

CITY OF FRESNO
MITIGATED NEGATIVE DECLARATION
FOR
WELLHEAD TREATMENT IMPROVEMENTS AT PUMP
STATION 102A

State Clearinghouse Number: 2023XXXXXX

City of Fresno
Department of Public Utilities
2600 Fresno Street
Fresno, CA 93721

Prepared by:

Provost & Pritchard Consulting Group
455 W. Fir Avenue
Clovis, CA 93611

Attachments:

Notice of Intent to Adopt a Mitigated Negative Declaration
Appendix G/Initial Study for a Mitigated Negative Declaration
Mitigation Monitoring and Reporting Program

CITY OF FRESNO

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION FOR WELLHEAD TREATMENT IMPROVEMENTS AT PUMP STATION 102A

NOTICE IS HEREBY GIVEN that the City of Fresno (City) plans to adopt a Mitigated Negative Declaration for the Wellhead Treatment Improvements at Pump Station (PS) 102A (Project). The public hearing will be held at the City of Fresno, City Council Chambers, located at 2600 Fresno Street, Fresno, CA 93721, on Thursday, June 15, 2023, at 9:00am.

The City's Department of Public Utilities proposes to construct wellhead treatment facilities to mitigate 1,2,3-Trichloropropane (TCP) concentrations found at the existing public water supply well, known as Pump Station 102. The treatment facilities will be constructed at the proposed PS 102A located less than 1,000 feet northeast of the existing PS 102.

The Project would construct the following components: tie-in to the existing PS 102 well head piping, approximately 1,400 linear feet (LF) of 12-inch diameter raw water main between the existing PS 102 well site and the proposed treatment site, PS 102A (1,200 gpm flow rate), develop a 175' by 160' triangular treatment site with a masonry block wall and metal fencing, frontage improvements, four (4) 12-foot by 15-foot granulated activated carbon vessels, approximately 450 LF of 18-inch diameter storm drain pipe, drive approach, 20' wide x 75' long concrete driveway, and 20' wide metal drive access gate, PG&E transformer, 40' x 40' GAC vessel pit, approximately 30' x 10' masonry block equipment building with chemical room containing sodium hypochlorite storage tank, chemical metering pump, chlorine and nitrate analyzers, one (1) generator, groundwater extraction well with manifold piping, deaeration tank, and booster pump (this well may be required in the future due to additional demand in the area or as a replacement of Well 102A), and manganese filters.

Pursuant to the California Environmental Quality Act, an Initial Study/ Mitigated Negative Declaration has been prepared, describing the degree of potential environmental impacts of the Project. The City has assessed the potential environmental impacts of this Project and has determined that they will be less than significant. Copies of the Initial Study and proposed Mitigated Negative Declaration are on file and available for public review upon written notice to 2600 Fresno Street, Fresno, CA 93721. The public review period during which the City will receive comments on the proposed Mitigated Negative Declaration will begin on May 5, 2023, and end on June 5, 2023. Comments should be in writing, if possible, and addressed to Briza Sholars at Provost & Pritchard, 455 W. Fir Ave, Clovis CA 93611, or at bsholars@ppeng.com

The site has been reviewed in accordance with Government Code Section 65962.5 and is not listed as a hazardous waste or materials site.

APPENDIX G/INITIAL STUDY FOR A MITIGATED NEGATIVE DECLARATION

Environmental Checklist Form for: Wellhead Treatment Improvements at Pump Station 102A

1.	Wellhead Treatment Improvements at Pump Station 102A
2.	Lead agency name and address: City of Fresno Department of Public Utilities 2600 Fresno Street Fresno, CA 93721
3.	Contact person and phone number: Anita Luera, Supervising Engineering Technician City of Fresno Department of Public Utilities/Utilities Planning & Engineering (559) 621-1625
4.	Project location: The Project is located in the City of Fresno, California, approximately 160 miles south of Sacramento and 100 miles north of Bakersfield (see Figure 1 and Figure 2). The proposed Project is located at the existing City of Fresno Pump Station 102 site, existing road right of way on N. Fowler Avenue and E. Grant Avenue, and at the proposed Pump Station 102A site which will be comprised of a portion of Assessor's Parcel Number 313-890-06S. The centroid of the Project site is 36° 44' 54.456" N, 119° 40' 44.472" W.
5.	Project sponsor's name and address: Anita Luera, Supervising Engineering Technician City of Fresno Department of Public Utilities/Utilities Planning & Engineering 2600 Fresno Street Fresno, CA 93721
6.	General & Community plan land use designation: Light Industrial
7.	Zoning: IL (Light Industrial)
8.	Description of project: Project Background and Purpose The existing well at pump station (PS) 102, located on the west side of North Fowler Avenue southwest of the Project site, was originally fitted with a pump and motor capable of producing 1,500 GPM. The well was rehabilitated in 2013 and the pump downsized to 1,200 GPM conforming to the City-set standard of approximately 40 feet of drawdown. The well has been offline since 2018 due to the presence of 1,2,3-Trichloropropane (1,2,3-TCP) in concentrations exceeding the drinking water Maximum Contaminant Limit (MCL). 1,2-Dibromo-3-chloropropane has also been detected in the groundwater at PS 102, however, concentrations have not exceeded the MCL.

Project Description

The City of Fresno, Department of Public Utilities proposes to construct wellhead treatment facilities to mitigate TCP concentrations at the existing public water supply well at PS 102. The treatment facilities will be constructed at the new PS 102A site, located less than 1,000 feet northeast of the existing PS 102.

The Project would construct the following:

- Tie-in to the existing PS 102 well head piping.
- Approximately 1,400 linear feet (LF) of 12-inch diameter raw water main between the existing PS 102 well site and the proposed treatment site, PS 102A (1,200 gpm flow rate).
- Develop a 175' by 160' triangular treatment site (PS 102A) with a masonry block wall and metal fencing, in addition to frontage improvements.
- Four (4) granulated activated carbon vessels that are approximately 12 feet wide and 15 feet tall.
- Approximately 450 LF of 18-inch diameter storm drainpipe.
- Drive approach, 20' wide x 75' long concrete driveway, and 20' wide metal drive access gate.
- PG&E transformer.
- 40' x 40' GAC vessel pit, comprised of a concrete pad approximately five feet below grade.
- Approximately 30' x 10' masonry block equipment building with chemical room containing sodium hypochlorite storage tank, chemical metering pump, and chlorine and nitrate analyzers.
- One (1) future generator (if needed).
- Future public water supply well with manifold piping (This well may be required in the future due to additional demand in the area or as a replacement of Well 102).
- Future deaeration tank and booster pump (if needed).
- Future manganese filters (if needed).

Operation and Maintenance

Due to the nature of the Project, operation and maintenance visits would occur as-needed or during scheduled visits.

The area of potential effect (APE) is approximately 3.2 acres which includes the existing well site, road right of way and vacant triangular site.

9.	Surrounding land uses and setting:			
	Planned Land Use	Existing Zoning	Existing Land Use	
North	Light Industrial	IL (Light Industrial)	Industrial	
East	Light Industrial	IL (Light Industrial)	Industrial	
South	Medium Density Residential	RS-5 (Residential, Single-Family, Medium Density)	Residential	
West	Medium Density Residential	RS-5 (Residential, Single-Family, Medium Density)	Residential	

10.	Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement): <ul style="list-style-type: none"> State Water Resources Control Board
11.	<p>Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code (PRC) Section 21080.3.1? If so, has consultation begun?</p> <p>The State requires lead agencies to consider the potential effects of proposed projects and consult with California Native American tribes during the local planning process for the purpose of protecting Traditional Tribal Cultural Resources through the California Environmental Quality Act (CEQA) Guidelines. Pursuant to PRC Section 21080.3.1, the lead agency shall begin consultation with the California Native American tribe that is traditionally and culturally affiliated with the geographical area of the proposed project. Such significant cultural resources are either sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe which is either on or eligible for inclusion in the California Historic Register or local historic register, or, the lead agency, at its discretion, and support by substantial evidence, choose to treat the resources as a Tribal Cultural Resources (PRC Section 21074(a)(1-2)). According to the most recent census data, California is home to 109 currently recognized Indian tribes. Tribes in California currently have nearly 100 separate reservations or Rancherias. Fresno County has a number of Rancherias such as Table Mountain Rancheria, Millerton Rancheria, Big Sandy Rancheria, Cold Springs Rancheria, and Squaw Valley Rancheria. These Rancherias are not located within the city limits.</p> <p>Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the</p>

	<p>potential for delay and conflict in the environmental review process. (See PRC Section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality.</p> <p>Currently, the Table Mountain Rancheria Tribe and the Dumna Wo Wah Tribe have requested to be notified pursuant to Assembly Bill 52 (AB 52). A certified letter was mailed to the above-mentioned tribes on December 19, 2022. The 30-day comment period ended on January 18, 2023. Neither tribe requested consultation.</p>
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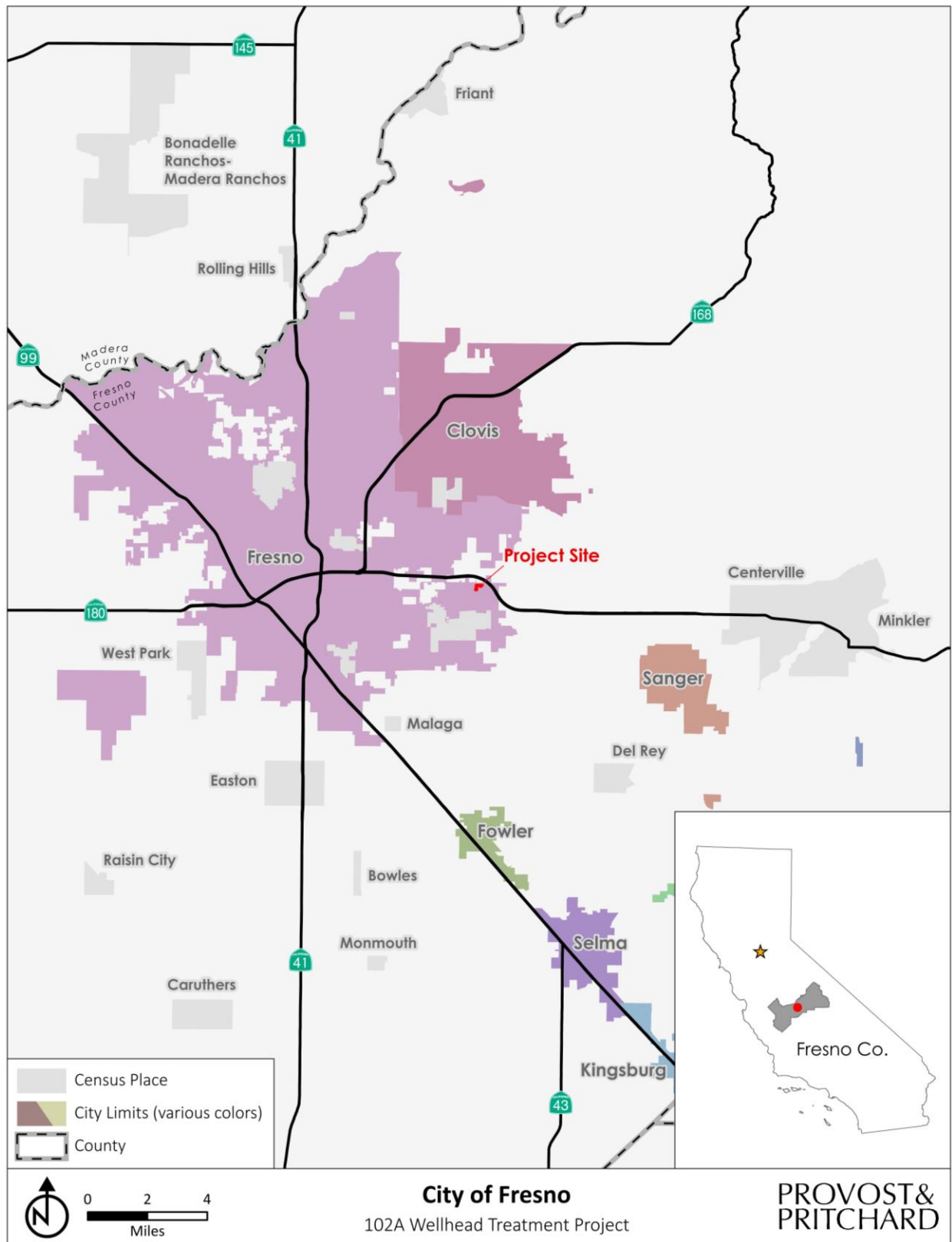


Figure 1: Regional Location Map

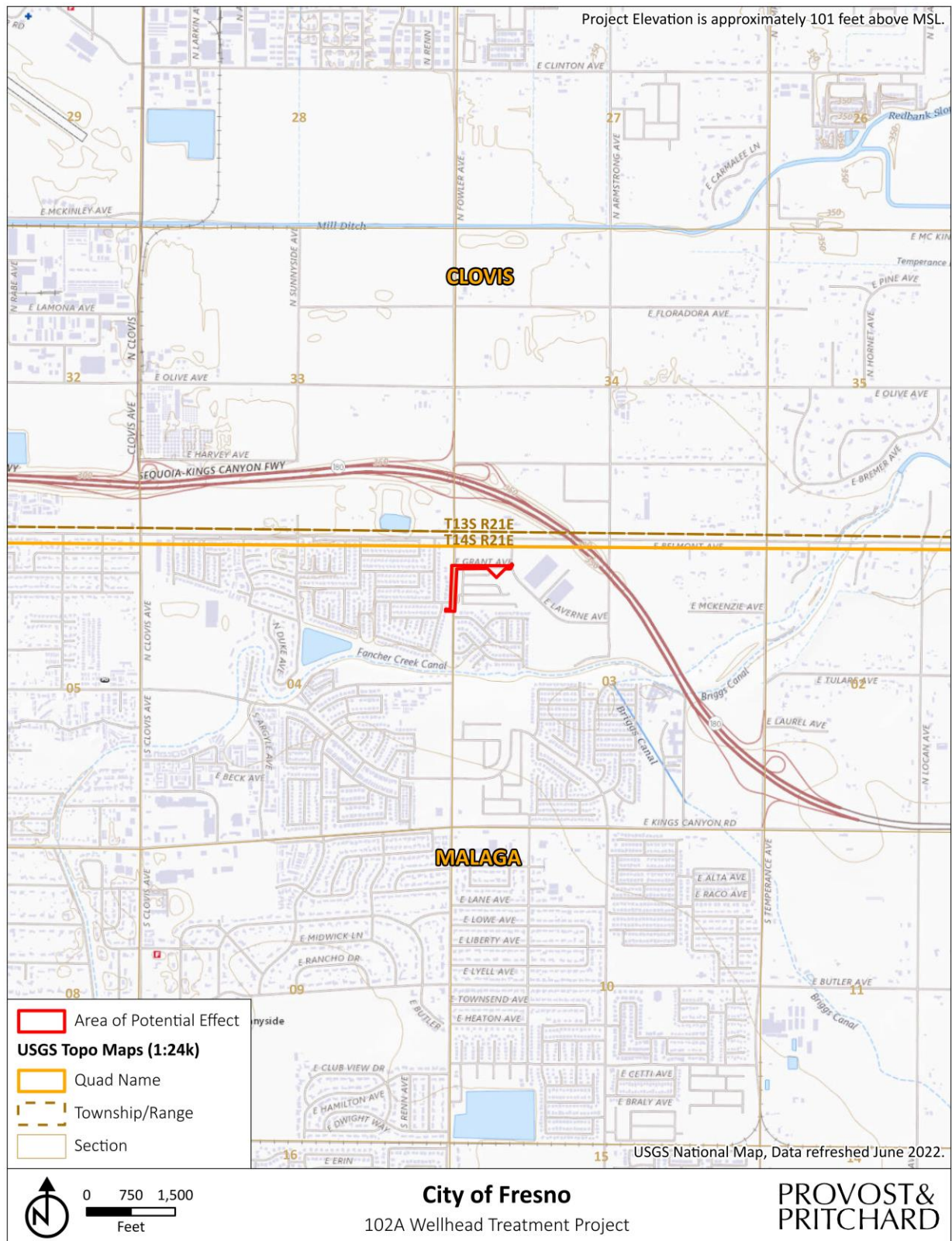


Figure 2: Topographic Map



Figure 3: Aerial Map of Project Site

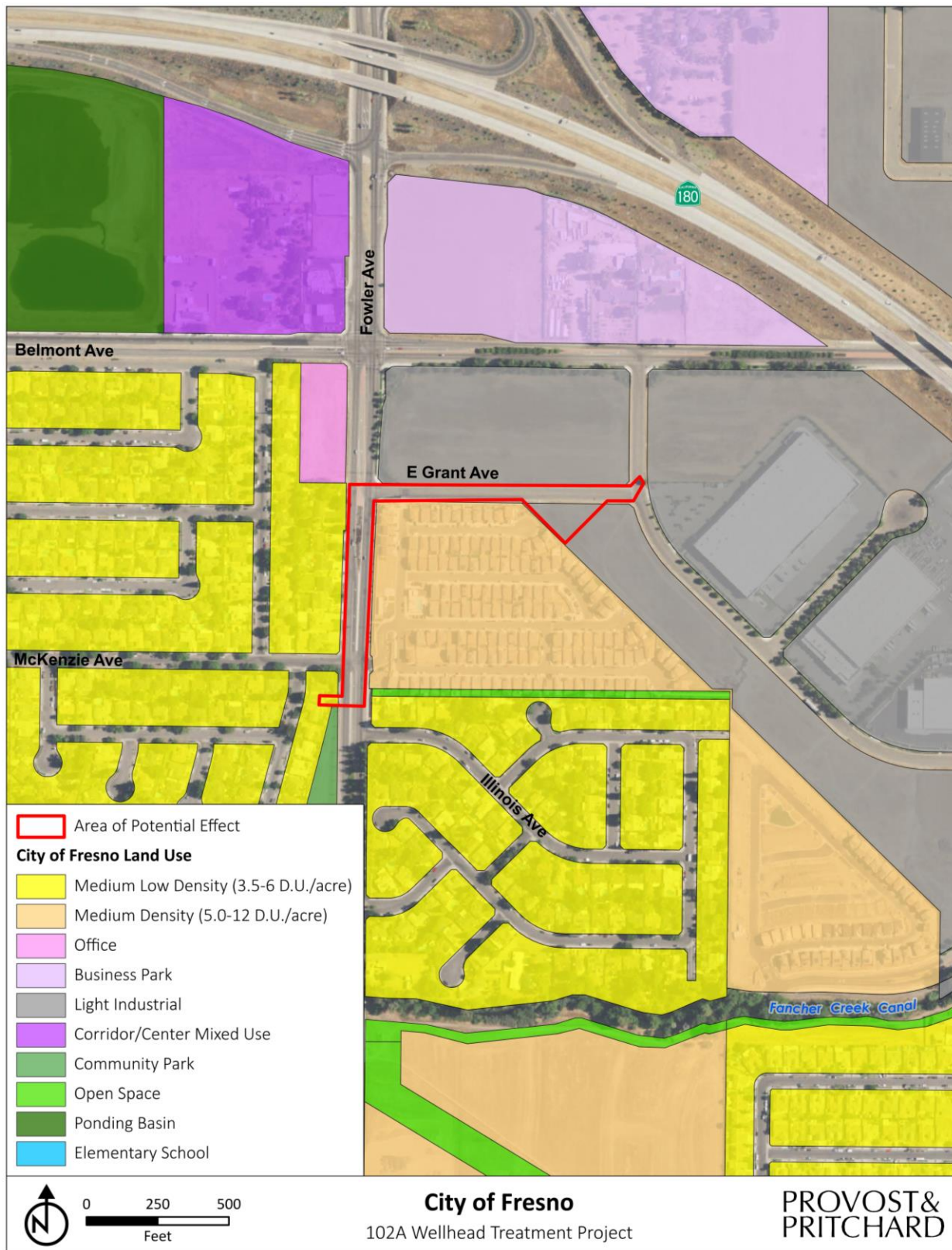


Figure 4: General Plan Land Use Designation Map

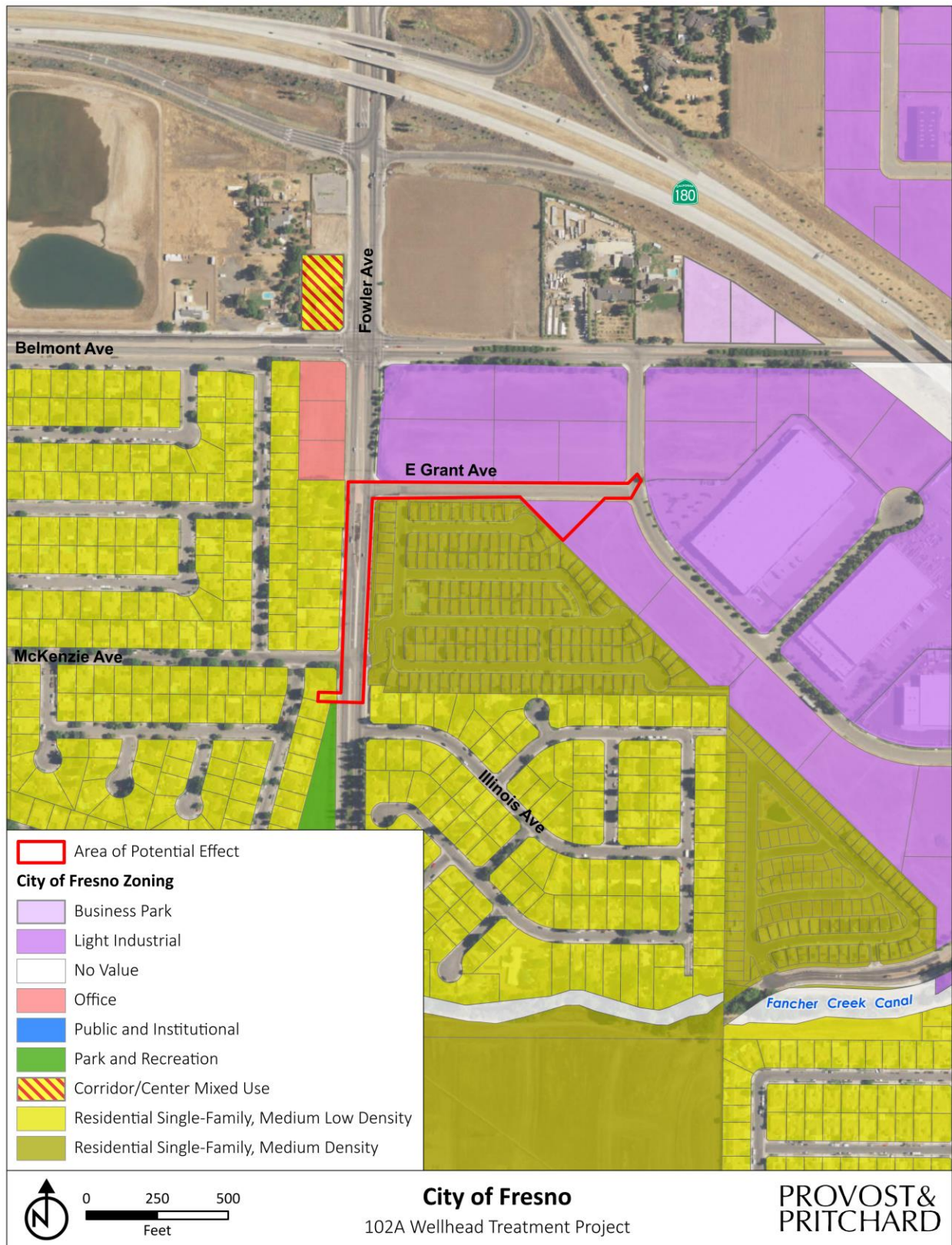


Figure 5: Zone District Map

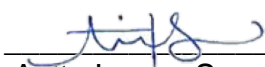
ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

