Water Resources Control Board adopted a Climate Change Resolution focused on reducing GHG emissions and building resilience to climate change impacts (State Water Board 2017). This action builds on a resolution adopted by the Board in 2007, which set forth initial actions it should take to respond to climate change and support the implementation of AB 32. Since that time, the California Water Action Plan was developed which is a blueprint for achieving more sustainable water management by improving water supply reliability, restoring important wildlife and habitat, and making the state's water systems and environment more resilient. The resolution calls for a proactive approach to climate change, including a drinking water regulation and water quality protection. Since the purpose of the project is to improve water quality, the project would not conflict with the State Water Resources Board Climate Change Resolution.

In addition, the project's emissions would not exceed the SMAQMD threshold of significance which was developed considering the AB 32 and SB 32 statewide reduction goals. Thus, the project would not conflict with the AB 32 and SB 32 Scoping Plan; or any other relevant plans, policies, or regulations for the purpose of reducing GHG emissions. Therefore, the project's contribution to cumulatively

[1] Since the project primarily involves construction activities, and the SJVAPCD has not determined a specific quantitative level of GHG emissions increase, above which a project would have a significant impact on the environment, and below which would have an insignificant impact (SJVACPD 2015), and the Del Rey Community Services District has not adopted a threshold, this analysis reviewed thresholds adopted by other districts and agencies. For example, the Sacramento Metropolitan Air Quality Management District (SMAQMD) has identified an annual threshold of 1,100 MT CO_2e for the construction and operational phases of projects. The threshold set by the SMAQMD was developed considering the AB 32 and SB 32 statewide reduction goals. Therefore, this analysis utilizes the 1,100 MT CO_2e threshold developed by SMAQMD for conservative purposes.

It is not the intent of this document to cause the adoption of these thresholds as mass emissions limits for this or other projects, but rather to provide this additional information to put the project-generated GHG emissions in the appropriate statewide context.

significant impacts to global climate change would not be considerable. The impact would be less than significant.

3.10 HAZARDS AND HAZARDOUS MATERIALS

Table 3.9-1. Potential Impacts on Hazards and Hazardous Materials

ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
IX. Hazards and Hazardous Materials. Would the project:	-
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	No Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No Impact
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, therefore, would it create a significant hazard to the public or the environment?	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	No Impact

Note: "-" indicates blank cell

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Construction of the project would involve the occasional transportation, use, and disposal of typical construction-related materials, such as fuel, oil, lubricants, and adhesives. The construction contractor would be required to comply with all relevant federal, State, and local statutes and regulations related to the transport, use, storage, or disposal of hazardous materials, including OSHA regulations to protect workers through hazard communication and provision of adequate training. Any unused construction-related hazardous materials would be removed from the site and disposed pursuant to applicable federal, State, and local regulations.

A new 200-gallon sodium hypochlorite tank would be installed at Well Sites 4, 6 and 7 and the existing sodium hypochlorite tank at Well Site 7 would be removed. Safety eye wash/shower stations would be installed at each of the chemical buildings. New virgin carbon for the GAC treatment systems would be brought to the well sites approximately every 12 to 18 months, and the spent carbon material would be picked up by the carbon supplier and disposed of by regeneration at their licensed sites according to

their State licenses. The project would include installation and occasional operation (for emergency backup only) of a standby generator with double-walled 300-gallon capacity diesel tank at Well Site 4. Existing standby generators at Well Sites 6 and 7 would remain and would be operated in a similar manner to existing conditions.

Chemicals used at the well sites would be handled in accordance with relevant federal, State, and local regulations, and are not anticipated to pose a substantial risk of release to the environment. Usage and storage of these chemicals would comply with the applicable safety data sheets (SDS) for each chemical. There would be no impact.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

As noted above, compliance with relevant federal, State, and local regulations and standard construction practices would minimize potential risks of accidental release. The quantities of hazardous substances to be stored at each site would be minimal, and secondary containment would be included. There would be no impact.

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

Well Site 5 is immediately adjacent to the Del Rey School playing fields, and Well Site 6 is also within a quarter mile of this school. Well Sites 4 and 7 are just over a quarter mile from the school (approximately 1400 feet east and southeast, respectively). Although hazardous materials (e.g., fuels, lubricants, adhesives) would be handled at Well Sites 5 and 6 during construction and operation, as described above under impact (a), the measures taken to comply with relevant federal, State and local regulations to protect the environment and workers would also serve to protect adjacent sensitive receptors such as students at nearby schools. There would be no impact.

d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, therefore, would it create a significant hazard to the public or the environment?