DETERMINATION:(To be completed by the Lead Agency).On the basis of this initial evaluation:

—	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<u>X</u>	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.
—	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT (EIR) is required.
—	I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An EIR is required, but it must analyze only the effects that remain to be addressed.
—	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Anita Luera, Supervising Engineering Technician,

May 2, 2023

Date

1. For purposes of this Initial Study, the following answers have the corresponding meanings:
 - a. "No Impact" means the specific impact category does not apply to the project, or that the record sufficiently demonstrates that project specific factors or general standards applicable to the project will result in no impact for the threshold under consideration.
 - b. "Less Than Significant Impact" means there is an impact related to the threshold under consideration, but that impact is less than significant.
 - c. "Less Than Significant with Mitigation Incorporation" means there is a potentially significant impact related to the threshold under consideration, however, with the mitigation incorporated into the project, the impact is less than significant. For purposes of this Initial Study "mitigation incorporated into the project" means mitigation originally described in the GP PEIR and applied to an individual project, as well as mitigation developed specifically for an individual project.
 - d. "Potentially Significant Impact" means there is substantial evidence that an effect may be significant related to the threshold under consideration.
2. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
3. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
4. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
5. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from, "Earlier Analyses," as described in (6) below, may be cross-referenced).
6. Earlier analyses may be used where, pursuant to the tiering, Program EIR, or other

CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

- a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in the PEIR or another earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
7. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
 8. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
 9. The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any, to reduce the impact to less than significance.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS – Except as provided in PRC Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) In non-urbanized areas, substantially degrade the existing visual character or quality public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

Baseline Conditions

Scenic vistas are areas that are considered to be a viewpoint, either, naturally occurring or man-made, that would be aesthetically pleasing to the general public and as a result provide a benefit to the area. Such resources provide a visual benefit to those who have access to them. The Proposed treatment site is planned and zoned for Light Industrial (IH) uses and is currently vacant. The area surrounding the site also consists of tall light industrial uses, two- and three-story residential dwellings, and trees. There are no facade standards in the IL zone district, however landscape screening is required for the project site as it is adjacent to residential areas. The General Plan does not identify any scenic vistas within proximity of, nor viewable from or near, the Project site. Scenic resources identified in the General Plan include the Sierra Nevada mountain range, however views are obstructed due to trees, buildings, and often smog. The nearest designated State scenic highway is approximately 13.6 miles east-southeast of the Project site.

DISCUSSION

Would the project:

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

No Impact. There are no designated scenic vistas within proximity of the Project site. Construction of the Project components would be shorter than buildings in the vicinity and would not obstruct existing public views of the Sierra Nevada mountain range. 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?

No Impact. As described above in Baseline Conditions, there are no identified scenic resources, trees, rock outcroppings, or historic buildings on or near the subject site. There are no State scenic highways within the Project's vicinity. Therefore, the Project would have no impact on scenic resources such as trees and rock outcroppings, historic buildings, or state scenic highways.

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

Less than Significant Impact. The Project treatment site, 102A is located in the City of Fresno, an urbanized area, and is currently vacant. The Project would be required to comply with all applicable zoning regulations governing scenic value or quality. These would include vegetative screening from residential land uses. Therefore, there would be a less than significant impact.

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

Less than Significant Impact. The Project would result in the construction of above ground equipment, however this equipment would be painted and not polished chrome. Additionally, the 40x40 GAC vessel pit will be constructed approximately five feet below grade to help minimize the impact of the proposed height of the vessels. No exterior lights are proposed. Therefore, the Project would create less than significant impact on daytime or nighttime views in the area.

Mitigation Measures

No mitigation measures are warranted for Aesthetics.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
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?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
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))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Baseline Conditions

The Project site is designated Farmland of Local Importance in the California Department of Conservation's (DOC) 2018 Farmland Mapping and Monitoring Program. The Project site is zoned IL and is currently vacant. The Project site is not subject to a Williamson Act contract.

Applicable Regulations

Farmland Mapping and Monitoring Program (FMMP): The FMMP produces maps and statistical data used for analyzing impacts to California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. The maps are updated every two years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance.

The California DOC's 2018 FMMP is a non-regulatory program that produces "Important Farmland" maps and statistical data used for analyzing impacts on California's agricultural resources. The Important Farmland maps identify eight land use categories, five of which are agriculture related: prime farmland, farmland of statewide importance, unique farmland, farmland of local importance, and grazing land – rated according to soil quality and irrigation status. The land use category found on the Project site is summarized below:

- **Farmland of Local Importance (L):** All farmable lands within Fresno County that do not meet the definitions of Prime, Statewide, or Unique. This includes land that is or has been used for irrigated pasture, dryland farming, confined livestock and dairy, poultry facilities, aquaculture and grazing land. The Fresno County Board of Supervisors modified its Farmland of Local Importance definition in 2001, adding the confined animal agriculture component.

DISCUSSION

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. The Project treatment site, 102A is designated on the FMMP maps as Farmland of Local Importance. No portion of the Project site is designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. As such, the Project will not involve the conversion of Farmland to non-agricultural use. Therefore, there would be no impact.

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

No Impact. The Project treatment site is zoned for Light Industrial uses and is not subject to a Williamson Act contract. 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))?**

No Impact. The Project site is not within the vicinity of a forest 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)). According to the City of Fresno General Plan, the Planning Area does not include any land used or designated for timber, forest land, or timber harvesting industry. Therefore, the Project would not conflict with existing zoning for, or cause rezoning of forest land. There would be no impact.

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

No Impact. As discussed above, the Project is not within the vicinity of a forest 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)). Therefore, the Project would not result in the loss of forest land to non-forest use. There would be no impact.

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

No Impact. The Project would construct wellhead treatment facilities for TCP for an existing City groundwater well. The Project would not involve additional changes to the existing environment that would change the nature of or location such that it would

lead to conversion of farmlands, the nearest being west of Al Radka Park located over 0.5 miles northwest of the Project site, to non-agricultural uses. Furthermore, the Project would not convert forest lands to non-forest uses. Therefore, there would be no impact.

Mitigation Measure

Mitigation measures are not warranted for impacts related to Agriculture and Forestry Resources.

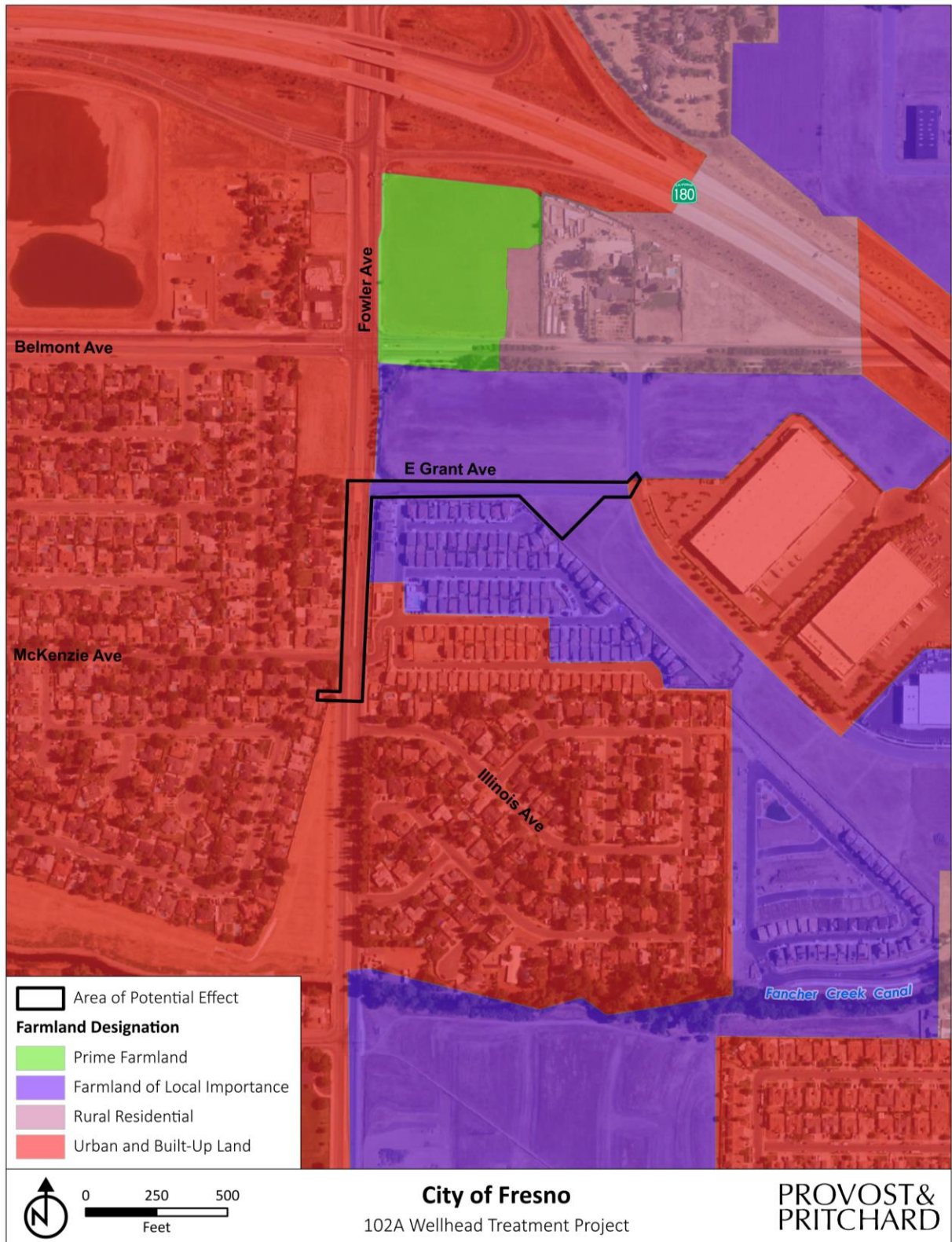


Figure 6: Farmland Designation Map

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan (e.g., by having potential emissions of regulated criterion pollutants which exceed the San Joaquin Valley Air Pollution Control Districts (SJVAPCD) adopted thresholds for these pollutants)?			X	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?		X		
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

Baseline Conditions

Regulatory Attainment Designations

Under the California Clean Air Act (CCAA), the California Air Resources Board (CARB) is required to designate areas of the State as attainment, nonattainment, or unclassified with respect to applicable standards. An “attainment” designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A “nonattainment” designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme

nonattainment, with extreme nonattainment being the most severe of the classifications. An “unclassified” designation signifies that the data does not support either an attainment or nonattainment designation. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The United States Environmental Protection Agency (EPA) designates areas for ozone, carbon monoxide (CO), and nitrogen dioxide (NO₂) as “does not meet the primary standards,” “cannot be classified,” or “better than national standards.” For sulfur dioxide (SO₂), areas are designated as “does not meet the primary standards,” “does not meet the secondary standards,” “cannot be classified,” or “better than national standards.” However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used. The EPA uses the same sub-categories for nonattainment status: serious, severe, and extreme. In 1991, the EPA assigned new nonattainment designations to areas that had previously been classified as Group I, II, or III for particulate matter less than 10 microns in diameter (PM₁₀) based on the likelihood that they would violate national PM₁₀ standards. All other areas are designated “unclassified.”

The State and national attainment status designations pertaining to the San Joaquin Valley Air Board (SJVAB) are summarized in **Table 1**. The SJVAB is currently designated as a nonattainment area with respect to the State PM₁₀ standard, ozone, and fine particulate matter 2.5 microns in size (PM_{2.5}) standards. The SJVAB is designated nonattainment for the National Ambient Air Quality Standards (NAAQS) 8-hour ozone and PM_{2.5} standards. On September 25, 2008, the EPA re-designated the San Joaquin Valley to attainment status for the PM₁₀ NAAQS and approved the PM₁₀ Maintenance Plan.

Table 1: Summary of Ambient Air Quality Standards and Attainment Designation

Pollutant	Averaging Time	California Standards*		National Standards*	
		Concentration*	Attainment Status	Primary	Attainment Status
O ₃	1-hour	0.09 parts per million (ppm)	Nonattainment / Severe	–	No Federal Standard
	8-hour	0.070 ppm	Nonattainment	0.075 ppm	Nonattainment (Extreme)**
PM ₁₀	Annual Arithmetic Mean (AAM)	20 microgram per cubic centimeter (µg/m ³)	Nonattainment	–	Attainment
	24-hour	50 µg/m ³		150 µg/m ³	
PM _{2.5}	AAM	12 µg/m ³	Nonattainment	12 µg/m ³	Nonattainment
	24-hour	No Standard		35 µg/m ³	
CO	1-hour	20 ppm	Attainment / Unclassified	35 ppm	Attainment / Unclassified
	8-hour	9 ppm		9 ppm	
	8-hour (Lake Tahoe)	6 ppm		–	
NO ₂	AAM	0.030 ppm	Attainment	53 ppb	Attainment / Unclassified
	1-hour	0.18 ppm		100 ppb	
SO ₂	AAM	–	Attainment	--	Attainment / Unclassified
	24-hour	0.04 ppm		--	
	3-hour	–		0.5 ppm	
	1-hour	0.25 ppm		75 ppb	

Pollutant	Averaging Time	California Standards*		National Standards*	
		Concentration*	Attainment Status	Primary	Attainment Status
Lead (Pb)	30-day Average	1.5 µg/m³	Attainment	–	No Designation / Classification
	Calendar Quarter	–		--	
	Rolling 3-Month Average	–		0.15 µg/m³	
Sulfates (SO ₄)	24-hour	25 µg/m³	Attainment	No Federal Standards	
Hydrogen Sulfide (H ₂ S)	1-hour	0.03 ppm (42 µg/m³)	Unclassified		
Vinyl Chloride (C ₂ H ₃ Cl)	24-hour	0.01 ppm (26 µg/m³)	Attainment		
Visibility-Reducing Particle Matter	8-hour	Extinction coefficient: 0.23/km-visibility of 10 miles or more due to particles when the relative humidity is less than 70%.	Unclassified		

* For more information on standards visit: <https://ww3.arb.ca.gov/research/aqqs/aqqs2.pdf>

** No Federal 1-hour standard. Reclassified extreme nonattainment for the Federal 8-hour standard.

***Secondary Standard

Source: CARB 2015; SJVAPCD 2015

Criteria Pollutants

California's ambient air monitoring network is one of the most extensive in the world, with more than 250 sites and 700 individual monitors measuring air pollutant levels across a diverse range of topography, meteorology, emissions, and air quality. Existing levels of ambient air quality and historical trends and projections in the Project are best documented by measurements made by these monitoring sites. The nearest monitoring site to the Project is located at the Fresno-Garland Monitoring Station at 3727 North First Street in Fresno, CA.

The site measures O₃, PM₁₀, and PM_{2.5}. Data presented in **Table 2** summarize monitoring data from the CARB's Aerometric Data Analysis and Management System for the Fresno-Garland Monitoring Station location published from 2019 to 2021.

Table 2: Ambient Air Quality Monitoring Summary

Air Pollutant	Averaging Time	Item	2019	2020	2021
Ozone	1-hour	Max 1 Hour (ppm)	0.105	0.119	0.112
		Days > State Standard (0.09 ppm)	2	10	6
	8-hour	Max 8 Hour (ppm)	.084	.099	.093
		Days > State Standard (0.070 ppm)	18	24	22
		Days > National Standard (0.070 ppm)	17	24	18
Inhalable coarse particles (PM ₁₀)	Annual	State Annual Average (µg/m ³)	35.9	48.4	41.6
	24-hour	National 24 Hour (µg/m ³)	328.2	296.4	281.0
		Days > State Standard (50 µg/m ³)	72	99	91
		Days > National Standard (150 µg/m ³)	3	14	1

Air Pollutant	Averaging Time	Item	2019	2020	2021
Fine particulate matter (PM _{2.5})	Annual	National Annual Average (µg/m ³)	11.1	19.1	15.6
	24-hour	24 Hour (µg/m ³)	51.3	163.2	99.9
		Days > National Standard (35 µg/m ³)	10	45	30

Thresholds

To assist local jurisdictions in the evaluation of air quality impacts, the San Joaquin Valley Air Pollution Control District (SJVAPCD) has published the Guide for Assessing and Mitigating Air Quality Impacts. This guidance document includes recommended thresholds of significance to be used for the evaluation of short-term construction, long-term operational, odor, toxic air contaminant, and cumulative air quality impacts. Accordingly, the SJVAPCD-recommended thresholds of significance are used to determine whether implementation of the proposed Project would result in a significant air quality impact. Projects that exceed these recommended thresholds would be considered to have a potentially significant impact to human health and welfare. The thresholds of significance are summarized, as follows:

Short-Term Emissions of Particulate Matter (PM₁₀): Construction impacts associated with the proposed Project would be considered significant if the feasible control measures for construction in compliance with Regulation VIII as listed in the SJVAPCD guidelines are not incorporated or implemented, or if project-generated emissions would exceed 15 tons per year (TPY).

Short-Term Emissions of Ozone Precursors (ROG and NO_x): Construction impacts associated with the proposed Project would be considered significant if the project generates emissions of Reactive Organic Gases (ROG) or nitrogen oxides (NO_x) that exceeds 10 TPY.

Long-Term Emissions of Particulate Matter (PM₁₀): Operational impacts associated with the proposed Project would be considered significant if the project generates emissions of PM₁₀ that exceed 15 TPY.

Long-Term Emissions of Ozone Precursors (ROG and NO_x): Operational impacts associated with the proposed Project would be considered significant if the project generates emissions of ROG or NO_x that exceeds 10 TPY.

Conflict with or Obstruct Implementation of Applicable Air Quality Plan: Due to the region's nonattainment status for ozone, PM_{2.5}, and PM₁₀, if the project-generated emissions of either of the ozone precursor pollutants (i.e., ROG and NO_x) or PM₁₀ would exceed the SJVAPCD's significance thresholds, then the project would be considered to conflict with the attainment plans. In addition, if the project would result in a change in land use and corresponding increases in vehicle miles traveled, the project may result in an increase in vehicle miles traveled that is unaccounted for in regional emissions inventories contained in regional air quality control plans.

Local Mobile-Source CO Concentrations: Local mobile source impacts associated with the proposed Project would be considered significant if the project contributes to CO concentrations at receptor locations in excess of the California Ambient Air Quality Standards (i.e. 9.0 ppm for 8 hours or 20 ppm for 1 hour).

Toxic Air Contaminants: Exposure to toxic air contaminants would be considered significant if the probability of contracting cancer for the Maximally Exposed Individual (i.e., maximum individual risk) would exceed 20 in 1 million or would result in a Hazard Index greater than 1.

Odors: Odor impacts associated with the proposed Project would be considered significant if the project has the potential to frequently expose members of the public to objectionable odors.

DISCUSSION

Would the project:

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

Less than Significant Impact. CEQA requires that certain projects be analyzed for consistency with the applicable air quality plan. For a project to be consistent with SJVAPCD air quality plans, the pollutants emitted from a project should not exceed the SJVAPCD emission thresholds or cause a significant impact on air quality. In addition, emission reductions achieved through implementation of offset requirements are a major component of the SJVAPCD air quality plans. As discussed below, construction of the Project would not result in the generation of criteria air pollutants that would exceed SJVAPCD thresholds of significance. Implementation of SJVAPCD Regulation VIII would further reduce construction dust impacts. Operational emissions associated with the project would not exceed SJVAPCD established significance thresholds for ROG, NO_x, CO, SO_x, PM₁₀, or PM_{2.5} emissions. Therefore, the Project would not conflict with or obstruct implementation of SJVAPCD air quality plans. 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 non-attainment under an applicable federal or state ambient air quality standard?

Less than Significant Impact. The Project would not exceed thresholds of significance established by the SJVAPCD, as shown in **Appendix A**. Therefore, the Project would not result in a significant impact.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact with Mitigation Incorporated. Sensitive receptors are defined as people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling units. The closest

sensitive receptors are residences adjacent to the Project site. Al Radka Park is located approximately 0.5 miles northwest of the Project site. Fancher Creek Elementary and Temperance-Kutner Elementary are located approximately 0.5 miles southwest and 0.66 miles northeast of the Project site, respectively. Construction of the Project would require the short-term use of diesel-powered equipment, typically cranes and a water well drill. Project emissions would not exceed thresholds of significance established by the SJVAPCD, as shown in **Appendix A**. The SJVAPCD has a Prioritization Screening calculator to determine the health impacts from Diesel Particulate Matter, however this calculator assumes a 70-year exposure period, while the Project is anticipated to be constructed over a six (6) month period, or approximately 0.8 percent of such period. Therefore, health risk was analyzed using CARB's HARP2 model. DPM emissions were assumed to be 100% of the Exhaust PM₁₀ emissions found in the CalEEMod model. As found in Table 3, with the incorporation of Mitigation Measure AIR-1 (the use of EPA Tier 4 Final off-road construction equipment), the Project would not have a significant impact on sensitive receptors.

Table 3 – Health Risk Calculations

	Cancer	Chronic	Acute
Project	37.3	2.23	0
Threshold	20	1	1
Project with AIR-1	0.001	0.005	

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

Less than Significant Impact. Heavy-duty equipment in the project area during construction could emit odors, primarily from the equipment exhaust. However, the construction activity would cease to occur after construction is completed. No other sources of objectionable odors have been identified for the Project.

The SJVAPCD addresses odor criteria within the GAMAQI. The District has not established a rule or standard regarding odor emissions, rather, the District has a nuisance rule, which states, "Any project with the potential to frequently expose members of the public to object able odors to be deemed to have a significant impact." The proposed uses are not anticipated to emit any objectionable odors. Therefore, objectionable odors affecting a substantial number of people would not occur as a result of the project. There would be a less than significant impact.

Mitigation Measures

- AIR-1: Diesel-powered off-road construction equipment shall be equipped with EPA Tier 4 Final engines or better.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				X
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
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?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	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?				X

Baseline Conditions

The Project site is located in the southern part of Fresno within the San Joaquin Valley. The Valley is bordered by the Sierra Nevada Mountain Range to the east, the Coast Range to the west, the Klamath Mountains and Cascade Range to the north, and the Transverse Ranges and Mojave Desert to the south.

Like most of California, the San Joaquin Valley experiences a Mediterranean climate. Warm, dry summers are followed by cool, moist winters. Summer temperatures often reach above 90 degrees Fahrenheit (°F), and the humidity is generally low. Winter temperatures are often below 60 (°F) during the day and rarely exceed 70 (°F). On average, the Central Valley receives approximately 10 inches of precipitation in the form of rainfall yearly, most of which occurs between October and March.

The area of potential effect (APE) is surrounded by residential neighborhoods to the south and west, and ruderal/industrial areas to the north and east and is approximately 3.2 acres. The alignments are proposed in the right-of-way of existing, paved roads, and the proposed treatment facility is located on a heavily disturbed, fallow parcel. The existing wellsite is surrounded by residential houses. Five trees are present in aerial imagery located within the Fowler Ave median and the entrance of the wellsite. California State Route 180 is located less than 0.2 miles northeast of the APE. The Fancher Creek Business Park is located directly east of the Project.

A watershed is the topographic region in which upland water collects and drains into a stream, river, or lake and can consist of many smaller subwatersheds. The APE lies within the Fancher Creek-Fancher Creek Canal watershed - Hydrologic Unit Code (HUC) 1803000903; and the Fancher Creek Canal subwatershed - HUC 180300090303.

The nearest surface water is the Fancher Creek Canal approximately 0.2 miles directly south of the APE. This canal is a channelized portion of Fancher Creek. The Fancher Creek-Fancher Creek Canal watershed includes Fancher Creek origins in the Sierra Nevada foothills, through to the valley floor where it is eventually channelized before crossing California State Route 180. The channelized Fancher Creek Canal includes upstream connections to Mud Creek as well as Hog Creek before they join Fancher Creek. The Fancher Creek Canal continues flowing west, eventually splitting into Braly

Canal, Central Canal, and Washington Canal west of Clovis Avenue. None of these canals appear to have a downstream connection to a known Waters of the United States, each terminating in the agricultural area east of California State Route 145.

Methodology

A thorough search of the California Department of Fish and Wildlife (CDFW), California Natural Diversity Database (CNDDDB), the United States Fish and Wildlife Service (USFWS), Information for Planning and Consultation (IPaC), iNaturalist, California Herps, and California Native Plant Society (CNPS) were reviewed for potential special status plant and animal species that may be found in and around the APE. The CNDDDB search included the United States Geologic Survey (USGS) areas encompassing the Malaga 7.5-minute quadrangle that contains the APE in its entirety, and for the eight surrounding quadrangles: Clovis, Fresno South, Fresno North, Conejo, Selma, Caruthers, Round Mountain, and Sanger. There are 20 special status animal species and 12 special status plant species with recorded observations within the 9-quad search. Special status species found within three miles of the APE, as well as those provided by the IPaC search, include 16 animal species and three plant species. These species, and their potential to occur within the Project area, are listed in **Table 4** and **Table 5** below. See also **Appendix B**.

Table 4: List of Special Status Animals with Potential to Occur Onsite and/or in the Vicinity

Species	Status	Habitat	Occurrence within Project Site
American badger (<i>Taxidea taxus</i>)	CSC	Grasslands, savannas, and mountain meadows near timberline are preferred. Most abundant in drier open spaces of shrub and grassland. Burrows in soil.	Absent. The APE is highly disturbed, consisting primarily of paved roads, and is therefore unsuitable for foraging or denning. The surrounding area is equally disturbed, consisting of residential neighborhoods and frequently disced parcels.
Burrowing Owl (<i>Athene cunicularia</i>)	CSC	Resides in open, dry annual or perennial grasslands, deserts, and scrublands with low growing vegetation. Nests underground in existing burrows created by mammals, most often ground squirrels.	Unlikely. The only potentially suitable habitat within and adjacent to the APE are the frequently disced, ruderal parcels. Due to frequent ground disturbance, ground squirrel burrows cannot persist, which are required by this species.
California Condor (<i>Gymnogyps californianus</i>)	FE, CE, CFP	Typically nests in cavities in canyon or cliff faces but has also been recorded nesting in giant sequoias in Tulare County. Requires vast expanse of open savannah, grassland, and/or foothill chaparral in mountain ranges of moderate altitude. Forages up to 100 miles from roost/nest site.	Absent. The APE is outside the current known range of this species.
California glossy snake (<i>Arizona elegans occidentalis</i>)	CSC	Inhabits arid scrub, rocky washes, grasslands, and chaparral. Prefers open areas with loose soil for easy burrowing.	Absent. The APE is outside the current known range for this species and suitable habitat for this species is absent.

Species	Status	Habitat	Occurrence within Project Site
California tiger salamander (<i>Ambystoma californiense</i>)	FT, CT, CWL	Requires vernal pools or seasonal ponds for breeding and small mammal burrows for aestivation. Generally found in grassland and oak savannah plant communities in central California from sea level to 1500 feet in elevation.	Absent. Habitats required by this species, including vernal pools, are absent from the APE and surrounding area. Upland habitat is less than marginal for this species within the APE due to frequent ground disturbance.
Coast horned lizard (<i>Phrynosoma blainvillii</i>)	CSC	Found in grasslands, coniferous forests, woodlands, and chaparral, primarily in open areas with patches of loose, sandy soil and low-lying vegetation in valleys, foothills, and semi-arid mountains. Frequently found near ant hills and along dirt roads in lowlands along sandy washes with scattered shrubs.	Absent. Due to frequent ground disturbance and paved roads, the APE is unsuitable for this species. The only regional recorded observation of this species is from a historical record dated 1893.
Crotch bumble bee (<i>Bombus crotchii</i>)	CCE	Occurs throughout coastal California, as well as east to the Sierra-Cascade crest, and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	Unlikely. Paved roads and frequent discing of the ruderal parcels likely prevents forage required by this species to persist. The only two regional recorded observations of this species occurred more than 100 years ago.
Delta smelt (<i>Hypomesus transpacificus</i>)	FT, CE	This pelagic and euryhaline species is Endemic to the Sacramento-San Joaquin River Delta, upstream through Contra Costa, Sacramento, San Joaquin, and Solano Counties.	Absent. Suitable perennial aquatic habitat for this species is absent from the APE and surrounding lands.
Fresno kangaroo rat (<i>Dipodomys nitratoides exilis</i>)	FE, CE	An inhabitant of alkali sinks open grassland environments in western Fresno County. Prefers bare, alkaline, clay-based soils subject to seasonal inundation with more friable soil mounds around shrubs and grasses.	Absent. The only regional recorded observation of this species is listed as "Extirpated" on CNDDB. Frequent ground disturbance and paved roads within the APE are unsuitable for this species.
Least Bell's Vireo (<i>Vireo bellii pusillus</i>)	FE, CE	This migratory species breeds in southern California. Breeding habitat consists of dense, low, shrubby, riparian vegetation in the vicinity of water or dry river bottoms. By the early 1980s, this species was extirpated from most of its historic range in California, including the Central Valley. This species now occurs exclusively along the coast of southern California (USFWS, 1998).	Absent. This species is considered extirpated from the Central valley.
Monarch Butterfly (<i>Danaus plexippus</i>)	FC	Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Larval host plants consist of milkweeds (<i>Asclepias</i> sp.). Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico.	Unlikely. Paved roads and frequent discing of the ruderal parcels likely prevents forage required by this species to persist. This species would not be expected to lay eggs within the AEP due to location within its migratory pathway.

Species	Status	Habitat	Occurrence within Project Site
Northern California legless lizard (<i>Anniella pulchra</i>)	CSC	Found primarily underground, burrowing in loose, sandy soil. Forages in loose soil and leaf litter during the day. Occasionally observed on the surface at dusk and night.	Absent. Paved roads and frequent ground disturbance within the APE are unsuitable for this species. The only regional recorded observation of this species occurred before 1900.
San Joaquin kit fox (<i>Vulpes macrotis mutica</i>)	FE, CT	Underground dens with multiple entrances in alkali sink, valley grassland, and woodland in valleys and adjacent foothills.	Unlikely. The highly disturbed habitats within the APE are less than marginal for this species. The only known population of this species in Fresno County is located more than 40 miles northwest of the APE.
Swainson's Hawk (<i>Buteo swainsoni</i>)	CT	Nests in large trees in open areas adjacent to grasslands, grain or alfalfa fields, or livestock pastures suitable for supporting rodent populations.	Unlikely. The highly disturbed urban and residential areas in the surrounding region are less than marginal for this species. The nearest contemporary recorded observation of this species occurred approximately 6.5 miles southwest of the APE in annual grassland and pasture habitat.
Vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	FT	Occupies vernal pools, clear to tea-colored water, in grass or mud-bottomed swales, and basalt depression pools.	Absent. Suitable vernal pool habitat for this species is absent from the APE and surrounding lands. The APE is subject to frequent ground disturbance and therefore generally unsuitable for this species.
Western Yellow-billed Cuckoo (<i>Coccyzus americanus occidentalis</i>)	FT, CE	Suitable nesting habitat in California includes dense riparian willow-cottonwood and mesquite habitats along a perennial river. Once a common breeding species in riparian habitats of lowland California, this species currently breeds consistently in only two locations in the State: along the Sacramento and South Fork Kern Rivers.	Absent. This species is considered extirpated from the region. The only two regionally recorded observations of this species occurred more than 100 years ago.

Table 5: List of Special Status Animals with Potential to Occur Onsite and/or in the Vicinity

Species	Status	Habitat	Occurrence within Project Site
California jewelflower (<i>Caulanthus californicus</i>)	FE, CE, CNPS 1B	Found in the San Joaquin Valley and Western Transverse Ranges in sandy soils. Occurs on flats and slopes, generally in non-alkaline grassland at elevations between 230 feet and 6100 feet. Blooms February–April.	Absent. The disturbed habitats of the APE are unsuitable for this species. The only regional recorded observation of this species lists it as “Extirpated” from the region.
California satintail (<i>Imperata brevifolia</i>)	CNPS 2B	Although this facultative species is equally likely to occur in wetlands and non-wetlands, it is often found in wet springs, meadows, streambanks, and floodplains at elevations below 1600 feet. Blooms September – May.	Absent. Habitats required by this species are absent from the APE. The only regional recorded observation of this species occurred more than 100 years ago.
Madera leptosiphon (<i>Leptosiphon serrulatus</i>)	CNPS 1B	Found in openings in foothill woodland, often yellow-pine forest, and chaparral at elevations between 1000 feet and 4300 feet. Blooms April – May.	Absent. The APE is outside the current known elevational range of this species. Habitats required by this species are absent from the APE.

Explanation of Occurrence Designations and Status Codes

Unlikely: Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient.
Absent: Species not observed on the site, and precluded from occurring there due to absence of suitable habitat.

STATUS CODES

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CT	California Threatened
FPE	Federally Endangered (Proposed)	CCT	California Threatened (Candidate)
FPT	Federally Threatened (Proposed)	CFP	California Fully Protected
FC	Federal Candidate	CSC	California Species of Concern
		CWL	California Watch List
		CCE	California Endangered (Candidate)
		CR	California Rare

CNPS LISTING

1A	Plants Presumed Extinct in California	2A	Plants Presumed Extirpated in California, but more common elsewhere.
1B	Plants Rare, Threatened, or Endangered in California and elsewhere.	2B	Plants Rare, Threatened, or Endangered in California, but more common elsewhere.

Threatened and Endangered Species

Permits may be required from the USFWS and/or CDFW if activities associated with a project have the potential to result in the “take” of a species listed as threatened or endangered under the federal and/or State Endangered Species Acts. Take is defined by the State of California as “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill” (California Fish and Game Code, Section 86). Take is more broadly defined by the federal Endangered Species Act to include “harm” (16 United States Code (USC), Section 1532 (19), 50 Code of Federal Regulation, Section 17.3). CDFW and USFWS are responsible agencies under CEQA and the National Environmental Policy Act (NEPA). Both agencies review CEQA and NEPA documents in order to determine the adequacy of their treatment of endangered species issues and to make project-specific recommendations for their conservation.

Designated Critical Habitat

When species are listed as threatened or endangered, the USFWS often designates areas of “Critical Habitat” as defined by Section 3(5)(A) of the federal Endangered Species Act (ESA). Critical Habitat is a term defined in the ESA as a specific geographic area that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical Habitat is a tool that supports the continued conservation of imperiled species by guiding cooperation with the federal government. Designations only affect federal agency actions or federally funded or permitted activities. Critical Habitat does not prevent activities that occur within the designated area. Only activities that involve a federal permit, license, or funding and are likely to destroy or adversely modify Critical Habitat will be affected.

Migratory Birds

The Federal Migratory Bird Treaty Act (MBTA) (16 USC 703-712) prohibits killing, possessing, or trading in any bird species covered in one of four international conventions to which the United States is a party, except in accordance with regulations prescribed by the Secretary of the Interior. The name of the act is misleading, as it covers nearly all bird's native to the United States, even those that are non-migratory. The MBTA encompasses whole birds, parts of birds, nests, and eggs. Additionally, California Fish and Game Code makes it unlawful to take or possess any non-game bird covered by the MBTA (Section 3513), as well as any other native non-game bird (Section 3800).

Birds of Prey

Birds of prey are protected in California under provisions of Fish and Game Code (Section 3503.5), which states that it is unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks and eagles) or Strigiformes (owls), as well as their nests and eggs. The Bald Eagle and Golden Eagle are afforded additional protection under the federal Bald and Golden Eagle Protection Act (16 USC 668), which makes it unlawful to kill birds or their eggs.

Nesting Birds

In California, protection is afforded to the nests and eggs of all birds. California Fish and Game Code (Section 3503) states that it is “unlawful to take, possess, or needlessly destroy the nest or eggs of any bird except as otherwise provided by this code or any regulation adopted pursuant thereto”. Breeding-season disturbance that causes nest abandonment and/or loss of reproductive effort is considered a form of “take” by the CDFW.

Jurisdictional Waterways and Associated Riparian Habitat

CDFW has jurisdiction over the bed and bank of natural drainages and lakes according to provisions of Section 1601 and 1602 of the California Fish and Game Code. Activities that may substantially modify such waters through the diversion or obstruction of their natural flow, change or use of any material from their bed or bank, or the deposition of

debris require a notification of a Lake or Streambed Alteration. If CDFW determines that the activity may adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement will be prepared. Such an agreement typically stipulates those certain measures will be implemented to protect the habitat values of the lake or drainage in question.

Section 404 of the federal Clean Water Act regulates the dredge or fill material into waters of the United States. Drainage channels and adjacent wetlands may be considered “waters of the United States” or “jurisdictional waters” subject to the jurisdiction of the USACE. The extent of jurisdiction has been defined in the Code of Federal Regulations and clarified in federal courts.

The State of California also asserts jurisdiction over drainages, wetlands, and other aquatic features. The limits of State jurisdiction differ from those of the USACE. Under the Porter-Cologne Water Quality Control Act of 1969, the State Water Resources Control Board (SWRCB) and nine local RWQCBs have regulatory authority over activities affecting water quality in all surface waters of the State, consisting of rivers, streams, lakes, and wetlands of the State. The RWQCB for a given region regulates discharges of fill or pollutants into waters of the State through the issuance of various permits and orders. Discharges into waters of the State that are also waters of the United States require a Section 401 Water Quality Certification from the RWQCB as a prerequisite to obtaining certain federal permits.

DISCUSSION

Would the project:

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

Less than Significant Impact with Mitigation Incorporated. The APE does provide marginal nesting habitat for multiple avian species, including ground nesting birds such as Killdeer (*Charadrius vociferus*). Birds nesting within the APE during construction have the potential to be injured or killed by Project-related activities. In addition to the direct “take” of nesting birds, nesting birds within the APE or adjacent areas could be disturbed by Project-related activities resulting in nest abandonment. Projects that adversely affect the nesting success of raptors and migratory birds or result in the mortality of individual birds are considered a violation of State and federal laws.

Mitigation measures BIO-1, BIO-2, and BIO-3 identified below have been identified to protect these species.

Project-Related Impacts to Special Status Animal Species Absent From, or Unlikely to Occur on, the Project Site

Of the 16 regionally occurring special status animal species, all were found to be absent or unlikely to occur within the APE due to past or ongoing disturbance and/or the absence of suitable habitat or resources. Existing conditions include traffic and noise from Fowler Avenue, high human activity from the residential neighborhood, and an almost complete void of habitat or resources within the Project site. Areas containing herbaceous vegetation appear to be frequently disced and trees within the APE are likely ornamental. It is therefore anticipated that there would be no impacts to special status animal species or their required habitats. **(Appendix B)**

Project-Related Impacts to Special Status Plant Species Absent From, or Unlikely to Occur on, the Project Site

Of the three regionally occurring special status plant species, all were found to be absent within the APE due to unsuitable habitat, known range, elevation, and soil type. The only vegetation occurring within the APE appears to include ornamental trees and shrubs and non-native, maintained grass patches. The majority of the site is paved and/or developed, and high traffic, industrial processes, and human activity within the APE are the daily norm. It is highly unlikely that special status plant species would currently exist within the APE due to the highly disturbed environment and lack of habitat. Therefore, it is anticipated that the project would result in no impact to special status plant species. **(Appendix B)**

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

No Impact. No riparian habitats or other sensitive natural communities have been identified within or near the APE. The Project site is located within a highly disturbed and developed area and road right of way is nearly completely paved. The Project area and general vicinity consist of paved roads, residential housing, and ruderal/industrial lots. Any habitat historically located within or near the APE has been eliminated and/or developed. Therefore, the project would have no adverse effect on any riparian habitat or other sensitive natural community.

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. The Project site does not contain any federally protected wetlands or other waters of the United States as defined by Section 404 of the Clean Water Act. The nearest surface water is the Fancher Creek Canal approximately 0.2 miles directly south of the APE. This canal is a channelized portion of Fancher Creek. The Fancher Creek Canal flows across the City of Fresno, eventually splitting into Braly Canal, Central Canal, and Washington Canal west of Clovis Avenue. None of these canals appear to have a downstream connection to a known Waters of the United States, each terminating in the agricultural area east of California State Route 145. Thus, the Project would not have any adverse effects on federally protected wetlands or waters

of the United States and 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?

No Impact. The APE is in the southeast quadrant of the City of Fresno within a highly disturbed area south of State Route 180. There are no waterways within the APE for migratory fish, nor is there habitat for the existence of native wildlife nursery sites. According to aerial imagery, the Fancher Creek Canal contains several patches of riparian vegetation which could act as cover for wildlife species utilizing the canal to disperse through the urban landscape. The canal, however, is separated from the APE by a 0.2-mile portion of a 4-lane road (Fowler Avenue), and a large, ruderal plot of land that appears to be frequently disced. No features within the APE would be expected to serve as a wildlife movement corridor. Therefore, the Project would not contribute any impacts to wildlife species or habitat that aren't already present and would have no impact on the movement of wildlife species or established corridors.