None of the four well sites are on properties that are included on the "Cortese List" of hazardous materials sites (DTSC 2019; SWRCB 2019). The nearest Cortese List site is the HS Mann site (now POM Wonderful facility) approximately 130 feet east of Well Site 4 (across the former railroad right-of-way). Historic metal recovery operations occurring at the HS Mann site in the 1960s and 1970s resulted in contamination of soil and shallow groundwater with copper, lead, zinc, and unspecified acids (DTSC 2019). Remedial actions were undertaken at the site in 2004, and deed restrictions were emplaced on the land parcels APN 350-031-04 and 350-031-07 (since renumbered to APNs 350-230-11T and 350-230-12T) requiring notification for excavation or subsurface work, and prohibiting use of the site for residential, daycare, school, or hospital use. The deed restrictions do not apply to the Well Site 4 property, and previous geotechnical investigations at Well Site 4 did not observe any contamination.

Because the project would not be located on a site that is included on the Cortese List, there would be no impact.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?

There are no public airports or public use airstrips within 2 miles of the project area (FAA 2019). The POM Wonderful airstrip, approximately 800 feet to the southwest of Well Site 4, is a private use airstrip and therefore not subject to this CEQA threshold. In any case, the proposed project improvements would not create a safety hazard or excessive noise related to the nearby airstrip. There would be no impact.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The project would construct and operate additional infrastructure on existing water supply well sites within the Del Rey community. Traffic disruption from construction activities would be short-term and limited to the immediate vicinity of the construction areas, and is therefore unlikely to interfere with emergency response actions or evacuations. Alternative routes would be available if temporary road closures are necessary for installation of the new pipeline between well sites 5 and 6. There would be no impact.

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

The project area is not within a moderate, high or very high fire severity hazard zone (CALFIRE 2007). Given the urban nature of the project area and lack of vegetation at the well sites, the risk of wildland fire would be minimal. There would be no impact.

3.11 HYDROLOGY AND WATER QUALITY

Table 3.10-1. Potential Impacts on Hydrology and Water Quality

ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
IX. Hydrology and Water Quality. Would the project:	-
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Less than Significant
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	No Impact

ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
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 that would: i) result in substantial on- or off-site erosion or siltation on- or off-site? ii) substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-or off-site; iii) create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No Impact

Note: "-" indicates blank cell

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Construction activities can pose a threat of short term increases in erosion, sedimentation, and other types of construction-related water pollution that could temporarily result in water quality violations. Because the project will not involve more than one acre of total disturbed area, a Stormwater General Construction Permit will not be required and a SWPPP is therefore not mandatory for this project. However, appropriate stormwater control and erosion control BMPs (described in Section 2.2.4) are included as part of the project and will be incorporated into construction specifications. These BMPs require the preparation and implementation of a SWPPP for the project site. With implementation of the BMPs, potential temporary adverse effects on water quality during construction would be less than significant.

Operation and maintenance of the treatment systems would be similar to existing operations at the well sites, and would not result in violations of water quality standards or other degradation of 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?

Although the proposed project involves a water system that is supplied from groundwater, no changes in the amount of water pumped from the wells is proposed. The purpose of the project is to update wellhead treatment equipment to improve water quality. Therefore, the project would not substantially decrease groundwater supplies. There would be no impact.

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 that would:

i) result in substantial on- or off-site erosion or siltation on- or off-site?

ii) Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite?

iii) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The proposed project would not substantially alter existing drainage patterns at the site and there are no nearby streams or rivers nearby that would have their courses altered as a result of the project.

Construction activities required to implement the project could pose a threat of short term increases in erosion, sedimentation, and other types of construction-related water pollution. Because the project will not involve more than one acre of total disturbed area, a Stormwater General Construction Permit will be not required and a SWPPP is therefore not mandatory for this project. However the BMPs described in Section 2.2.4 include preparation of a SWPPP, and are included as part of the project and will be incorporated into construction specifications. With implementation of the BMPs, potential temporary adverse effects to stormwater during construction would be less than significant.

There would be a minor increase (approximately 2,500 square feet) in the amount of permanent impervious surface area at well sites 4 and 6, which would have only a negligible increase in stormwater runoff. This negligible increase is not anticipated to result in increased flooding or exceed the capacity of existing stormwater drainage systems. There would be no permanent impact.

d) Risk release of pollutants in flood hazard, tsunami, or seiche zones due to project inundation?

The project area is in an area of minimal flood hazard (FEMA 2019). The project area is also not in a tsunami or seiche zone. Therefore, there would be no impacts related to releases of pollutants due to project inundation.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The project would not result in substantial changes to water quality (other than to improve it) or groundwater management, and therefore would not conflict with or obstruct implementation of water quality control plan or sustainable groundwater management plan.

3.12 LAND USE AND PLANNING

Table 3.11-1. Potential Impacts on Land Use and Planning

ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
X. Land Use and Planning. Would the project:	-
a) Physically divide an established community?	No Impact

	ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	No Impact

Note: "-" indicates blank cell

a) Physically divide an established community?

The project area is in unincorporated Fresno County in the Del Rey community. The immediate area contains predominantly developed commercial and residential land, with agricultural uses to the west and industrial uses to the east. The proposed project would not change the nature of existing land uses at the well sites, and would not divide an established community or introduce physical features that would create a barrier, divide, or separate adjacent uses; or impede movement or circulation on existing public roads, streets, or paths. There would be no impacts related to physically dividing an established community.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Well sites 4, 5 and 6 are in an AL20-Limited Agricultural District; and well site 7 is in a R2-Low Density Multiple Family Residential District (County of Fresno 2019b). These districts allow for utility uses, which would be subject to County review and approval (County of Fresno 2000; 2018). While the project would add new structures, these structures would be compatible with existing infrastructure at the well sites. The project features would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The proposed project would be compatible with the surrounding uses. Therefore, there would be no impact.

3.13 MINERAL RESOURCES

Table 3.12-1. Potential Impacts on Mineral Resources

ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
XII. Mineral Resources. Would the project:	-
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	No Impact
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?	No Impact

Note: "-" indicates blank cell

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?

The proposed project would not result in the loss of availability of known mineral resources that would be of value to the region and the residents of the State. According to Mineral Resources Zones Maps, no areas of mineral deposits are indicated (California Department of Conservation 1999). Therefore, there would be no impact.

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?

The proposed project does not involve mining of any locally important resources nor is it near potential surface mining areas. No mineral resources of local importance such as construction aggregates, sand, gravel, metals, gypsum, limestone, or granite are identified in the local general plan for the project area (County of Fresno 2000). Therefore, there would be no impact.

3.14 NOISE

Table 3.13-1. Potential Impacts on Noise

ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
XII. Noise. Would the project result in:	-
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	No Impact
b) Generation of excessive vibration or ground-borne noise levels?	No Impact
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No Impact

Note: "-" indicates blank cell

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?

Project construction would cause a temporary increase in ambient noise levels due to generation of noise from heavy equipment such as excavators, trucks, crane, loader, forklift and generators. High-impact equipment such as a pile-driver or jackhammer are not anticipated to be required for construction. The County's Noise Control Ordinance (County of Fresno 1978) states that "noise sources associated with construction, provided such activities do not take place before 6:00 a.m. or after 9:00 p.m. on any day except Saturday or Sunday, or before 7:00 a.m. or after 5:00 p.m. on Saturday or Sunday" are exempt from the noise standards stipulated in Chapter 8.40 of the ordinance. The proposed project would be constructed during standard (daytime) construction hours and would therefore be exempt from the noise standards.

Once completed, operation of the wellhead treatment system will not generate any additional noise above the existing well site operations, with the exception of the occasional use of the new standby generator at Well Site 4. The County's Noise Control Ordinance states that noise from "any mechanical device, apparatus, or equipment used, related to or connected with emergency activities or emergency work" are exempt from the noise standards stipulated in Chapter 8.40 of the ordinance. The standby generator would only be used as a backup energy source during power outages or other emergency situations, and therefore noise generated by the generator would be exempt from the noise standards.

Because all construction noise and operational noise generated by the project would be exempt, the project would not exceed any noise standards, therefore there would be no impact.

b) Generation of excessive vibration or ground-borne noise levels?

High-impact equipment such as a pile-driver or jackhammer are not anticipated to be required for construction, therefore generation of excessive vibration or ground-borne noise is not anticipated. There would be no impact.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 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?