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

No Impact. The Project is consistent with the goals and policies of the City of Fresno General Plan. There are no wetlands or natural watercourses within the APE, and nearly the entire area is paved, therefore native wildlife habitat is non-existent. The Project is consistent with the resource objectives and policies contained within the City of Fresno General Plan: Parks, Open Space, and Schools Element that address protection of natural resources. Therefore, there would be no impact with local policies or ordinances.

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. The Project is not within a designated Habitat Conservation Plan, Natural Conservation Plan, or any other State or local habitat conservation plan. There would be no impact.

Mitigation Measures

BIO-1: The Project's construction activities will occur, if feasible, between September 16 and January 31 (outside of nesting bird season) in an effort to avoid impacts to nesting birds.

BIO-2: If activities must occur within nesting bird season (February 1 to September 15), a qualified biologist will conduct a pre-construction survey for all nesting birds within the Project boundary and an additional 50 feet surrounding the Project, no more than 7 days prior to the start of construction. All raptor nests would be considered "active" upon the nest-building stage.

BIO-3: On discovery of any active nests or breeding colonies near work areas, the biologist will determine appropriate construction setback distances based on applicable CDFW and/or USFWS guidelines and/or the biology of the species in question. Construction buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged and are no longer dependent on the nest.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

Baseline Conditions

Cultural Records Search

A records search from the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS), located at California State University, Bakersfield (CSUB) was conducted in November 2022. The SSJVIC records search includes a review of all recorded archaeological and built-environment resources as well as a review of cultural resource reports on file. In addition, the California Points of Historical Interest, the California Historical Landmarks, the California Register of Historical Resources, the National Register of Historic Places, and the California State Built Environment Resources Directory listings were reviewed for the above referenced APE and an additional ¼-mile radius. Due to the sensitive nature of cultural resources, archaeological site locations are not released. (**Appendix C**).

Additional sources included the State Office of Historic Preservation Historic Properties Directory, Archaeological Determinations of Eligibility, and the California Inventory of Historic Resources.

According to the information in their files, there are no recorded resources within the Project area, and it is not known if any exist there. There are ten recorded resources in the one-half mile radius: P-10-003038, 003039, 004415, 006089, 006091, 006100, 007232, 007233, 007234, and 007235. These resources consist of four historic era buildings, an historic era bridge, an historic era row of palm trees, an historic era trash scatter and well, and three prehistoric era ground stones.

Resource P-10-004415, Bridge #42-65, has been given a National Register status code of 3S, indicating that this resource appears eligible for listing in the National Register of Historic Places as an individual property through survey evaluation. There are no other recorded cultural resources within the Project area that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks. **(Appendix C)**

Sacred Lands File Search

The Native American Heritage Commission (NAHC) in Sacramento was also contacted in November 2022. They were provided with a brief description of the Project and a map showing its location and requested that the NAHC perform a search of the Sacred Lands File to determine if any Native American resources have been recorded in the immediate APE. The NAHC identifies, catalogs, and protects Native American cultural resources -- ancient places of special religious or social significance to Native Americans and known ancient graves and cemeteries of Native Americans on private and public lands in California. The NAHC is also charged with ensuring California Native American tribes' accessibility to ancient Native American cultural resources on public lands, overseeing the treatment and disposition of inadvertently discovered Native American human remains and burial items, and administering the California Native American Graves Protection and Repatriation Act (CalNAGPRA), among many other powers and duties. NAHC provide a current list of Native American Tribal contacts to notify of the project. **(Appendix C)**

DISCUSSION

Would the project:

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

Less than Significant Impact. As stated above, a Cultural Resources Records Search dated November 15 2022 was received from the SSJVIC at CSUB. According to the information in their files, there are no recorded resources within the Project area, and it is not known if any exist there.

The CHRIS records search also confirmed there have been no previous cultural resource studies conducted within the Project area. There have been five cultural resource studies conducted within the one-half mile radius. The search also confirmed the absence of identified cultural resources within the Project APE. The search also indicated that there were ten cultural resources with the half-mile radius. These

resources consist of four historic era buildings, an historic era bridge, an historic era row of palm trees, an historic era trash scatter and well, and three prehistoric era ground stones. The proposed Project construction activities as they stand today, would not impact any of these resources.

The majority of the Project is located on land that has been previously disturbed and currently developed and improved. Due to the Project site having been previously disturbed, it is unlikely that the Project would cause a substantial adverse change in the significance of a historical or archaeological resource. The Project would be required to follow all applicable federal, State, and local requirements set for archaeologic resource recovery. In the unlikely event that an archaeological resource is uncovered during the construction of this Project, all construction activities would cease, and a qualified archaeologist would be contacted to assess the uncovered resource. Any impacts would be considered less than significant. (Appendix C)

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

Less than Significant Impact with Mitigation Incorporated. As stated above, a Cultural Resources Records Search dated November 15 2022 was received from the SSJVIC at CSUB. According to the information in their files, there are no recorded resources within the Project area, and it is not known if any exist there. There are ten recorded resources in the one-half mile radius that consist of four historic era buildings, an historic era bridge, an historic era row of palm trees, an historic era trash scatter and well, and three prehistoric era ground stones. The proposed Project construction activities as they stand today, would not impact any of these resources.

The majority of the Project is located on land that has been previously disturbed and currently developed and improved. Due to the Project site having been previously disturbed, it is unlikely that the Project would cause a substantial adverse change in the significance of a historical or archaeological resource. The Project would be required to follow all applicable federal, State, and local requirements set for archaeologic resource recovery. In accordance with Mitigation Measure CUL-1, in the unlikely event that an archaeological resource is uncovered during the construction of this Project, all construction activities would cease, and a qualified archaeologist would be contacted to assess the uncovered resource. Any impacts after implementation of mitigation measure CUL-1 would be considered less than significant. (Appendix C)

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

Less than Significant Impact with Mitigation Incorporated. There is no evidence or record that the Project has the potential to be an unknown burial site, or the site of buried human remains. Although no formal cemeteries or other places of human internment are anticipated to exist on the Project site due to its existing disturbed status, in accordance with Health and Safety Code Section 7050.5 and Public Resource Code Section 5097.98 and mitigation measure CUL-2, if human remains

are uncovered, construction activities would cease, and the Fresno County Coroner would be contacted. The Project would adhere to all applicable federal, State, and local requirements regarding the discovery of human remains due to Project activities. Any impacts after implementation of mitigation would be less than significant.

Mitigation Measures

- CUL-1: If previously unknown resources are encountered before or during grading activities, construction shall stop in the immediate vicinity of the find and a qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and the City's Historic Preservation Ordinance. If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.
- CUL-2: In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

Baseline Conditions

Pacific Gas and Electric (PG&E) supplies electricity and natural gas to the Project area. PG&E obtains its power through hydroelectric, thermal (natural gas), wind, and solar generation of purchases. PG&E continually produces new electric generation and natural gas sources and implements continuous improvements to gas lines throughput its service areas to ensure the provision of services to users.

DISCUSSION

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?**

Less than Significant Impact. The Project would comply with Building Energy Efficiency Standards included in Titles 20 and 24 of the California Code of Regulations, which requires new development to incorporate energy efficiency standards, including include energy-efficient lighting and motor requirements, into Project designs.

Current regulations for construction equipment, heavy-duty equipment, and earthmoving equipment used in construction contributes to reductions in energy as well as reduction in pollutant emissions. California implemented its In-Use Off-Road Diesel Fueled Fleets regulations (off-road regulation) which applies to all self-propelled off-road diesel vehicles 25 horsepower or greater and most two-engine vehicles. The Small Off-Road Engines program was implemented by California to apply to categories of outdoor powered equipment and specialty vehicles often used in construction.

Through compliance with energy reduction standards and regulations aimed at reducing consumption of transportation related energy consumption, as well as the energy provider's energy reduction programs, the Project will have less than significant impacts related to energy usage during Project operations and construction and its impacts related to wasteful, inefficient, or unnecessary energy consumption overall, would be less than significant.

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

Less than Significant Impact. The Project would be required to comply with all applicable regulations, including the building and lighting energy efficiency requirements of Title 24, Part 6 (California Energy Code), and the appliance energy efficient requirements of Title 20 for electrical motors, therefore the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and would be less than significant.

Mitigation Measures

Mitigation measures are not warranted for impacts related to Energy.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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:			X	
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Result in substantial soil erosion or the loss of topsoil?				X
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X
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?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

Baseline Conditions

Geology and Soils

The Project site is located in the City of Fresno. The City of Fresno is located along the eastern section of the southern San Joaquin Valley portion of the Great Valley Geomorphic Province of California. The San Joaquin Valley is bordered to the north by the Sacramento Valley portion of the Great Valley, to the east by the Sierra Nevada, to the west by the Coast Ranges, and to the south by the Transverse Ranges. The San Joaquin sedimentary basin is separated from the Sacramento basin to the north by the buried Stockton arch and associated Stockton Fault.

Faults and Seismicity

Most of Fresno is situated within an area of relatively low seismic activity and is not located within a known active earthquake fault zone. The Project is not located within an Alquist-Priolo Earthquake Fault Zone and there are no known active faults within the City of Fresno. The nearest major fault is the San Andreas Fault, located approximately 69

miles west of the Project site. The San Andreas fault is the dominant active tectonic feature of the Coast Ranges and represents the boundary of the North American and Pacific plates. The San Joaquin Fault is located approximately 63 miles west of the Project site.

Liquefaction

The potential for liquefaction, which is the loss of soil strength due to seismic forces, is dependent on soil types and density, the groundwater table, and the duration and intensity of ground shaking. Although no specific liquefaction hazard areas have been identified in Fresno County, this potential is recognized throughout the San Joaquin Valley where unconsolidated sediments and a high-water table coincide. Soil types along the Valley floor are not generally conducive to liquefaction because they are generally too coarse. Furthermore, the average depth to groundwater within the City of Fresno is approximately 85 to 95 feet which also minimizes liquefaction potential. According to the California DOC's Earthquake Zones of Required Investigation map, the Project site is not located in an area identified to be at a risk of liquefaction.

Soil Subsidence

Subsidence occurs when a large land area settles due to over-saturation or extensive withdrawal of groundwater, oil, or natural gas. These areas are typically composed of open-textured soils, high in silt or clay content, which become saturated. Although some areas in Fresno County have experienced subsidence due to groundwater overdraft, the City of Fresno's elevation has remained relatively unchanged. The Project site's underlying soil consists wholly of Atwater sandy loam. Soils onsite represent a low risk of subsidence.

Dam and Levee Failure

Hundreds of dams and reservoirs have been built in California for water supply, flood control, hydroelectric power, and recreational uses. The storage capacity of these dams varies across the State from large reservoirs with capacities exceeding millions of acre-feet (AF) to small reservoirs with capacities from hundreds to thousands of AF. Depending on the season, water from these reservoirs is released into the river system of the State and eventually reaches the Pacific Ocean. The San Joaquin River, located at the north edge of the City of Fresno, is the primary river in the vicinity. The San Joaquin River is impounded by a dam which forms the 520-thousand acre-foot Lake Millerton, approximately 21 miles north-northeast of the Project site. If Friant dam were to fail, a large portion of Fresno County, including the City of Fresno, would be inundated with water.

DISCUSSION

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 Division of Mines and Geology Special Publication 42.**

Less than Significant Impact. As described in Baseline Conditions above, the Project is not located on or near a known earthquake fault and would not directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving the rupture of a known earthquake fault. Impacts would be less than significant.

- ii. **Strong seismic ground shaking?**

Less than Significant Impact. Although there are no known earthquake faults within the vicinity of the Project, and strong ground shaking is unlikely, construction of the proposed expansion structures would comply with the most recent seismic standards as set forth in the California Building Standards Code. Compliance with these standards would ensure potential impacts related to strong seismic ground shaking would be less than significant.

- iii. **Seismic-related ground failure, including liquefaction?**

Less than Significant Impact. Like most of California, the Project site is located in an area that does experience seismic related activity to varying degrees. However, the Project site is not located in the vicinity of a fault zone or an identified area that would result in substantial seismic related ground failure that would result in adverse effects to people or the environment. Impacts would be less than significant.

- iv. **Landslides?**

Less than Significant Impact. Landslides usually occur in locations with steep slopes and unstable soils. The Project is located on the Valley floor where no major geologic landforms exist, and the topography is essentially flat and level. Therefore, the Project site has minimal-to-no landslide susceptibility, and there will be a less than significant impact.

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

Less than Significant Impact. The Project treatment site is vacant and relatively flat, and thus only minor grading activities would be required to ensure necessary drainage occurs. The Project would construct impermeable surfaces, which would be required to drain through approved drainage systems. There would be a less than significant impact.

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

Less than Significant Impact. The proposed Project is not located in an area that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. The Department of Conservation has not identified the Project site as being in an area that would be at risk of lateral spreading, and liquefaction or collapse. In addition, the United States Geologic Survey has not identified the Project area as a location that is likely to experience soil subsidence. Impacts would be less than significant.

- 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. The proposed Project would not be located on expansive soil creating a substantial direct or indirect risk to life or property. The Project would be located on land that is comprised of 100 percent Atwater sandy loam according to an NRCS Web Soil Survey on the Project site. Hanford fine sandy loam soil is expansive nor made of clay. 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?**

Less than Significant Impact. The Project treatment site is currently connected to the City's sewer system and would continue to be after implementation of the Project. Septic installation or alternative wastewater disposal systems are not necessary for the Project. Impacts would be less than significant.

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

Less than Significant Impact. The Project would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature. Therefore, impacts would be less than significant.

Mitigation Measures

Mitigation measures are not warranted for impacts related to Geology and Soils.

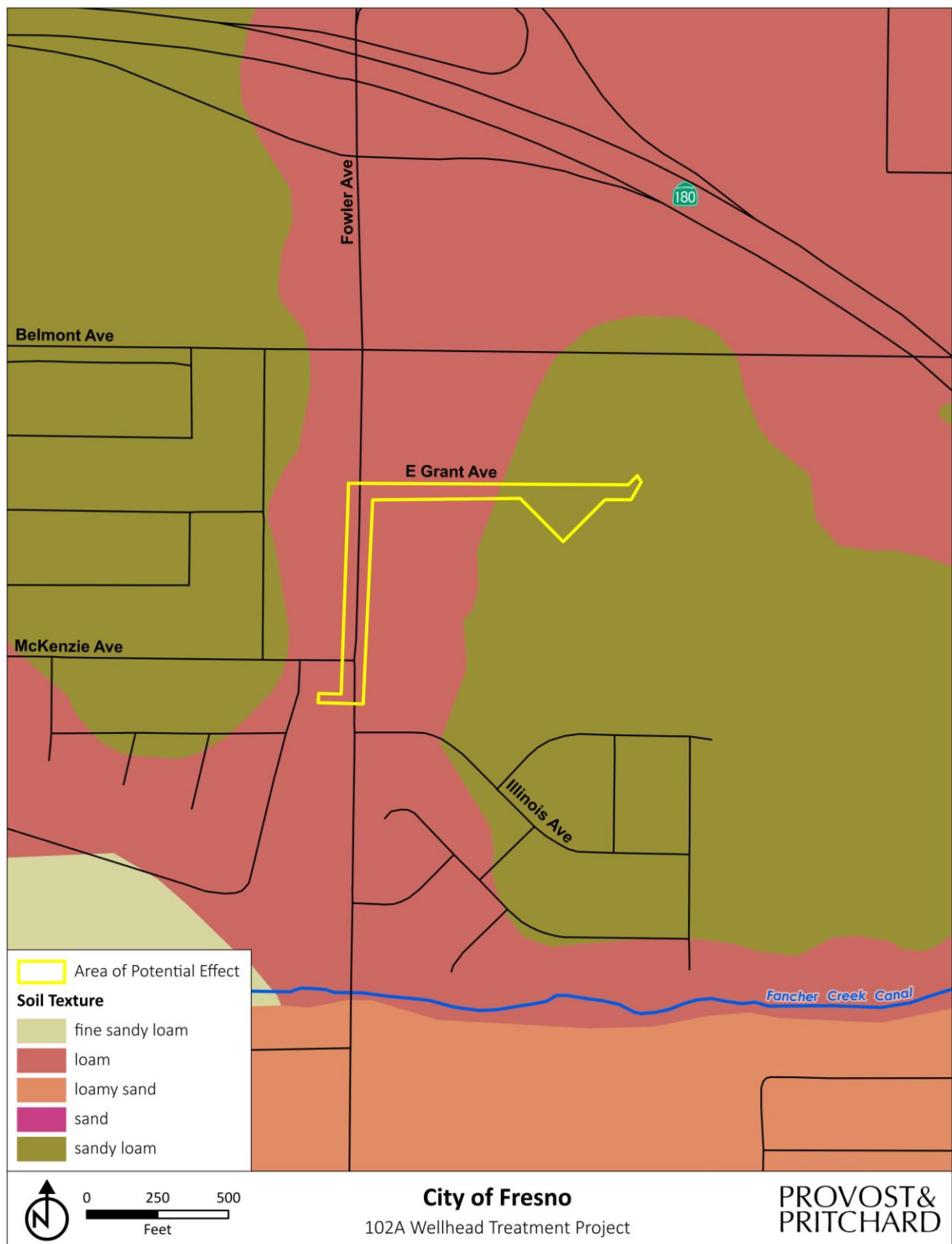


Figure 7: Soils Map

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Baseline Conditions

Commonly identified GHG emissions and sources include the following:

Carbon dioxide (CO₂) is an odorless, colorless natural greenhouse gas and is emitted from natural and anthropogenic sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic out gassing. Anthropogenic sources include the burning of coal, oil, natural gas, and wood.

Methane (CH₄) is a flammable greenhouse gas. A natural source of methane is the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain methane, which is extracted for fuel. Other sources are from landfills, fermentation of manure, and ruminants such as cattle.

Nitrous oxide (N₂O), also known as laughing gas, is a colorless greenhouse gas. Nitrous oxide is produced by microbial processes in soil and water, including those reactions that occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load.

Water vapor is the most abundant, and variable greenhouse gas. It is not considered a pollutant; in the atmosphere, it maintains a climate necessary for life.

Ozone (O₃) is known as a photochemical pollutant and is a greenhouse gas; however, unlike other greenhouse gases, ozone in the troposphere is relatively short-lived and, therefore, is not global in nature. Ozone is not emitted directly into the atmosphere but is formed by a complex series of chemical reactions between volatile organic compounds, nitrogen oxides, and sunlight.

Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

Chlorofluorocarbons (CFCs) are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. CFCs destroy stratospheric ozone; therefore, their production was stopped as required by the Montreal Protocol in 1987.

Hydrofluorocarbons (HFCs) are synthetic chemicals that are used as a substitute for CFCs. Of all the greenhouse gases, HFCs are one of three groups (the other two are perfluorocarbons and sulfur hexafluoride) with the highest global warming potential. HFCs are human-made for applications such as air conditioners and refrigerants.

Perfluorocarbons (PFCs) have stable molecular structures and do not break down through the chemical processes in the lower atmosphere; therefore, PFCs have long atmospheric lifetimes, between 10,000 and 50,000 years. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.

Sulfur hexafluoride (SF₆) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It has the highest global warming potential of any gas evaluated. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Emissions of GHGs contributing to global climate change are largely attributable to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. About three-quarters of human emissions of CO₂ to the global atmosphere during the past 20 years are due to fossil fuel burning. Atmospheric concentrations of CO₂, CH₄, and N₂O have increased by at least 40 percent, 150 percent, and 20 percent respectively since the year 1750. GHG emissions are typically expressed in carbon dioxide-equivalents (CO₂e), based on the GHG's Global Warming Potential (GWP). The GWP is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. For example, one ton of CH₄ has the same contribution to the greenhouse effect as approximately 25 tons of CO₂. Therefore, CH₄ is a much more potent GHG than CO₂.

DISCUSSION

Would the project:

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

Less than Significant Impact. As depicted in **Appendix A**, construction of the Project would emit approximately 60 MTCO₂e. As the Project proposes to add treatment equipment to an existing water supply system, additional greenhouse gas

emissions related to the operations and maintenance would be minimal-to-none. The City has adopted a Greenhouse Gas Reduction Plan, and thus the Project is required to comply with all applicable General Plan policies for ministerial and discretionary actions. These requirements, which include the provision of water and energy conservation, would ensure the Project would not generate greenhouse gas emissions that may have a significant effect on the environment. Impacts 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?

Less than Significant Impact. The City has adopted a Greenhouse Gas Reduction Plan, and thus the Project is required to comply with all applicable General Plan policies for ministerial and discretionary actions. These requirements, which include compliance with water and energy conservation regulations described above in the Energy section, would ensure the Project would not generate greenhouse gas emissions that may have a significant effect on the environment. Impacts would be less than significant.

Mitigation Measures

Mitigation measures are not warranted for impacts related to Greenhouse Gas.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIAL – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X

Baseline Conditions

Hazardous Materials

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires the California Environmental Protection Agency to develop at least annually an updated Cortese List. The Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List. DTSC's EnviroStor database provides DTSC's component of Cortese List data. In addition to the EnviroStor database, the SWRCB Geotracker database provides information on regulated hazardous waste facilities in California, including underground storage tank cases and non- underground storage tank cleanup programs, including Spills-Leaks-Investigations-

Cleanups sites, Department of Defense sites, and Land Disposal program. A search of the DTSC EnviroStor database and the SWRCB Geotracker performed in October 2022 determined that there are no known active hazardous waste generators or hazardous material spill sites within the Project site or immediate surrounding vicinity.

Airports

The proposed Project is located approximately 1.75 miles southeast of the Fresno-Yosemite International Airport. The Project is located within the Traffic Pattern Zone in the Airport Land Use Compatibility Plan (ALUCP).