There are no public airports in the vicinity of the project site. A private airstrip, POM Wonderful, is approximately 800 feet southeast of Well Site 4 and does not have an adopted land use plan. In any case, the project does not include the construction of habitable buildings or permanent work spaces that would expose residents or employees to excessive noise levels from the airstrip. There would be no impact.

3.15 POPULATION AND HOUSING

Table 3.14-1. Potential Impacts on Population and Housing

ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
XIII. Population and Housing. Would the project:	-
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)?	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact

Note: "-" indicates blank cell

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)?

The proposed project would not directly or indirectly induce population growth in the surrounding area. The project does not involve the construction of housing or commercial or industrial businesses, which could attract more people to the area, and would not remove any obstacle or barrier to population growth. The project does not include any increase in the amount of water supplied to the Del Rey community. Thus, the project would not induce population growth in the area. There would be no impact.

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

The proposed project would not displace any existing people or housing which would necessitate construction of replacement elsewhere. Therefore, there would be no impact.

3.16 PUBLIC SERVICES

Table 3.15-1. Potential Impacts on Public Services

ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
XIV. Public Services. Would the project:	-
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:	-
Fire protection?	No Impact
Police protection?	No Impact
Schools?	No Impact
Parks?	No Impact
Other public facilities?	No Impact

Note: "-" indicates blank cell

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: Fire protection, Police protection, Schools, Parks, or Other public facilities?

The proposed project would not involve any development related to new housing or employment opportunities that would result in increased population growth in the area. Therefore, there would not be a change in demand for public services, including fire protection, police protection, schools, parks and other public facilities. Furthermore, the project would not result in roadway impacts or increase traffic congestion that could interfere with response times for fire and other emergency responders. Thus, the project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities. There would be no impact.

3.17 RECREATION

Table 3.16-1. Potential Impacts on Recreation

ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
XV. Recreation. Would the project:	-
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?	No Impact
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	No Impact

Note: "-" indicates blank cell

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?

The proposed project would not increase the population of the project area by introducing new housing or employment opportunities that would result in increased use or physical deterioration of recreational facilities. There would be no impact.

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

The proposed project would not involve construction of new or expansion of existing recreational facilities. In addition, the project would not increase the population of the project area by introducing new housing or employment opportunities that would result in construction or expansion of recreational facilities. There would be no impact.

3.18 TRANSPORTATION/TRAFFIC

Table 3.17-1. Potential Impacts on Transportation and Traffic

ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
XVII. Transportation. Would the project:	-
a) Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	No Impact
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	No Impact
c) 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
d) Result in inadequate emergency access?	No Impact

Note: "-" indicates blank cell

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

During construction of the proposed project, construction vehicles would access the project sites via State Route 99 and local roads, including E American Avenue, S Portola Ave, E Jefferson Ave and E Avila Avenue. While construction activities would result in more vehicles to these roadways, due to the small scope and size of the project and the low existing traffic volumes, the project is not anticipated to cause substantial traffic congestion. Additionally, any impacts to roadways would be temporary and short-term. Existing bicycle, pedestrian and transit networks would be maintained, and the project would have no impacts on scenic highways. Therefore, the proposed project during construction and operation would have no impacts on a program, plan, ordinance or policy addressing the circulation system.

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

CEQA Guidelines section 15064.3(a) describes specific considerations for evaluating a project's transportation impacts and states "Generally, VMT is the most appropriate measure of transportation impacts." As stated in CEQA Guidelines section 15064.3(b)(2), "projects that reduce, or have no impact on, VMT should be presumed to cause a less than significant transportation impact."

A temporary minor increase in VMT could occur during project construction as the result of worker trips to the site, materials delivery, and spoils hauling. Any minor increase in VMT would be temporary and would not exceed the 110 vehicle trips per day threshold generally assumed to cause a less-than-significant impact related to VMT (OPR 2017).

Operation of the proposed project would be similar to existing operations at the well site, with on average, one additional well site visit per week for operations and maintenance purposes by Del Rey CSD employees, and approximately one truck trip per year to the site to deliver new carbon and pick up the spent carbon material for disposal. Operation of the project would therefore have a negligible

increase in VMT over existing operations. Therefore, the proposed project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, and there would be no impacts.

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

The proposed project would not increase hazards due to a geometric design feature or be incompatible with existing uses. Therefore, there would be no impact.

d) Result in inadequate emergency access?