Emergency Response Plan

The City's Emergency Preparedness Officer is responsible for ensuring that Fresno's emergency response plans are up-to-date and implemented properly. The Emergency Preparedness Officer facilitates cooperation between City departments and other local, state and federal agencies, including Fresno County. The Fresno County Office of Emergency Services coordinates the development and maintenance of the Fresno County Operational area Master Plan.

Sensitive Receptors

The nearest sensitive receptors are residences located adjacent to the Project site. The nearest schools are Fancher Creek Elementary and Temperance-Kutner Elementary, located 0.5 miles southwest and 0.66 miles northeast of the Project site, respectively. The nearest park is Al Radka Park, located 0.5 miles northwest of the Project site.

DISCUSSION

Would the project:

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

Less than Significant Impact. Construction of the Project would require the use and transport of hazardous materials, including fuels, oils, and other chemicals (e.g., paints, lead, adhesives, etc.) typically used during construction. It is likely that these hazardous materials and vehicles would be stored by the contractor(s) on-site during construction activities. Project operations would require the use of sodium hypochlorite (bleach). Improper use and transportation of hazardous materials could result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment. However, all materials used during construction and operations would be contained, stored, and handled in compliance with applicable standards and regulations established by DTSC, the EPA and the Occupational Safety and Health Administration. Any impacts would be less than significant.

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

Less than Significant Impact. The Project consists of the construction of treatment facilities for an existing groundwater well, and would store chemicals, including sodium hypochlorite (bleach), in a small masonry block building. Those materials would be contained, stored, and handled in compliance with applicable standards and regulations. A Hazardous Materials Business Plan would be required to be prepared and complied with. Therefore, any impacts would be less than significant.

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

Less than Significant Impact. No schools are located within one-quarter mile of the Project site. This condition precludes the possibility of activities associated with the Project exposing schools within a one-quarter mile radius of the project site to hazardous materials. Any impacts would be less than significant.

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

No Impact. The Project does not involve land that is listed as a hazardous materials site pursuant to Government Code Section 65962.5 and is not included on a list compiled by the Department of Toxic Substances Control. A search of the DTSC EnviroStor database and the SWRCB Geotracker performed in October 2022 determined that there are no known active hazardous waste generators or known hazardous material spill sites within the Project site. 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 two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?**

Less than Significant Impact. The Project site is located less than two miles from and is located within a Traffic Pattern Zone of the Fresno-Yosemite International Airport. The Traffic Pattern Zone prohibits uses that are hazards to flight, which include physical (i.e. tall objects), visual, and electronic forms of interference. The Project would result in structures lower than surrounding buildings, would not cause glare, and would comply with all FCC regulations regarding wireless telecommunication. Impacts would be less than significant.

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

Less than Significant Impact. Construction of the Project may require partial closure

of streets for the purpose of connecting to existing infrastructure and for construction vehicles. Such encroachments in the public right-of-way require approval of an Encroachment Permit by the Department of Public Works and compliance with the California Manual on Uniform Traffic Control Devices. Therefore, there would be a less than significant impact to emergency evacuation routes or emergency response routes on local roadways as a result of the Project.

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

No Impact. According to Cal Fire's Fire Hazard Severity Zone Maps, the nearest wildland, which has a moderate fire risk, is located approximately three miles north of the Project site. Given the absence of wildlands in the vicinity, implementation of the Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. There would be no impact.

Mitigation Measures

Mitigation measures are not warranted for impacts related to Hazards and Hazardous Materials.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:			X	

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

Baseline Conditions

The City of Fresno overlies the Kings Subbasin of the San Joaquin Valley Groundwater Basin (SJV Basin). The Kings Subbasin underlies Fresno, Kings, and Tulare Counties and has a surface area of 976,000 acres (1,530 square miles). The Kings Subbasin has not been adjudicated. The Department of Water Resources (DWR) classified the Kings Basin as being in a state of critical overdraft in its Bulletin 118-80.

The SJV Basin comprises the southern portion of the Great Central Valley of California and is bounded to the north by the Sacramento-San Joaquin Delta and Sacramento Valley, to the east by the Sierra Nevadas, to the south by the San Emigdio and Tehachapi Mountains, and to the west by the Coast Ranges.

The Kings Subbasin, located within the southern half of the SJV Basin, is bounded to the north by the San Joaquin River, to the east by the alluvium-granite rock interface of the Sierra Nevada foothills, and to the west by the Delta-Mendota and Westside Subbasins. The Kings Subbasin is bounded to the south by the northern boundary of the Empire West Side Irrigation District, the southern fork of the Kings River, the southern boundary of the

Laguna Irrigation District, the northern boundary of the Kings County Water District, and the western boundary of Stone Corral Irrigation District.

DISCUSSION

Would the project:

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

Less than Significant Impact. The Project proposes to treat groundwater to drinking water quality levels. The Project would be required to comply with all applicable regulations so that water quality standards are met and continue to be maintained. Filter backwash would be discharged into the sewer system to be treated by the City's wastewater treatment system. Impacts would be 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?**

Less than Significant Impact. The Project proposes the treatment of existing water supplied to residents, and therefore would not significantly decrease groundwater supplies or interfere substantially with groundwater recharge. Impacts from the Project would be less than significant.

- c) **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:**

- i. **Result in substantial erosion or siltation on- or off-site?**

Less than Significant Impact. Due to the Project site's small site, the Project is not required to prepare a Stormwater Pollution Prevention Plan (SWPPP) which is used to ensure that substantial erosion or siltation of large projects does not occur. Given that the site is small and relatively flat, there erosion and siltation that could occur during construction activities is minimal. Therefore, the potential for impacts that could result in substantial erosion or siltation, on- or off-site, would be low. Therefore, impacts would be less than significant.

- ii. **Substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?**

Less than Significant Impact. Stormwater runoff from the Project site would be directed to existing drainage basins owned and maintained by FMFCD. Implementation of the Project would increase the impermeability of the Project site, however FMFCD's Standard Plans and Specifications allows for a higher runoff coefficient than what is proposed by the Project. Due to the size of the site and the planned runoff levels, impacts would be less than significant.

- iii. **Create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

Less than Significant Impact. The Fresno Metropolitan Flood Control District's Standard Plans and Specifications allows for a higher runoff coefficient than what is proposed by the Project. Existing stormwater basins in the area are planned for a runoff coefficient larger than the Project site's impermeable area. The Project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. There would be a less than significant impact.

- iv. **Impede or redirect flood flows?**

No Impact. The Project is not located in a flood zone. The Project would not impede or redirect flood flows. There would be no impact.

- d) **In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?**

No Impact. The Project is not located within or near a body of water; therefore, it is not located in a tsunami or seiche zone. According to the FEMA Flood Map Service Center, the Project site is also not located in a flood hazard zone. The nearest flood zone is located 1.4 miles northwest of the Project site (see **Figure 7**). Therefore, there would be no impact.

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

Less than Significant Impact. Applicable water quality control plans for the City of Fresno are included within the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins. The City is currently in compliance with all facets of the water quality control plan.

The City is a member of the North Kings Groundwater Sustainability Agency (GSA). In accordance with the Sustainable Groundwater Management Act GSAs, located in areas in critical overdraft are required to adopt Groundwater Sustainability Plans by 2020. The GSA has adopted its plan on November 21, 2019. The City of Fresno has several projects in the Groundwater Sustainability Plan, as shown in **Table 5** below:

Table 5: City of Fresno Groundwater Projects

City of Fresno Groundwater Projects			
Project	Description	Benefit	Milestone Year
RESIDENTIAL WATER METER RETROFIT PROJECT	Residential meter installation contracts commenced in 2010 and run through the end of 2012. Per capita water consumption from 2007 through 2011 averaged 277 gpcd. Per capita consumption after meters were installed, excluding the drought period of 2012-2016, averages 201 gpcd (2017 & 2018). The population at the end of 2011 was 513,358. Applying the per capita water consumption values from before and after meter installation yields a 43,600 AF reduction for the base 2011 population.	43,600 AF/yr	2015
T-3 SURFACE WATER TREATMENT FACILITY	Construction of a 3 MG water storage tank and 4-MGD surface water treatment facility (with possible future expansion to 8-MGD). The project will include, engineering & design, construction of tank, booster pumps, operations and treatment buildings, and associated site improvements.	2,210 AF/yr	2015
SOUTHWEST RECLAMATION FACILITY AND DISTRIBUTION SYSTEM	This project includes the design and construction of an initial 5-MGD tertiary treatment facility and transmission and distribution system. The reclaimed water produced and distributed in the southwest region will provide a direct potable water offset, thus reducing the reliance on and use of groundwater supplies.	5,140 AF/yr	2020
NIELSEN RECHARGE FACILITY	Expand the City's groundwater recharge program and includes land acquisition, development of new recharge basins, structures and conveyance systems such as pipelines, canal turnouts, metering systems, and interties. The project goal is to optimize groundwater recharge efforts so as to balance groundwater extractions as laid out in the City's 2014 Metropolitan Water Resources Plan.	3,500 AF/yr	2020
SOUTHEAST SURFACE WATER TREATMENT FACILITY	Design, construction, start-up, and commissioning of the new Southeast Surface Water Treatment Facility (SESWTF) and associated large diameter transmission mains. New facility is required to treat surface water diverted from the Kings River through canal and raw water pipeline system. Historically, the City has largely relied on groundwater to meet municipal water demands. The SESWTF will utilize surface water supplies and permit the balanced use of both groundwater and surface water, thus greatly reducing groundwater extractions.	82,240 AF/yr	2020
NORTHEAST SURFACE WATER TREATMENT	The Northeast Surface Water Treatment Facility Expansion Project is part of the City's near-term program to attain and maintain the sustainable use of water resources. This	30,840 AF/yr	2025

City of Fresno Groundwater Projects			
Project	Description	Benefit	Milestone Year
FACILITY EXPANSION	project is for the 30-MGD expansion of the existing surface water treatment facility for a total capability of 60-MGD. To enable water from the expansion to reach further into the City large diameter transmission mains will also be constructed. This project will meet future growth demands and ensure groundwater utilization attains and remains at safe-yield levels.		
SOUTHEAST RECLAMATION FACILITY AND DISTRIBUTION SYSTEM	As part of the City's long-term goal to utilize resources sustainably the development of a recycled water program will be key. This project includes design and construction of an initial 8-MGD tertiary treatment facility with transmission and distribution mains. The reclaimed water produced and distributed in the southeast region will provide a direct potable water offset, thus reducing the reliance on and use of groundwater supplies.	8,227 AF/yr	2030

A project would obstruct implementation of a Sustainable Groundwater Management Plan if it prevented the development of identified projects to sustainably maintain groundwater. As the Project does not seek to develop on property identified for these groundwater management projects, the Project would therefore have a less than significant impact.

Mitigation Measures

Mitigation measures are not warranted for impacts related to Hydrology and Water Quality.



Figure 8: FEMA Flood Zone Map

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?				X
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?			X	

Baseline Conditions

The Project is within the City of Fresno. The surrounding area is planned for Medium Density Residential and Light Industrial uses. Existing land uses in the surrounding area consists of warehouses and single-family residences. See **Figure 4** and **Figure 5** for the Project site's general plan land use designation and zoning, respectively.

DISCUSSION

a) Physically divide an established community?

No Impact. The Project involves the development of water treatment facilities on an existing vacant lot and pipelines within existing road right of way. The Project would not require the vacation or abandonment of any streets or sidewalks. Therefore, the Project would have no impact associated with the physical division of established land uses in the community.

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?

Less than Significant Impact. The Project is consistent with respective general plan objectives and policies and will not significantly conflict with applicable land use plans, policies or regulations of the City of Fresno. Therefore, there would be a less than significant impact.

Mitigation Measures

Mitigations measures are not warranted for impacts related to Land Use.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			X	
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?				X

Baseline Conditions

The Project is located in central Fresno County, in the southern section of California's Great Valley Geomorphic Province, or Central Valley. Historically, Fresno County has been a leading producer of a variety of minerals including aggregate, fossil fuels, metals, and other materials used in construction or in industrial processes. Currently, aggregate and petroleum are the City's most significant mineral resources.

The City is located within the Fresno production-consumption region, which spans parts of Madera and Fresno Counties. The California Geological Survey, previously known as California Department of Conservation Division of Mines and Geology, analyzed this region for the presence of aggregate resources in a 1988 mineral land classification report and a subsequent 1999 update. In each of these reports CGS classified the Fresno PC region according to the presence or absence of significant aggregate deposits. The land classification is presented in the form of Mineral Resource Zones (MRZs). Most of City of Fresno, outside of the San Joaquin and Kings River Resource Areas has an MRZ-3 designation and may contain economically recoverable mineral resources. MRZ-3 represents areas containing mineral deposits the significance of which cannot be evaluated from data available to the CGS.

DISCUSSION

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?**

Less than Significant Impact. The Project is located in an MRZ-3 zone. The MRZ-3 zone, as discussed above, is defined as an area containing mineral deposits, the significance of which cannot be evaluated. Therefore, due to the unknown significance determination, there are no known mineral resources that would be of value to the

region and residents of the state. There would be a less than significant 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. The Project is located in an MRZ-3 zone and is not delineated on an applicable land use plan as a locally-important mineral resource recovery site. The MRZ-3 Zone, as discussed in Section 4.12.1, is defined as an area containing mineral deposits, the significance of which cannot be evaluated. The Project site does not contain economically-viable soils, as depicted in Section 4.7. There are no known current or historic mineral resource extraction or recovery operations in the Project vicinity nor are there any known significant mineral resources onsite. The closest active mining operation is operated by Vulcan Materials located approximately 11 miles northeast of the Project site, at 11599 North Friant Road. There would be no impact.

Mitigation Measures

Mitigation measures are not warranted for impacts related to Mineral Resources.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. 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?			X	
b) Generation of excessive ground borne vibration or ground borne noise levels?			X	
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?			X	

Baseline Conditions

The Project site is located in an area with Light Industrial land uses to the north and east and Residential, Single-Family land uses to the south and west. The Project is located inside the Airport Influence Areas of Fresno-Yosemite International Airport, as identified in the Fresno County ALUCP. The nearest airstrip of any kind is Fresno-Yosemite International Airport, whose nearest runway is located approximately 2.24 miles northwest of the Project site. SR 99, located immediately southwest, is identified in the Fresno General Plan as a significant transportation noise source within the planning area.

DISCUSSION

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 in other applicable local, state, or federal standards of other agencies?**

Less than Significant Impact. Activities associated with construction could result in temporary elevated noise levels and ground borne vibration, with maximum construction noise levels ranging between 74 dBA to 89 dBA at 50 feet distance.

Project generated construction noise would be short in duration. In addition, pursuant to Fresno Municipal Code, Chapter 10, Article 1, construction would be restricted to the hours of 7:00 am to 10:00 pm, Monday through Saturday. Construction activities within these hours are exempt from noise requirements.

Table 15-2506-B of the City of Fresno Development Code establishes standards for noise exposure from transportation noise sources. Table 15-2506-C of the Development Code establishes land use compatibility for new development proposed near transportation noise sources. Given the minor increase in additional construction- and operation and maintenance-related traffic, the Project itself is not considered a significant source of transportation noise. As such, the Project would be within acceptable transportation related noise standards and there would be no impact of this type. Additionally, upon completion of construction, Project generated noise would remain the same as it is currently during on-site operations.

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

Less than Significant Impact. Impacts related to the Project's generation of noise and ground borne vibration both during construction and operation would be reduced by existing natural or human made barriers, distance, and through adherence to existing regulations. Water well drilling would generate approximately 0.089 peak particle velocity (PPV) and 87 vibration decibels (VdB), when measured at 25 feet away from the vibration source. Table 7-5 of the Transit Noise and Vibration Impact Assessment Manual describes the damage threshold to buildings extremely susceptible to vibration damage as 0.12 PPV or 90 VdB. Given that the vibration would

occur 82 feet away and at less 0.12 PPV or 90 VdB, impacts would be less than significant.

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

Less than Significant Impact. While the Project site is located in an airport land use plan of Fresno-Yosemite International Airport, it is located outside the airport's 75, 70, 65, and 60dB zones. The Project site is not located within two miles of any other private, public or public use airport. Therefore, the Project would not expose people residing or working in the Project area to excessive noise levels, and there would be a less than significant impact.

Mitigation Measures

Mitigation measures are not warranted for impacts related to Noise.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. 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)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Baseline Conditions

The Project is located in the City of Fresno, which as of 2020, is estimated to have a population of 544,510. The Project site is located in the southern portion of the City of Fresno. The treatment site is vacant and located in an area used for light industrial and residential purposes.

DISCUSSION

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)?**

Less than Significant Impact. The Project proposes to make alterations to the City water system for the purposes of treating the existing water supply, and therefore does not propose any residential units that would increase population growth in the area. The Project also does not propose to change General Plan land uses that would substantially increase residential population. Therefore, impacts would be less than significant.

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

No Impact. The Project would not demolish, nor result in the demolition of any residences or housing units. Therefore, there would be no impact.

Mitigation Measures

Mitigation measures are not warranted for impacts related to Population and Housing.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES – Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?			X	
Police protection?			X	
Schools?				X
Parks?				X
Other public facilities?			X	

Baseline Conditions

Fire Protection: The Project site is served by the City of Fresno Fire Department for its fire protection services. Fire Station No. 15 is located approximately 1.7 miles southwest of the Project site.

Police Protection: The Project site is served by the City of Fresno Police Department for its police protection services. The closest existing City of Fresno Police Department is located approximately 1.1 miles southwest of the Project site.

Schools: The Project is located in the Clovis Unified School District. The nearest school is Fancher Creek Elementary, located 0.5 miles southwest of the Project site.

Parks: Al Radka Park, located northwest of the Project site, is approximately 0.5 miles away.

Landfills: The American Avenue Disposal Site, located approximately 26 miles southeast of the Project serves the majority of the City of Fresno.

DISCUSSION

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, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:**

i. **Fire protection?**

Less than Significant Impact. The Project proposes to construct water treatment facilities and ancillary equipment. Existing water supply is contaminated with 1,2,3-TCP and 1,2-Dibromo-3-chloropropane has been detected. The water treatment process would require the use of sodium hypochlorite (bleach), which is hazardous in large quantities, but would be stored on-site in a contained structure. The Project would be required to comply with a Hazardous Material Business Plan (HMBP). Impacts to fire protection services would be less than significant.

ii. **Police protection?**

Less than Significant Impact. The Project proposes to construct water treatment facilities and ancillary equipment. Due to the nature of the Project, calls for service are anticipated to be minimal. Impacts to police protection services would be less than significant.

iii. **Schools?**

No Impact. The Project proposes to construct a water treatment facilities and

ancillary equipment. The Project would not generate additional employees or residents. There would be no impact to schools.

iv. Parks?

No Impact. The Project would not generate additional employees or residents. There would be no impact to parks.

v. Other public facilities?

Less than Significant Impact. Implementation of the Project would generate some waste from water treatment byproducts, however these quantities would be minimal. Impacts would be less than significant.

Mitigation Measures

Mitigation measures are not warranted for impacts related to Public Services.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. 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?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Baseline Conditions

The City of Fresno has numerous neighborhood parks located throughout the City and three regional parks serving the entire metropolitan area. The nearest park is Al Radka park, located approximately 0.5 miles northwest of the Project site.

DISCUSSION

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. The water treatment Project does not include any features that would 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 impacts would occur.

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

No Impact. As mentioned above, the Project does not include recreational facilities or require the construction or expansion of recreational facilities; therefore, there would be no impact.

Mitigation Measures

Mitigation measures are not warranted for impacts regarding Recreation.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			X	
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
d) Result in inadequate emergency access?			X	

Baseline Conditions

The City of Fresno General Plan, Mobility and Transportation Element is intended to provide a comprehensive program of transportation planning through policies for all modes of transportation. The General Plan establishes Traffic Impact Zones to ensure projects provide transportation infrastructure in accordance with plans. The Project is located within Traffic Impact Zone III, which generally represents areas near or outside the City Limits but within the Sphere of Influence as of December 31, 2012.

City of Fresno adopted CEQA Guidelines for Vehicle Miles Traveled (VMT) Thresholds, dated June 25, 2020, pursuant to Senate Bill 743. The thresholds described therein are referred to herein as the City of Fresno VMT Thresholds. The City of Fresno VMT Thresholds document was prepared and adopted consistent with the requirements of CEQA Guidelines Sections 15064.3 and 15064.7. The December 2018 Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) published by the Governor's Office of Planning and Research (OPR), was utilized as a reference and guidance document in the preparation of the Fresno VMT Thresholds.

DISCUSSION

Would the project:

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

Less than Significant Impact. Construction of the Project may require the closure or partial closure of streets, but such effects would be temporary and would be required to comply with the California Manual on Uniform Traffic Control Devices (MUTCD) as required by a Public Works encroachment permit. The Project, once constructed, would not affect any circulation system, transit, roadways, bicycle, or pedestrian facilities. Therefore, the Project would result in a less than significant impact.

- b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?**

Less than Significant Impact. Senate Bill (SB) 743 requires that relevant CEQA analysis of transportation impacts be conducted using a metric known as vehicle miles traveled (VMT) instead of Level of Service (LOS). VMT measures how much actual auto travel (additional miles driven) a proposed project would create on California roads. If the project adds excessive car travel onto our roads, the project may cause a significant transportation impact.

The State CEQA Guidelines were amended to implement SB 743, by adding Section 15064.3. Among its provisions, Section 15064.3 confirms that, except with respect to transportation projects, a project's effect on automobile delay shall not constitute a significant environmental impact. Therefore, LOS measures of impacts on traffic facilities is no longer a relevant CEQA criteria for transportation impacts.

CEQA Guidelines Section 15064.3(b)(4) states that "[a] lead agency has discretion to

evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate used to estimate vehicle miles traveled and any revision to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section."

On June 25, 2020, the City of Fresno adopted CEQA Guidelines for Vehicle Miles Traveled Thresholds, dated June 25, 2020, pursuant to Senate Bill 743 to be effective of July 1, 2020. The thresholds described therein are referred to herein as the City of Fresno VMT Thresholds. The City of Fresno VMT Thresholds document was prepared and adopted consistent with the requirements of CEQA Guidelines Sections 15064.3 and 15064.7. The December 2018 Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) published by the Governor's Office of Planning and Research (OPR), was utilized as a reference and guidance document in the preparation of the Fresno VMT Thresholds.

The City of Fresno VMT Thresholds adopted a screening standard and criteria that can be used to screen out qualified projects that meet the adopted criteria from needing to prepare a detailed VMT analysis.

The City of Fresno VMT Thresholds Section 3.0 regarding Project Screening discusses a variety of projects that may be screened out of a VMT analysis including specific development and transportation projects. For development projects, conditions may exist that would presume that a development project has a less than significant impact. These may be size, location, proximity to transit, or trip-making potential. For transportation projects, the primary attribute to consider with transportation projects is the potential to increase vehicle travel, sometimes referred to as "induced travel."

The VMT thresholds allow for the screening out of projects that generate a low volume of daily traffic. The City allows the screening out of project that generate less than 500 average daily trips (ADTs). The proposed water treatment facility would generate minimal operational and maintenance trips, which would approximate to less than one (1) ADT. In conclusion, the Project will result in a less than significant VMT impact and is consistent with CEQA Guidelines section 15064.3(b).

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. The Project does not propose any off-site improvements to the local transportation network that would result in sharp curves, dangerous intersections, or other hazards. Any design of internal drive aisles, access driveways, or other circulation improvements would be required to adhere to the City of Fresno Fire Department's design standards which are imposed on project developments during

the building plan check and development review process. Since the Project is not incompatible with surrounding land uses, there are no offsite improvements, and all on-site improvements would be made adhering to the latest design standards for the City of Fresno preventing hazardous conditions. There would be no impact.

d) Result in inadequate emergency access?

Less than Significant Impact. The Project does not involve a change to any emergency response plan. Construction of the Project would require work in the existing right-of-way, and as such temporary lane closures may occur. Work in the right-of-way requires preparation of and compliance with a Traffic Control Plan prepared in accordance with the California Manual on Uniform Traffic Control Devices (CA MUTCD). As such, there would be a less than significant impact.

Mitigation Measures

Mitigation measures are not warranted for impacts related to Transportation

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRIBAL CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC 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:			X	
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC section 5020.1(k), or,			X	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC section 5024.1. In applying the criteria set forth in subdivision (c) of PRC section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			X	

Baseline Conditions

Public Resources Code Section 21080.3.1, et seq. (AB 52)

Public Resources Code Section 21080.3.1, et seq. (codification of AB 52, 2013-14) requires that a lead agency, within 14 days of determining that it will undertake a project, must notify in writing any California Native American Tribe traditionally and culturally affiliated with the geographic area of the project if that Tribe has previously requested notification about projects in that geographic area. The notice must briefly describe the project and inform Tribes they have 30 days from receipt of notification to request formal consultation. The lead agency then has 30 days to initiate the consultation, which then continues until the parties come to an agreement regarding necessary mitigation or agree that no mitigation is needed, or one or both parties determine that negotiation occurred in good faith, but no agreement will be made.

Pursuant to PRC Section 21080.3, the City of Fresno has received letters from the Dumna Wo Wah and Table Mountain Rancheria of California Tribal Governments officially requesting notification. The City sent letters to these two tribes notifying them of the Project and provided a map. These letters were sent via certified mail on December 19, 2022. No requests for consultation have been received by the City.

Sacred Lands File Search

In addition to Native American Outreach pursuant to AB 52, the NAHC was contacted to perform an SLF. The NAHC identifies, catalogs, and protects Native American cultural resources -- ancient places of special religious or social significance to Native Americans and known ancient graves and cemeteries of Native Americans on private and public lands in California. The NAHC is also charged with ensuring California Native American tribes' accessibility to ancient Native American cultural resources on public lands, overseeing the treatment and disposition of inadvertently discovered Native American

human remains and burial items, and administering the California Native American Graves Protection and Repatriation Act, among many other powers and duties. The NAHC reviewed the Sacred Lands File and found no record of tribal cultural resources.

DISCUSSION

Would the project

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

- i. **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**

Less than Significant Impact. No request for tribal consultation for the Project have been received. In addition, the NAHC SLF results confirmed there were no recorded tribal cultural resources in the Project area.

In the unlikely event that an archaeological resource is uncovered during construction, tribal in relation or not, all construction would cease, and a qualified archaeologist would be contacted to assess the resource. The Project would adhere to all applicable federal, State, and local requirements in regard to tribal cultural resources.

- ii. **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

Less than Significant Impact. No request for tribal consultation for the Project have been received. In addition, the NAHC SLF results confirmed there were no recorded tribal cultural resources in the Project area.

While it is unlikely that human resources would be uncovered during construction activities associated with this Project, discovery of human remains on-site would result in the ceasing of all construction activities and the contacting of the Fresno County Coroner. If the Coroner determines that the remains are that of tribal descent, they would contact the NAHC to determine the most likely descendant. The Project would be required to comply with all applicable federal, State, and local requirements in relation to the uncover of human remains. Any impacts would be considered less than significant.

Mitigation Measures

Mitigation measures are not warranted for impacts related to Tribal Cultural Resources.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 effect?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
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?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

Baseline Conditions

The Project site is currently served by the City of Fresno for water delivery, wastewater treatment, and solid waste disposal. Stormwater management is managed by FMFCD. Electricity and natural gas services are provided by PG&E.

DISCUSSION

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?**

Less than Significant Impact. The Project treatment site is adjacent to a developed public street, where utilities are present. The Project itself would include approximately 1,400 linear feet (LF) of 12-inch diameter raw water main between the existing PS 102 well site and the proposed treatment site, PS 102A (1,200 gpm flow rate) to tie into the existing PS 102 well head piping. The pipeline connection would be within existing road right of way and is a short distance. There is no need for relocation or construction of new electric power, natural gas, telecommunication facilities. Impacts would be less than significant.

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

No Impact. The Project itself is an existing groundwater supply well PS102 with proposed treatment facilities to mitigate TCP concentrations in the City's water supply system. There would be no impacts from the Project on water supplies.

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

Less than Significant Impact. Wastewater generated by the Project would be delivered through a new connection to the existing sewer system. The Department of Public Utilities reviewed the Project and confirmed that sanitary sewer facilities are available to provide service to the Project, subject to standard connection requirements. Therefore, impacts would be less than significant.

- 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?**

Less than Significant Impact. The Project would likely generate minimal solid waste from construction activities. Solid waste generated during operations could include spent treatment chemicals and byproducts, however these would not be generated in large quantities. Impacts would be less than significant.

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

Less than Significant Impact. Despite the Project's unlikelihood of generating significant quantities of solid waste, the Project would be required to comply with all regulations applicable to solid waste generation for public utility projects. Impacts would be less than significant.

Mitigation Measures

Mitigation measures are not warranted for impacts related to Utilities and Service Systems.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. 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?				X
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?				X
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

Baseline Conditions

The Project site is located in the southeastern portion of the City of Fresno. The Project is in an urbanized setting within and surrounded by residential and light industrial uses. The Project site would be served by the City of Fresno for its fire protection needs. In addition, the Project site is not located in or near land classified as a Very High Fire Hazard Severity Zone. The nearest State Responsibility Area (SRA) is located approximately 10.5 miles northeast near Kirkman Hill and the nearest Very High Fire Hazard Severity Zone is located approximately 34 miles east near Miramonte, CA.

DISCUSSION

Would the project:

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

No Impact. The Project is located in an area of low wildfire risk, and is not located in a SRA nor near land classified by either Cal Fire or the City of Fresno as a Very High Fire Hazard Severity Zone. As mentioned above, the nearest SRA is approximately 10.5 miles northeast of the Project site. Additionally, the site is approximately 34 miles from the nearest Very High Fire Hazard Severity Zone classification. As the Project is not subject to wildfire risks, further analysis is not warranted, thus no impacts would occur.

- 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. As described above, the Project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; 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 to the environment?**

No Impact. As described above, the Project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; therefore there would be no impact.

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

No Impact. Due to the topography of the Project site, its distal location to an SRA and a very high fire hazard severity zone, it is not subject to the risk of downslope or

downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes. Therefore, there would be no impact.

Mitigation Measures

Mitigation measures are not warranted for impacts related to Wildfire.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
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)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

DISCUSSION

- 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?**

Less than Significant Impact. As described in the Biological Resources section, with the implementation of Mitigation Measures BIO-1, BIO-2, and BIO-3, the Project would not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate important examples of the major periods of California history or prehistory. Therefore, the Project would have a less than significant 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.)**

Less than Significant Impact. CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. The Project would construct water treatment facilities and ancillary treatment equipment. Implementation of the Project would continue to be consistent with the site’s intended use. Therefore, implementation of the Project would not result in significant cumulative impacts and all potential impacts would be reduced to less than significant through the implementation of basic regulatory requirements incorporated into Project design.

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

Less than Significant Impact. The analysis conducted in this Initial Study results in a determination that the Project would have a less than a substantial adverse effect on human beings, either directly or indirectly.

Mitigation Measure Monitoring Program for Wellhead Treatment Improvements at Pump Station 102A

This Mitigation Monitoring and Reporting Program (MMRP) was formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) prepared for the proposed **Wellhead Treatment Improvements at Pump Station 102A** (project). The MMRP, which is found in Table A of this section, lists mitigation measures recommended in the IS/MND for the proposed project and identifies mitigation monitoring requirements. The MMRP must be adopted when the City Council makes a final decision on the proposed project.

This MMRP has been prepared to comply with the requirements of State law (Public Resources Code Section 21081.6). State law requires the adoption of an MMRP when mitigation measures are required to avoid significant impacts. This requirement facilitates implementation of all mitigation measures adopted through the California Environmental Quality Act (CEQA) process. The MMRP is intended to ensure compliance during implementation of the project.

The MMRP is organized in a matrix format. The first column identifies the mitigation measure. The second column, entitled "Mitigation Responsibility," refers to the party responsible for implementing the mitigation measure. The third column, entitled "Monitoring/Reporting Agency," refers to the agency responsible for oversight or ensuring that the mitigation measure is implemented. The fourth column, entitled "Monitoring Schedule," refers to when monitoring will occur to ensure that the mitigating action is completed. The fifth column, entitled "Verification," will be initialed and dated by the individual designated to verify adherence to the project specific mitigation.

Table A: Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
I. AESTHETICS				
There are no significant impacts to Aesthetics.				
II. AGRICULTURE				
There are no significant impacts to Energy.				
III. AIR QUALITY				
AIR-1: Diesel-powered off-road construction equipment shall be equipped with EPA Tier 4 Final engines or better.	Prior to commencement of construction activities	City of Fresno	City of Fresno	
IV. BIOLOGICAL RESOURCES				
BIO-1: The Project's construction activities will occur, if feasible, between September 16 and January 31 (outside of nesting bird season) in an effort to avoid impacts to nesting birds.	Prior to commencement of construction activities	City of Fresno	City of Fresno	
BIO-2: If activities must occur within nesting bird season (February 1 to September 15), a qualified biologist will conduct a pre-construction survey for all nesting birds within the Project boundary and an additional 50 feet surrounding the Project, no more than 7 days prior to the start of construction. All raptor nests would be considered "active" upon the nest-building stage.	If construction commences between February 1 and September 15	City of Fresno	City of Fresno	
BIO-3: On discovery of any active nests or breeding colonies near work areas, the biologist will determine appropriate construction setback distances based on applicable CDFW and/or USFWS guidelines and/or the biology of the species in question. Construction buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged and are no longer dependent on the nest.	Upon discovery of active nests or breeding colonies near work areas	City of Fresno	City of Fresno	
V. CULTURAL RESOURCES				
CUL-1: If previously unknown resources are encountered before or during grading activities, construction shall stop in the immediate vicinity of the find and a qualified historical resources specialist shall be consulted to determine whether the resource requires further	Upon discovery of previously-unknown cultural resources	City of Fresno	City of Fresno	

Table A: Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
<p>study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and the City's Historic Preservation Ordinance. If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.</p>				
<p>CUL-2: In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking</p>	<p>Upon discovery of human remains</p>	<p>City of Fresno</p>	<p>City of Fresno</p>	

Table A: Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.				
VI. ENERGY				
There are no significant impacts to Energy.				
VII. GEOLOGY AND SOILS				
There are no significant impacts to Geology and Soils.				
VIII. GREENHOUSE GAS EMISSIONS				
There are no significant impacts to Greenhouse Gas Emissions.				
IX. HAZARDS AND HAZARDOUS MATERIALS				
There are no significant impacts to Hazards and Hazardous Materials.				
X. HYDROLOGY AND WATER QUALITY				
There are no significant impacts to Hydrology and Water Quality.				
XI. LAND USE AND PLANNING				
There are no significant impacts to Land Use and Planning.				
XII. MINERAL RESOURCES				
There are no significant impacts to Mineral Resources.				
XIII. NOISE				
There are no significant impacts to Noise.				
XIV. POPULATION AND HOUSING				
There are no significant impacts to Population and Housing.				
XV. PUBLIC SERVICES				
There are no significant impacts to Public Services.				
XVI. RECREATION				
There are no significant impacts to Recreation.				
XVII. TRANSPORTATION				
There are no significant impacts to Transportation.				
XVII. TRIBAL CULTURAL RESOURCES				

Table A: Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
There are no significant impacts to Tribal Cultural Resources.				
XIX. UTILITIES AND SERVICE SYSTEMS				
There are no significant impacts to Utilities and Service Systems.				
XX. WILDFIRE				
There are no significant impacts to Wildfire.				
XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
See BIO-1 above.	Prior to commencement of construction activities	City of Fresno	City of Fresno	
See BIO-2 above.	If construction commences between February 1 and September 15	City of Fresno	City of Fresno	
See BIO-3 above.	Upon discovery of active nests or breeding colonies near work areas	City of Fresno	City of Fresno	

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Appendix A: CalEEMod Output Files

PS 102A - Fresno County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

PS 102A

Fresno County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	14.00	1000sqft	0.32	14,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2025
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Architectural Coating - No parking lot striping

Area Coating - No parking lot striping

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	840.00	0.00
tblAreaCoating	Area_Parking	840	0
tblConstructionPhase	PhaseEndDate	6/21/2023	6/7/2023
tblConstructionPhase	PhaseEndDate	6/7/2023	5/24/2023
tblConstructionPhase	PhaseEndDate	1/18/2023	1/4/2023

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tblConstructionPhase	PhaseEndDate	6/14/2023	5/31/2023
tblConstructionPhase	PhaseEndDate	1/16/2023	1/2/2023
tblConstructionPhase	PhaseStartDate	6/15/2023	6/1/2023
tblConstructionPhase	PhaseStartDate	1/19/2023	1/5/2023
tblConstructionPhase	PhaseStartDate	1/17/2023	1/3/2023
tblConstructionPhase	PhaseStartDate	6/8/2023	5/25/2023
tblConstructionPhase	PhaseStartDate	1/14/2023	1/1/2023

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction

[illegible]

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2023	3-31-2023	0.2332	0.2332
2	4-1-2023	6-30-2023	0.1576	0.1576
		Highest	0.2332	0.2332

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	9.2000e-004	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.7000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.2000e-004	0.0000	1.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.7000e-004

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	9.2000e-004	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.7000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.2000e-004	0.0000	1.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.7000e-004

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2023	1/2/2023	5	1	
2	Grading	Grading	1/3/2023	1/4/2023	5	2	
3	Building Construction	Building Construction	1/5/2023	5/24/2023	5	100	

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4	Paving	Paving	5/25/2023	5/31/2023	5	5
5	Architectural Coating	Architectural Coating	6/1/2023	6/7/2023	5	5

Acres of Grading (Site Preparation Phase): 0.5**Acres of Grading (Grading Phase): 1.5****Acres of Paving: 0.32****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Grading	Graders	1	6.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

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Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	6.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction**3.2 Site Preparation - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	3.0900e-003	1.9600e-003	0.0000		1.1000e-004	1.1000e-004		1.0000e-004	1.0000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309
Total	2.7000e-004	3.0900e-003	1.9600e-003	0.0000	2.7000e-004	1.1000e-004	3.8000e-004	3.0000e-005	1.0000e-004	1.3000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0157	0.0157	0.0000	0.0000	0.0159
Total	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0157	0.0157	0.0000	0.0000	0.0159

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	3.0900e-003	1.9600e-003	0.0000		1.1000e-004	1.1000e-004		1.0000e-004	1.0000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309
Total	2.7000e-004	3.0900e-003	1.9600e-003	0.0000	2.7000e-004	1.1000e-004	3.8000e-004	3.0000e-005	1.0000e-004	1.3000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Site Preparation - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0157	0.0157	0.0000	0.0000	0.0159
Total	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0157	0.0157	0.0000	0.0000	0.0159

3.3 Grading - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3100e-003	0.0000	5.3100e-003	2.5700e-003	0.0000	2.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3000e-004	0.0102	5.5500e-003	1.0000e-005		4.2000e-004	4.2000e-004		3.9000e-004	3.9000e-004	0.0000	1.2381	1.2381	4.0000e-004	0.0000	1.2481
Total	9.3000e-004	0.0102	5.5500e-003	1.0000e-005	5.3100e-003	4.2000e-004	5.7300e-003	2.5700e-003	3.9000e-004	2.9600e-003	0.0000	1.2381	1.2381	4.0000e-004	0.0000	1.2481

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0503	0.0503	0.0000	0.0000	0.0508
Total	2.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0503	0.0503	0.0000	0.0000	0.0508

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3100e-003	0.0000	5.3100e-003	2.5700e-003	0.0000	2.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3000e-004	0.0102	5.5500e-003	1.0000e-005		4.2000e-004	4.2000e-004		3.9000e-004	3.9000e-004	0.0000	1.2381	1.2381	4.0000e-004	0.0000	1.2481
Total	9.3000e-004	0.0102	5.5500e-003	1.0000e-005	5.3100e-003	4.2000e-004	5.7300e-003	2.5700e-003	3.9000e-004	2.9600e-003	0.0000	1.2381	1.2381	4.0000e-004	0.0000	1.2481

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0503	0.0503	0.0000	0.0000	0.0508
Total	2.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0503	0.0503	0.0000	0.0000	0.0508

3.4 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0316	0.3209	0.3549	5.7000e-004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093
Total	0.0316	0.3209	0.3549	5.7000e-004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Building Construction - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1000e-004	4.3900e-003	1.3200e-003	2.0000e-005	6.6000e-004	3.0000e-005	6.9000e-004	1.9000e-004	3.0000e-005	2.2000e-004	0.0000	1.9233	1.9233	1.0000e-005	2.9000e-004	2.0098
Worker	9.3000e-004	6.0000e-004	7.0700e-003	2.0000e-005	2.4000e-003	1.0000e-005	2.4100e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.8862	1.8862	6.0000e-005	5.0000e-005	1.9039
Total	1.0400e-003	4.9900e-003	8.3900e-003	4.0000e-005	3.0600e-003	4.0000e-005	3.1000e-003	8.3000e-004	4.0000e-005	8.7000e-004	0.0000	3.8094	3.8094	7.0000e-005	3.4000e-004	3.9137

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0316	0.3209	0.3549	5.7000e-004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093
Total	0.0316	0.3209	0.3549	5.7000e-004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093

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3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1000e-004	4.3900e-003	1.3200e-003	2.0000e-005	6.6000e-004	3.0000e-005	6.9000e-004	1.9000e-004	3.0000e-005	2.2000e-004	0.0000	1.9233	1.9233	1.0000e-005	2.9000e-004	2.0098
Worker	9.3000e-004	6.0000e-004	7.0700e-003	2.0000e-005	2.4000e-003	1.0000e-005	2.4100e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.8862	1.8862	6.0000e-005	5.0000e-005	1.9039
Total	1.0400e-003	4.9900e-003	8.3900e-003	4.0000e-005	3.0600e-003	4.0000e-005	3.1000e-003	8.3000e-004	4.0000e-005	8.7000e-004	0.0000	3.8094	3.8094	7.0000e-005	3.4000e-004	3.9137

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5300e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004		6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.5300e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004		6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Paving - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	9.0000e-005	1.0600e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2829	0.2829	1.0000e-005	1.0000e-005	0.2856
Total	1.4000e-004	9.0000e-005	1.0600e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2829	0.2829	1.0000e-005	1.0000e-005	0.2856

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5300e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004		6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.5300e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004		6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Paving - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	9.0000e-005	1.0600e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2829	0.2829	1.0000e-005	1.0000e-005	0.2856
Total	1.4000e-004	9.0000e-005	1.0600e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2829	0.2829	1.0000e-005	1.0000e-005	0.2856

3.6 Architectural Coating - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0157	0.0157	0.0000	0.0000	0.0159
Total	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0157	0.0157	0.0000	0.0000	0.0159

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0157	0.0157	0.0000	0.0000	0.0159
Total	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0157	0.0157	0.0000	0.0000	0.0159

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.521458	0.053308	0.175656	0.151963	0.025001	0.006656	0.014407	0.022718	0.000702	0.000287	0.023515	0.001463	0.002865

Historical Energy Use: N

5.1 Mitigation Measures Energy

[illegible]

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated

[illegible]

Mitigated

[illegible]

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	9.2000e-004	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.7000e-004
Unmitigated	9.2000e-004	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.7000e-004

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.7000e-004
Total	9.1000e-004	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.7000e-004

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.7000e-004
Total	9.1000e-004	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.7000e-004

7.0 Water Detail**7.1 Mitigation Measures Water**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Appendix B: Biological Review Memo

Memorandum

To: City of Fresno

From: Provost & Pritchard: Mary Beth Bourne, Associate Biologist

Subject: Biological Review of the proposed City of Fresno 102A Wellhead Treatment Project
1561-22013 TK4

Date: December 27, 2022

Biological Review

The 102A Wellhead Treatment Project (Project) is proposed to mitigate water quality contamination from 1,2,3-Trichloropropane identified in well 102A (Well) owned and operated by the City of Fresno (City). The well is located west of North Fowler Avenue and south of East Makenzie Avenue. The Project includes approximately 1,400 linear feet of pipeline within the existing road right-of-way, north on North Fowler Avenue and east of East Grant Avenue to a vacant triangular section of land where the proposed treatment facilities will be located. The Area of Potential Effect (APE) is approximately 3.2 acres and includes the Project areas and an additional 50-foot survey buffer (see **Attachment A**).