Traffic disruption from construction activities would be short-term and limited to the immediate vicinity of the construction areas, and is therefore unlikely to interfere with emergency access. Alternative routes would be available if temporary road closures are necessary for installation of the new pipeline between well sites 5 and 6, which would be communicated to local emergency response providers. There would be no impact.

3.19 TRIBAL CULTURAL RESOURCES

Table 3.18-1. Potential Impacts on Tribal Cultural Resources

ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
XVIII. Tribal Cultural Resources. 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:	-
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	No Impact
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	No Impact

Note: "-" indicates blank cell

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).

As discussed in the Historic Property Inventory Report prepared for the project (AECOM 2019b), the project sites are not listed on the California Register of Historical Resources or any local register of historical resources. There would be no impact.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of

Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

As discussed in the Historic Property Inventory Report prepared for the project (AECOM 2019b), there are no known tribal cultural resources in the project area. The proposed project would include implementation of accidental discovery protocols to avoid impacts if previously unknown resources are encountered. There would be no impact.

3.20 UTILITIES AND SERVICE SYSTEMS

Table 3.19-1. Potential Impacts on Utilities and Service Systems

ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
XIX. Utilities and Service Systems. Would the project:	-
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	No Impact
c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	No Impact
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?	No Impact
e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	No Impact

Note: "-" indicates blank cell

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?

The proposed project would not involve any development that would increase population growth or change the demand for water supply, water treatment, electric power, natural gas or telecommunication facilities, which would require or result in the relocation or construction of new expanded utilities services. The project would not result in substantial increases in impervious surface area which could result in increased storm water runoff and therefore does not require new or expanded storm drainage systems. Thus, there would be no impact.

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

The proposed project would install GAC treatment equipment at well sites, which are currently utilized to provide water supply to the Dey Rey community and no changes in water supply are proposed as part of the project. Water use during construction would be minor and would come from existing sources. Thus, there would be no impact related to water supplies.

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

Wastewater services would not be required during the construction or operation of the project. Contractors would use portable sanitary facilities or nearby public facilities. Therefore, there would be no impact related wastewater treatment capacity.

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?

Solid waste in the County of Fresno is transferred to American Avenue Disposal Site. During construction of the project, typical construction waste would be generated. However, the amount of waste generated it expected to be small due to the small scope and size of the project. The project would not generate waste in excess of State or local standards or in excess of capacity of local infrastructure. There would be no impact.

e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

A Waste Management Plan and Waste Log would be required as part of the County of Fresno's Construction and Demolition Debris Recycling Program, which are designed to assist the County's compliance with the State mandate. The mandate requires a minimum of 65 percent of all waste generated from a permitted project to be repurposed or recycled (County of Fresno, no date). Construction and demolition material from the proposed project would be disposed according to federal, state and local law. Therefore, there would be no impact.

3.21 WILDFIRE

Table 3.20-1. Potential Impacts on Wildfire

ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
XIX. Wildfire. If located in or near State Responsibility Areas or lands classified as very high fire hazard severity zones, would the project:	-
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	No Impact
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	No Impact

ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
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 on the environment?	No Impact
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, therefore of runoff, post-fire slope instability, or drainage changes?	No Impact

Note: "-" indicates blank cell

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

The project area is not in or near a State Responsibility Area or in a very high fire hazard severity zone (Cal Fire 2007), therefore this threshold of significance is not applicable to the proposed project. Nevertheless, the project would not be inconsistent with the Fresno County Master Emergency Services Plan, and no evacuation routes would be impeded or disrupted during the construction or operation of the project. There would be no impact.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

The project area is not in or near a State Responsibility Area or in a very high fire hazard severity zone (Cal Fire 2007), therefore this threshold of significance is not applicable to the proposed project. Nevertheless, there are no factors such as steep slopes, prevailing winds or high fuel sources in which the proposed project would result in exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, there would be no impact.

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 on the environment?

The project area is not in or near a State Responsibility Area or in a very high fire hazard severity zone (Cal Fire 2007), therefore this threshold of significance is not applicable to the proposed project. Nevertheless, the minor infrastructure upgrades and construction required for the project would be undertaken on existing well sites and within County road right-of-way and would not exacerbate fire risk in the surrounding area. Thus, there would be no impact.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, therefore of runoff, post-fire slope instability, or drainage changes?