Topography

The APE lies within the Central Valley which is bordered by the Sierra Nevada Mountain Ranges to the east, the Coast Ranges to the west, the Klamath Mountains and Cascade Range to the north, and the Transverse Ranges and Mojave Desert to the south. The topography within the APE is relatively flat with elevations ranging from approximately 320 to 325 feet above mean sea level.

Climate

Like most of California, the APE experiences a Mediterranean climate. Warm, dry summers are followed by cool, moist winters. Summer temperatures range between 80- and 90-degrees Fahrenheit (°F), but often exceeds 90 °F. Winter minimum temperatures are near 40 °F. The average annual precipitation is approximately 13 inches, falling primarily from October to April (WeatherSpark, 2022).

Waters

A watershed is the topographic region in which upland water collects and drains into a stream, river, or lake and can consist of many smaller subwatersheds. The APE lies within the Fancher Creek-Fancher Creek Canal watershed - Hydrologic Unit Code (HUC) 1803000903; and the Fancher Creek Canal subwatershed - HUC 180300090303.

The nearest surface water is the Fancher Creek Canal approximately 0.2 miles directly south of the APE. This canal is a channelized portion of Fancher Creek. The Fancher Creek-Fancher Creek Canal watershed includes Fancher Creek origins in the Sierra Nevada foothills, through to the valley floor where it is eventually channelized before crossing California State Route 180. The channelized Fancher Creek Canal includes upstream connections to Mud Creek as well as Hog Creek before they join Fancher Creek. The Fancher Creek Canal continues flowing west,

eventually splitting into Braly Canal, Central Canal, and Washington Canal west of Clovis Avenue. None of these canals appear to have a downstream connection to a known Waters of the United States, each terminating in the agricultural area east of California State Route 145.

Soils

Two soil mapping units representing two soil types were identified within the APE. The soils are displayed with their core properties in the table below, according to the Major Land Resource Area of California 19 map area. These soils are commonly used for agriculture.

Table 1. List of Soils Located Onsite and Their Basic Properties

Soil	Soil Map Unit	Percent of APE	Hydric Unit	Hydric Minor Units	Drainage	Permeability	Runoff
Atwater	Sandy loam, 0 to 3 percent slopes	34.6%	No	No	Well drained	Moderately rapid permeability	Very low runoff
Ramona	Loam	65.4%	No	No	Well drained	Moderately slow permeability	Low runoff

None of the major or minor soils units were identified as hydric. Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions such that under sufficiently wet conditions, hydrophytic vegetation can be supported.

The full soil report can be found in **Attachment B** at the end of this document.

Biotic Habitat

The APE is surrounded by residential neighborhoods to the south and west, and ruderal/industrial areas to the north and east. The alignments are proposed in the right-of-way of existing, paved roads, and the proposed treatment facility is located on a heavily disturbed, fallow parcel. The existing wellsite is surrounded by residential houses. Five trees are present in aerial imagery located within the Fowler Ave median and the entrance of the wellsite. California State Route 180 is located less than 0.2 miles northeast of the APE. The Fancher Creek Business Park is located directly east of the Project.

Methodology

A thorough search of the California Department of Fish and Wildlife (CDFW), California Natural Diversity Database (CNDDDB), the United States Fish and Wildlife Service (USFWS), Information for Planning and Consultation (IPaC), iNaturalist, California Herps, and California Native Plant Society (CNPS) were reviewed for potential special status plant and animal species that may be found in and around the APE. The CNDDDB search included the United States Geologic Survey (USGS) areas encompassing the *Malaga* 7.5-minute quadrangle that contains the APE in its entirety, and for the eight surrounding quadrangles: *Clovis*, *Fresno South*, *Fresno North*, *Conejo*, *Selma*, *Caruthers*, *Round Mountain*, and *Sanger*. The full CNDDDB and IPaC species list can be found in **Attachment C** and **Attachment D** at the end of this document. No field survey was conducted. Viewing of the APE was achieved utilizing satellite and historical imagery.

Special Status Species

There are 20 special status animal species and 12 special status plant species with recorded observations within the 9-quad search. Special status species found within three miles of the APE, as well as those provided by the IPaC search, include 16 animal species and three plant species. These species, and their potential to occur within the APE, are listed in **Table 2** and **Table 3** below.

Table 2. List of Special Status Animals with Potential to Occur Onsite and/or in the Vicinity.

<i>Species</i>	<i>Status</i>	<i>Habitat</i>	<i>Occurrence within Project Site</i>
American badger (<i>Taxidea taxus</i>)	CSC	Grasslands, savannas, and mountain meadows near timberline are preferred. Most abundant in drier open spaces of shrub and grassland. Burrows in soil.	Absent. The APE is highly disturbed, consisting primarily of paved roads, and is therefore unsuitable for foraging or denning. The surrounding area is equally disturbed, consisting of residential neighborhoods and frequently disced parcels.
Burrowing Owl (<i>Athene cunicularia</i>)	CSC	Resides in open, dry annual or perennial grasslands, deserts, and scrublands with low growing vegetation. Nests underground in existing burrows created by mammals, most often ground squirrels.	Unlikely. The only potentially suitable habitat within and adjacent to the APE are the frequently disced, ruderal parcels. Due to frequent ground disturbance, ground squirrel burrows cannot persist, which are required by this species.
California Condor (<i>Gymnogyps californianus</i>)	FE, CE, CFP	Typically nests in cavities in canyon or cliff faces but has also been recorded nesting in giant sequoias in Tulare County. Requires vast expanse of open savannah, grassland, and/or foothill chaparral in mountain ranges of moderate altitude. Forages up to 100 miles from roost/nest site.	Absent. The APE is outside the current known range of this species.
California glossy snake (<i>Arizona elegans occidentalis</i>)	CSC	Inhabits arid scrub, rocky washes, grasslands, and chaparral. Prefers open areas with loose soil for easy burrowing.	Absent. The APE is outside the current known range for this species and suitable habitat for this species is absent.
California tiger salamander (<i>Ambystoma californiense</i>)	FT, CT, CWL	Requires vernal pools or seasonal ponds for breeding and small mammal burrows for aestivation. Generally found in grassland and oak savannah plant communities in central California from sea level to 1500 feet in elevation.	Absent. Habitats required by this species, including vernal pools, are absent from the APE and surrounding area. Upland habitat is less than marginal for this species within the APE due to frequent ground disturbance.
Coast horned lizard (<i>Phrynosoma blainvillii</i>)	CSC	Found in grasslands, coniferous forests, woodlands, and chaparral, primarily in open areas with patches of loose, sandy soil and low-lying vegetation in valleys, foothills, and semi-arid mountains. Frequently found near ant hills and along dirt roads in lowlands along sandy washes with scattered shrubs.	Absent. Due to frequent ground disturbance and paved roads, the APE is unsuitable for this species. The only regional recorded observation of this species is from a historical record dated 1893.
Crotch bumble bee (<i>Bombus crotchii</i>)	CCE	Occurs throughout coastal California, as well as east to the Sierra-Cascade crest, and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	Unlikely. Paved roads and frequent disking of the ruderal parcels likely prevents forage required by this species to persist. The only two regional recorded observations of this species occurred more than 100 years ago.
Delta smelt (<i>Hypomesus transpacificus</i>)	FT, CE	This pelagic and euryhaline species is Endemic to the Sacramento-San Joaquin River Delta, upstream through Contra Costa, Sacramento, San Joaquin, and Solano Counties.	Absent. Suitable perennial aquatic habitat for this species is absent from the APE and surrounding lands.

<i>Species</i>	<i>Status</i>	<i>Habitat</i>	<i>Occurrence within Project Site</i>
Fresno kangaroo rat (<i>Dipodomys</i> <i>nitratoides exilis</i>)	FE, CE	An inhabitant of alkali sinks open grassland environments in western Fresno County. Prefers bare, alkaline, clay-based soils subject to seasonal inundation with more friable soil mounds around shrubs and grasses.	Absent. The only regional recorded observation of this species is listed as “Extirpated” on CNDDDB. Frequent ground disturbance and paved roads within the APE are unsuitable for this species.
Least Bell’s Vireo (<i>Vireo bellii pusillus</i>)	FE, CE	This migratory species breeds in southern California. Breeding habitat consists of dense, low, shrubby, riparian vegetation in the vicinity of water or dry river bottoms. By the early 1980s, this species was extirpated from most of its historic range in California, including the Central Valley. This species now occurs exclusively along the coast of southern California (USFWS, 1998).	Absent. This species is considered extirpated from the Central valley.
Monarch Butterfly (<i>Danaus plexippus</i>)	FC	Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Larval host plants consist of milkweeds (<i>Asclepias</i> sp.). Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico.	Unlikely. Paved roads and frequent discing of the ruderal parcels likely prevents forage required by this species to persist. This species would not be expected to lay eggs within the AEP due to location within its migratory pathway.
Northern California legless lizard (<i>Anniella pulchra</i>)	CSC	Found primarily underground, burrowing in loose, sandy soil. Forages in loose soil and leaf litter during the day. Occasionally observed on the surface at dusk and night.	Absent. Paved roads and frequent ground disturbance within the APE are unsuitable for this species. The only regional recorded observation of this species occurred before 1900.
San Joaquin kit fox (<i>Vulpes macrotis mutica</i>)	FE, CT	Underground dens with multiple entrances in alkali sink, valley grassland, and woodland in valleys and adjacent foothills.	Unlikely. The highly disturbed habitats within the APE are less than marginal for this species. The only known population of this species in Fresno County is located more than 40 miles northwest of the APE.
Swainson’s Hawk (<i>Buteo swainsoni</i>)	CT	Nests in large trees in open areas adjacent to grasslands, grain or alfalfa fields, or livestock pastures suitable for supporting rodent populations.	Unlikely. The highly disturbed urban and residential areas in the surrounding region are less than marginal for this species. The nearest contemporary recorded observation of this species occurred approximately 6.5 miles southwest of the APE in annual grassland and pasture habitat.
Vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	FT	Occupies vernal pools, clear to tea-colored water, in grass or mud-bottomed swales, and basalt depression pools.	Absent. Suitable vernal pool habitat for this species is absent from the APE and surrounding lands. The APE is subject to frequent ground disturbance and therefore generally unsuitable for this species.

<i>Species</i>	<i>Status</i>	<i>Habitat</i>	<i>Occurrence within Project Site</i>
Western Yellow-billed Cuckoo (<i>Coccyzus americanus occidentalis</i>)	FT, CE	Suitable nesting habitat in California includes dense riparian willow-cottonwood and mesquite habitats along a perennial river. Once a common breeding species in riparian habitats of lowland California, this species currently breeds consistently in only two locations in the State: along the Sacramento and South Fork Kern Rivers.	Absent. This species is considered extirpated from the region. The only two regionally recorded observations of this species occurred more than 100 years ago.

Table 3. List of Special Status Plants with Potential to Occur Onsite and/or in the Vicinity.

<i>Species</i>	<i>Status</i>	<i>Habitat</i>	<i>Occurrence within Project Site</i>
California jewelflower (<i>Caulanthus californicus</i>)	FE, CE, CNPS 1B	Found in the San Joaquin Valley and Western Transverse Ranges in sandy soils. Occurs on flats and slopes, generally in non-alkaline grassland at elevations between 230 feet and 6100 feet. Blooms February–April.	Absent. The disturbed habitats of the APE are unsuitable for this species. The only regional recorded observation of this species lists it as “Extirpated” from the region.
California satintail (<i>Imperata brevifolia</i>)	CNPS 2B	Although this facultative species is equally likely to occur in wetlands and non-wetlands, it is often found in wet springs, meadows, streambanks, and floodplains at elevations below 1600 feet. Blooms September – May.	Absent. Habitats required by this species are absent from the APE. The only regional recorded observation of this species occurred more than 100 years ago.
Madera leptosiphon (<i>Leptosiphon serrulatus</i>)	CNPS 1B	Found in openings in foothill woodland, often yellow-pine forest, and chaparral at elevations between 1000 feet and 4300 feet. Blooms April – May.	Absent. The APE is outside the current known elevational range of this species. Habitats required by this species are absent from the APE.

EXPLANATION OF OCCURRENCE DESIGNATIONS AND STATUS CODES

Unlikely: Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient.
Absent: Species not observed on the site and precluded from occurring there due to absence of suitable habitat.

STATUS CODES

FE Federally Endangered
FT Federally Threatened
FC Federal Candidate

CE California Endangered
CT California Threatened
CFP California Fully Protected
CSC California Species of Concern
CWL California Watch List

CNPS LISTING

1B Plants Rare, Threatened, or Endangered in California and elsewhere.

2B Plants Rare, Threatened, or Endangered in California, but more common elsewhere.

Designated Habitat and Communities

The CDFW and USFWS often designate areas of “Critical Habitat” when it lists species as threatened or endangered. Critical Habitat is a specific geographic area that contains features essential for the conservation of a threatened or endangered species and would require special

management or protection. According to CNDDDB and IPaC, designated critical habitat is absent from the APE and vicinity.

CDFW also designates “natural communities of special concern” and are defined by distinguished, significant biological diversity, or a home to special status species. According to CNDDDB, the APE contains no natural communities of special concern.

Wildlife Corridors

Wildlife movement corridors are routes that animals regularly and predictably follow during seasonal migration, dispersal from native ranges, daily travel within home ranges, and inter-population movements. Movement corridors in California are typically associated with valleys, ridgelines, and rivers and creeks supporting riparian vegetation. According to aerial imagery, the Fancher Creek Canal contains several patches of riparian vegetation which could act as cover for wildlife species utilizing the canal to disperse through the urban landscape. The canal, however, is separated from the APE by a 0.2-mile portion of a 4-lane road (Fowler Avenue), and a large, ruderal plot of land that appears to be frequently disced. No features within the APE would be expected to serve as a wildlife movement corridor.

Project Impacts Analysis and Recommendations

Of the 16 regionally occurring special status animal species, all were found to be absent or unlikely to occur within the APE due to unsuitable habitat. As explained in **Table 2**, these species include: American badger, Burrowing Owl, California Condor, California glossy snake, California tiger salamander, coast horned lizard, Crotch bumblebee, delta smelt, Fresno kangaroo rat, Least Bell’s Vireo, Northern California legless lizard, monarch butterfly, San Joaquin kit fox, Swainson’s Hawk, vernal pool fairy shrimp, and Western Yellow-billed Cuckoo. Since it is unlikely these species would occur onsite, implementation of the Project would have no impact on these special status species through construction mortality, disturbance, or loss of habitat. Mitigation measures are not warranted.

Of the three regionally occurring special status plant species, all were found to be absent within the APE due to unsuitable habitat, known range, elevation, and soil type. As explained in **Table 3**, these species include: California jewelflower, California satintail, and Madera leptosiphon. Since it is unlikely these species would occur onsite, implementation of the Project would have no impact on these special status species through construction mortality, disturbance, or loss of habitat. Mitigation measures are not warranted.

The APE does provide marginal nesting habitat for multiple avian species, including ground nesting birds such as Killdeer (*Charadrius vociferus*). Birds nesting within the APE during construction have the potential to be injured or killed by Project-related activities. In addition to the direct “take” of nesting birds, nesting birds within the APE or adjacent areas could be disturbed by Project-related activities resulting in nest abandonment. Projects that adversely affect the nesting success of raptors and migratory birds or result in the mortality of individual birds are considered a violation of State and federal laws.

The following recommendations have been identified to protect these species.

Recommendations

1. The Project’s construction activities will occur, if feasible, between September 16 and January 31 (outside of nesting bird season) in an effort to avoid impacts to nesting birds.
2. If activities must occur within nesting bird season (February 1 to September 15), a qualified biologist will conduct a pre-construction survey for all nesting birds within the Project boundary and an additional 50 feet surrounding the Project, no more than 7 days prior to

the start of construction. All raptor nests would be considered “active” upon the nest-building stage.

3. On discovery of any active nests or breeding colonies near work areas, the biologist will determine appropriate construction setback distances based on applicable CDFW and/or USFWS guidelines and/or the biology of the species in question. Construction buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged and are no longer dependent on the nest.

Summary of Review

Although there is a potential for Project activities to impact nesting birds, adhering to the recommendations discussed above would result in less than significant impacts to these avian species, therefore, no additional actions are warranted.

Protected habitats and natural communities, wildlife corridors, and waters of the State or United States are outside of the APE and would not be impacted by the Project.

If Project activities were to change or the APE were to be altered, an additional biological review may be necessary to determine any further potential biological impacts. If you have any questions or need further information, please do not hesitate to contact me at mbourne@ppeng.com.

Sincerely,



Mary Beth Bourne
Associate Biologist

Attachments:

Attachment A - APE Map

Attachment B - NRCS Soil Report

Attachment C - CNDDDB Species List

Attachment D - IPaC Species List

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Attachment A - APE Map



Attachment B - NRCS Soil Report



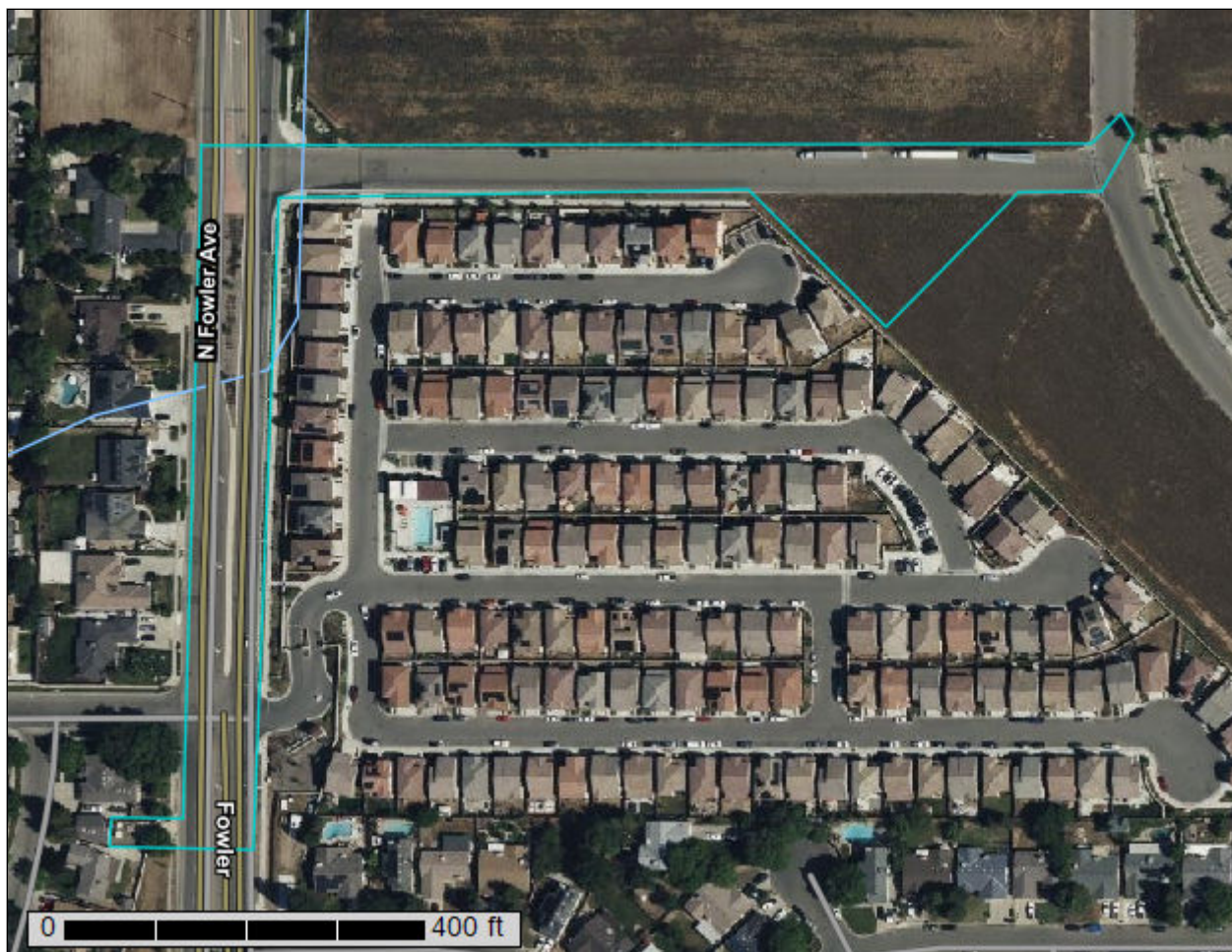
United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Eastern Fresno Area, California



December 14, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.