The project area is not in or near a State Responsibility Area or in a very high fire hazard severity zone (Cal Fire 2007), therefore this threshold of significance is not applicable to the proposed project. Nevertheless, the project area is generally flat with little to no slope and there have been no recent fires in the project vicinity that would result in runoff or drainage changes. Therefore, the proposed project would not expose the public to a risk of post-fire slope instability or drainage changes. There would be no impact.

3.22 MANDATORY FINDINGS OF SIGNIFICANCE

Table 3.21-1. Mandatory Findings of Significance

ENVIRONMENTAL ISSUES	ENVIRONMENTAL IMPACT SIGNIFICANCE
XVIII. Mandatory Findings of Significance.	-
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?	No Impact
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.)	No Impact
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	No Impact

Note: "-" indicates blank cell

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 an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

As discussed within this document, the project would have less than significant or less-than-significant with mitigation impacts on natural habitats, threatened and endangered species or cultural resources. Therefore, the proposed project would not substantially degrade the quality of the environment. There would be no impact.

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.)

As discussed within this document, the proposed project would have little to no impact on the environment. No other present or foreseeable future projects in the vicinity of the well sites are known of that would cause impacts that could combine with impacts of the proposed project to cause a significant cumulative impact. There would be no impact.

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

As discussed within this document, the proposed project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. There would be no impact.

4 REFERENCES

AECOM. 2018a. Del Rey Wellhead Treatment Systems Project- U.S. Fish and Wildlife Service Biological Assessment.

_____. 2018b. Historic Property Inventory Report for the City of Del Rey Water Meter Installation and Granular Activated Carbon Wellhead Treatment Projects Fresno County, California.

_____. 2020. Del Rey Wellhead Treatment Systems Project - Air Quality and Greenhouse Gas Analysis. January 10.

California Air Resources Board (CARB). 2019. Area Designations Maps/State and National, https://ww3.arb.ca.gov/desig/adm/adm.htm. Accessed January 2020.

California Department of Conservation. 2018a. Division of Land Resource Protection, Farmland Mapping and Monitoring Program, Rural Land Mapping Edition. Fresno County Important Farmland 2016. Sheet 2 of 2. Available online: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2016/fre16_e.pdf

California Department of Conservation. 2018b. DOC Maps: California Geology. Available online at: https://maps.conservation.ca.gov/geology/. Accessed on December 11, 2019.

California Department of Conservation. 2019. Reported California Landslides interactive map. Available online at: https://www.conservation.ca.gov/cgs/landslides. Accessed on December 11, 2019.

California Department of Fish and Wildlife. 2021. California Natural Diversity Database query, September 16, 2021.

California State Water Resources Control Board (State Water Board). 2017. Action Focuses Board on Reducing Greenhouse Gas Emissions and Building Resilience to Climate Change Impacts. Available at: https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/docs/2017mar/pr030717_climate_change.pdf. Accessed January 2020.

Natural Resources Conservation Services. 2019. Web Soil Survey. Available online at: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed on December 11, 2019.

San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impact. Available at: https://www.valleyair.org/transportation/GAMAQI_12-26-19.pdf. Accessed January 2020.

_____. 2018. Project Ambient Air Quality Analysis Applicability Determination. Available at: http://www.valleyair.org/policies_per/Policies/APR-2030.pdf. Accessed January 2020.

_____. 2019. Ambient Air Quality Standards & Valley Attainment Status. Available at: https://www.valleyair.org/aqinfo/attainment.htm. Accessed January 2020.

United States Environmental Protection Agency (USEPA). 2017. Understanding Global Warming Potentials. Available at https://www.epa.gov/ghgemissions/understanding-global-warming-potentials. Accessed January 2020.

U.S. Geological Survey. 2019. US Quaternary Faults interactive map. Available online at: https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf. Accessed on December 10, 2019.

5 DOCUMENT PREPARERS

The following AECOM staff contributed to the preparation of this document and supporting studies:

Annamarie Guerrero ..... Archaeologist
Emma Rawnsley ..... Senior Environmental Planner
John Chamberlain ..... Quality Reviewer
Mark Reitz ..... Engineer
Matthew Bettelheim ..... Senior Biologist
Michelle Dunn ..... Environmental Planner
Paola Pena ..... Air Quality Scientist
Roshni Saxena ..... Environmental Planner
Saana Deichsel ..... Biologist
Stephanie Osby ..... Environmental Planner