Custom Soil Resource Report Soil Map




Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)


Soils


 Soil Map Unit Polygons


 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit


 Clay Spot


 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop


 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole


 Slide or Slip

 Sodic Spot


 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals


Transportation

 Rails


 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eastern Fresno Area, California
Survey Area Data: Version 15, Sep 1, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 16, 2022—May 30, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
ArA	Atwater sandy loam, 0 to 3 percent slopes	1.1	34.6%
Rc	Ramona loam	2.1	65.4%
Totals for Area of Interest		3.2	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Eastern Fresno Area, California

ArA—Atwater sandy loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: h10x
Elevation: 250 to 450 feet
Mean annual precipitation: 9 to 14 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 250 to 275 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Atwater and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Atwater

Setting

Landform: Dunes on fan remnants
Landform position (two-dimensional): Shoulder, footslope
Landform position (three-dimensional): Side slope, base slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian deposits derived from alluvium derived from granite

Typical profile

A - 0 to 24 inches: sandy loam
Bt - 24 to 43 inches: sandy loam
C - 43 to 60 inches: loamy sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.8 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Ecological site: R017XY905CA - Dry Alluvial Fans and Terraces
Hydric soil rating: No

Minor Components

Unnamed, sandy clay loam subsoil

Percent of map unit: 12 percent
Landform: Dunes on fan remnants

Custom Soil Resource Report

Hydric soil rating: No

Delhi

Percent of map unit: 3 percent

Landform: Dunes on fan remnants

Hydric soil rating: No

Rc—Ramona loam

Map Unit Setting

National map unit symbol: hl8m

Elevation: 250 to 500 feet

Mean annual precipitation: 9 to 15 inches

Mean annual air temperature: 60 to 62 degrees F

Frost-free period: 225 to 275 days

Farmland classification: Prime farmland if irrigated

Map Unit Composition

Ramona and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ramona

Setting

Landform: Alluvial fans, stream terraces

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium derived from granite

Typical profile

A - 0 to 12 inches: loam

BAt - 12 to 24 inches: loam

Bt - 24 to 38 inches: clay loam

C - 38 to 60 inches: coarse sandy loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 5.5 inches)

Custom Soil Resource Report

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 4c
Hydrologic Soil Group: C
Ecological site: R017XY905CA - Dry Alluvial Fans and Terraces
Hydric soil rating: No

Minor Components

Unnamed, fine sandy loam

Percent of map unit: 10 percent
Landform: Stream terraces, alluvial fans
Hydric soil rating: No

Unnamed, clay loam

Percent of map unit: 5 percent
Landform: Stream terraces, alluvial fans
Hydric soil rating: No

Unnamed, gently sloping

Percent of map unit: 5 percent
Landform: Stream terraces, alluvial fans
Hydric soil rating: No

References

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- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelpdb1043084>

Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

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United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Attachment C - CNDDDB Species List



Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad IS (Malaga (3611966) OR Conejo (3611956) OR Selma (3611955) OR Caruthers (3611957) OR Fresno South (3611967) OR Fresno North (3611977) OR Clovis (3611976) OR Round Mountain (3611975) OR Sanger (3611965))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
alkali-sink goldfields <i>Lasthenia chrysantha</i>	PDAST5L030	None	None	G2	S2	1B.1
American badger <i>Taxidea taxus</i>	AMAJF04010	None	None	G5	S3	SSC
Antioch efferian robberfly <i>Efferia antiochi</i>	IIDIP07010	None	None	G1G2	S1S2	
black-crowned night heron <i>Nycticorax nycticorax</i>	ABNGA11010	None	None	G5	S4	
bristly sedge <i>Carex comosa</i>	PMCYP032Y0	None	None	G5	S2	2B.1
burrowing owl <i>Athene cunicularia</i>	ABNSB10010	None	None	G4	S3	SSC
California glossy snake <i>Arizona elegans occidentalis</i>	ARADB01017	None	None	G5T2	S2	SSC
California jewelflower <i>Caulanthus californicus</i>	PDBRA31010	Endangered	Endangered	G1	S1	1B.1
California linderiella <i>Linderiella occidentalis</i>	ICBRA06010	None	None	G2G3	S2S3	
California satintail <i>Imperata brevifolia</i>	PMPOA3D020	None	None	G3	S3	2B.1
California tiger salamander - central California DPS <i>Ambystoma californiense pop. 1</i>	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
coast horned lizard <i>Phrynosoma blainvillii</i>	ARACF12100	None	None	G3G4	S4	SSC
Crotch bumble bee <i>Bombus crotchii</i>	IIHYM24480	None	Candidate Endangered	G2	S1S2	
double-crested cormorant <i>Nannopterum auritum</i>	ABNFD01020	None	None	G5	S4	WL
forked hare-leaf <i>Lagophylla dichotoma</i>	PDAST5J070	None	None	G2	S2	1B.1
Fresno kangaroo rat <i>Dipodomys nitratoideis exilis</i>	AMAFD03151	Endangered	Endangered	G3TH	SH	
great egret <i>Ardea alba</i>	ABNGA04040	None	None	G5	S4	
Greene's tuctoria <i>Tuctoria greenei</i>	PMPOA6N010	Endangered	Rare	G1	S1	1B.1
hoary bat <i>Lasiurus cinereus</i>	AMACC05030	None	None	G3G4	S4	



Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Hurd's metapogon robberfly <i>Metapogon hurdi</i>	IIDIP08010	None	None	G1G2	S1S2	
least Bell's vireo <i>Vireo bellii pusillus</i>	ABPBW01114	Endangered	Endangered	G5T2	S2	
Madera leptosiphon <i>Leptosiphon serrulatus</i>	PDPLM09130	None	None	G3	S3	1B.2
midvalley fairy shrimp <i>Branchinecta mesoavallensis</i>	ICBRA03150	None	None	G2	S2S3	
molestan blister beetle <i>Lytta molesta</i>	IICOL4C030	None	None	G2	S2	
Northern California legless lizard <i>Anniella pulchra</i>	ARACC01020	None	None	G3	S3	SSC
Northern Claypan Vernal Pool <i>Northern Claypan Vernal Pool</i>	CTT44120CA	None	None	G1	S1.1	
Northern Hardpan Vernal Pool <i>Northern Hardpan Vernal Pool</i>	CTT44110CA	None	None	G3	S3.1	
pallid bat <i>Antrozous pallidus</i>	AMACC10010	None	None	G4	S3	SSC
San Joaquin adobe sunburst <i>Pseudobahia peirsonii</i>	PDAST7P030	Threatened	Endangered	G1	S1	1B.1
San Joaquin kit fox <i>Vulpes macrotis mutica</i>	AMAJA03041	Endangered	Threatened	G4T2	S2	
San Joaquin pocket mouse <i>Perognathus inornatus</i>	AMAFD01060	None	None	G2G3	S2S3	
San Joaquin Valley Orcutt grass <i>Orcuttia inaequalis</i>	PMPOA4G060	Threatened	Endangered	G1	S1	1B.1
Sanford's arrowhead <i>Sagittaria sanfordii</i>	PMALI040Q0	None	None	G3	S3	1B.2
snowy egret <i>Egretta thula</i>	ABNGA06030	None	None	G5	S4	
spiny-sepaled button-celery <i>Eryngium spinosepalum</i>	PDAP10Z0Y0	None	None	G2	S2	1B.2
succulent owl's-clover <i>Castilleja campestris</i> var. <i>succulenta</i>	PDSCR0D3Z1	Threatened	Endangered	G4?T2T3	S2S3	1B.2
Swainson's hawk <i>Buteo swainsoni</i>	ABNKC19070	None	Threatened	G5	S3	
tricolored blackbird <i>Agelaius tricolor</i>	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	IICOL48011	Threatened	None	G3T2T3	S3	
vernal pool fairy shrimp <i>Branchinecta lynchi</i>	ICBRA03030	Threatened	None	G3	S3	



Selected Elements by Common Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
western mastiff bat <i>Eumops perotis californicus</i>	AMACD02011	None	None	G4G5T4	S3S4	SSC
western pond turtle <i>Emys marmorata</i>	ARAAD02030	None	None	G3G4	S3	SSC
western spadefoot <i>Spea hammondi</i>	AAABF02020	None	None	G2G3	S3	SSC
western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	ABNRB02022	Threatened	Endangered	G5T2T3	S1	

Record Count: 44

Attachment D - IPaC Species List



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

Phone: (916) 414-6600 Fax: (916) 414-6713



In Reply Refer To:

December 15, 2022

Project Code: 2023-0025566

Project Name: Biological Review of the proposed City of Fresno 102A Wellhead Treatment

Project # 1561-22013 TK4

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of

this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

Endangered Species Act Species

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Fresno Kangaroo Rat <i>Dipodomys nitratoide exilis</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5150	Endangered
San Joaquin Kit Fox <i>Vulpes macrotis mutica</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2873	Endangered

Birds

NAME	STATUS
California Condor <i>Gymnogyps californianus</i> Population: U.S.A. only, except where listed as an experimental population There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Amphibians

NAME	STATUS
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (Central CA DPS) There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC User Contact Information

Agency: Provost & Pritchard

Name: Mary Beth Bourne

Address: 455 W Fir Ave

City: Clovis

State: CA

Zip: 93611

Email: marybbourne@gmail.com

Phone: 5594492700

Appendix C: Cultural Resources Information

City of Fresno

Water Treatment of Well 102 A Project

Cultural Resources Information

San Joaquin Valley Information Center, CSU Bakersfield, California Historical Resources Information System: Record Search 21-429, dated November 15, 2022.

- There have been no previous cultural resource studies conducted within the project area.
- There have been five cultural resource studies conducted within the one-half mile radius: FR-00257, 00535, 02223, 02237, and 03030
- There are no recorded resources within the project area, and it is not known if any exist.
- There are ten recorded resources in the one-half mile radius: P-10-003038, 003039, 004415, 006089, 006091, 006100, 007232, 007233, 007234, and 007235.
 - These resources consist of four historic era buildings, an historic era bridge, an historic era row of palm trees, an historic era trash scatter and well, and three prehistoric era ground stones.
- Resource P-10-004415, Bridge #42-65, has been given a National Register status code of 3S, indicating that this resource appears eligible for listing in the National Register of Historic Places as an individual property through survey evaluation.
- There are no other recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

Native American Heritage Commission (NAHC): Sacred Lands File & Native American Contacts List Request, dated December 7, 2022.

- A Record Search of the NAHC Sacred Lands File was completed for the Area of Potential Effect (APE) with negative results.

AB 52 Consultation pursuant to Public Resource Code Section 21080.3.1

- The City of Fresno has received a letter from the Dumna Wo Wah Tribe and the Table Mountain Rancheria Tribe.
- A Tribal Consultation Notification Request Letter was sent out by the City of Fresno via certified mail dated December 19, 2022, which included a Project Description, map of the APE and a Topo map.
- No correspondence has been received by the City of Fresno pursuant to the Tribal Consultation Notification Request Letter.

CHRIS – Record Search Results



To: Jackie Lancaster
Provost & Pritchard Consulting Group
400 E. Main Street, Suite 300
Visalia, CA 93291

Record Search 22-429

Date: November 15, 2022

Re: City of Fresno, 102A Wellhead Treatment Project

County: Fresno

Map(s): Malaga 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there have been no previous cultural resource studies conducted within the project area. There have been five cultural resource studies conducted within the one-half mile radius: FR-00257, 00535, 02223, 02237, and 03030.

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there are no recorded resources within the project area, and it is unknown if any exist there. There are ten recorded resources in the one-half mile radius: P-10-003038, 003039, 004415, 006089, 006091, 006100, 007232, 007233, 007234, and 007235. These resources consist of four historic era buildings, an historic era bridge, an historic era row of palm trees, an historic era trash scatter and well, and three prehistoric era ground stones.

Resource P-10-004415, Bridge #42-65, has been given a National Register status code of 3S, indicating that this resource appears eligible for listing in the National Register of Historic Places as an individual property through survey evaluation. There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand this project consists of installation of approximately 1,400 LF of pipeline within existing road right of way from an existing well to a vacant section of land where the proposed treatment facilities will be located. Because a cultural resources study has not been completed on this project area, it is unknown if any cultural resources are present. Therefore, we recommend a qualified, professional consultant conduct a field survey of any vacant land prior to ground disturbance activities to determine if cultural resources are present. No further investigation is currently recommended for the road right of ways. However, if any cultural resources are unearthed during ground disturbance activities, all work must halt in the area of the find and a qualified, professional consultant should be called out to assess the findings and make the appropriate mitigation recommendations. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:



Celeste M. Thomson, Coordinator

Date: November 15, 2022

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

NAHC – Sacred Lands File Search Results



NATIVE AMERICAN HERITAGE COMMISSION

December 7, 2022

Jackie Lancaster
Provost & Pritchard

Via Email to: jlancaster@ppeng.com

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Sara Dutschke
Miwok

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Buffy McQuillen
Yokayo Pomo, Yuki,
Nomlaki

COMMISSIONER
Wayne Nelson
Luiseño

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
[Vacant]

COMMISSIONER
[Vacant]

EXECUTIVE SECRETARY
**Raymond C.
Hitchcock**
Miwok/Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

Re: City of Fresno 102A Wellhead Treatment Project, Fresno County

Dear Mr. Lancaster:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Cameron.vela@nahc.ca.gov.

Sincerely,

Cameron Vela

Cameron Vela
Cultural Resources Analyst

Attachment

AB 52 Tribal Consultation



Department of Public Utilities

Utilities Planning & Engineering
1626 E Street
Fresno, California 93706
559-621-8600
www.fresno.gov

December 19, 2022

Dumna Wo-Wah Tribal Government
Tribal Chairman Robert G Ledger Sr
2191 W Pico Avenue
Fresno, CA 93705

Subject: Notification pursuant to Assembly Bill 52 for City of Fresno Wellhead Treatment Improvements at Pump Station 102A, located in the City of Fresno, Fresno County

Dear Chairperson Ledger:

The City of Fresno (City), as Lead Agency under the California Environmental Quality Act, is currently processing an Initial Study/Mitigated Negative Declaration for Wellhead Treatment Improvements at Pump Station 102A (Project). Pursuant to the provisions of Assembly Bill 52 (AB 52), the City is requesting your review of the Project, as described below, to determine if formal consultation is deemed appropriate.

The purpose of the Project is for the removal of 1,2,3-Trichloropropane from groundwater produced by the existing municipal water supply well at Pump Station 102 (PS 102). The Project includes the construction of wellhead treatment facilities at a remote treatment site (Pump Station 102A) located within 1,000 feet of the existing PS 102. Construction will include a raw water pipeline, four 12-foot diameter Granular Activated Carbon vessels, a small accessory structure, a PG&E transformer, a perimeter block wall, and a new driveway with gates.

Please be assured that any locations of archaeological sites, cemeteries, or sacred places will be treated confidentially, as required by law, and not disclosed in any document available to the general public.

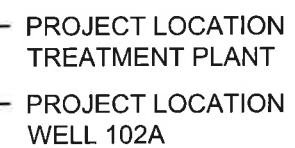
A copy of the Regional Vicinity Map and Project Site Map is included. Pursuant to AB 52, the Tribe has 30 days to request formal consultation. Please feel free to contact me with any questions at (559) 621-1625 or Anita.Luera@fresno.gov.

Respectfully,

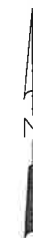


Anita Luera
City of Fresno

Enclosures: Regional Vicinity Map, Project Site Map

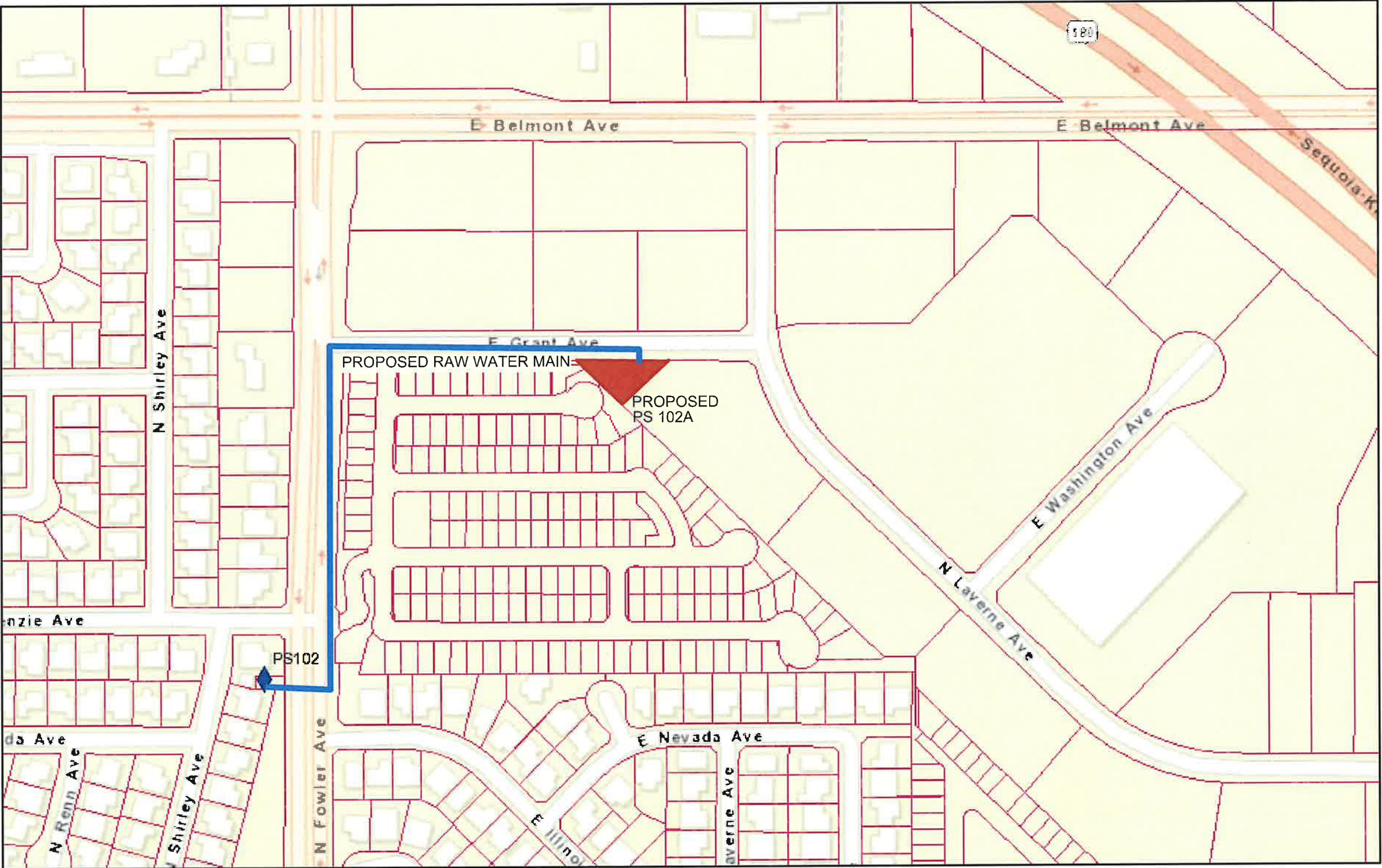


VICINITY MAP



ATTACHMENT 1

PROJECT LOCATION MAP - PROPOSED PUMP STATION 102A



8/11/2021, 4:47:33 PM

Water Wells Aban

<all other values>

ABAN

Water Wells Prop

<all other values>

PROP

Water Wells Priv

<all other values>

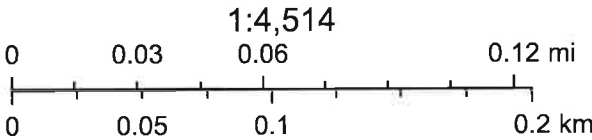
PRIV

Water Wells

Active

Live Not Accepted

Parcels



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

Web AppBuilder for ArcGIS

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Department of Public Utilities

Utilities Planning & Engineering
1626 E Street
Fresno, California 93706
559-621-8600
www.fresno.gov

December 19, 2022

Table Mountain Rancheria
Brenda Lavell, Chairperson
P.O. Box 410
Friant, CA, 93626

Subject: Notification pursuant to Assembly Bill 52 for City of Fresno Wellhead Treatment Improvements at Pump Station 102A, located in the City of Fresno, Fresno County

Dear Chairperson Lavell:

The City of Fresno (City), as Lead Agency under the California Environmental Quality Act, is currently processing an Initial Study/Mitigated Negative Declaration for Wellhead Treatment Improvements at Pump Station 102A (Project). Pursuant to the provisions of Assembly Bill 52 (AB 52), the City is requesting your review of the Project, as described below, to determine if formal consultation is deemed appropriate.

The purpose of the Project is for the removal of 1,2,3-Trichloropropane from groundwater produced by the existing municipal water supply well at Pump Station 102 (PS 102). The Project includes the construction of wellhead treatment facilities at a remote treatment site (Pump Station 102A) located within 1,000 feet of the existing PS 102. Construction will include a raw water pipeline, four 12-foot diameter Granular Activated Carbon vessels, a small accessory structure, a PG&E transformer, a perimeter block wall, and a new driveway with gates.

Please be assured that any locations of archaeological sites, cemeteries, or sacred places will be treated confidentially, as required by law, and not disclosed in any document available to the general public.

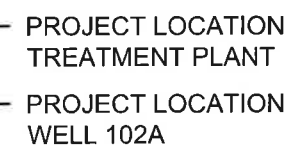
A copy of the Regional Vicinity Map and Project Site Map is included. Pursuant to AB 52, the Tribe has 30 days to request formal consultation. Please feel free to contact me with any questions at (559) 621-1625 or Anita.Luera@fresno.gov.

Respectfully,

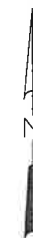


Anita Luera
City of Fresno

Enclosures: Regional Vicinity Map, Project Site Map

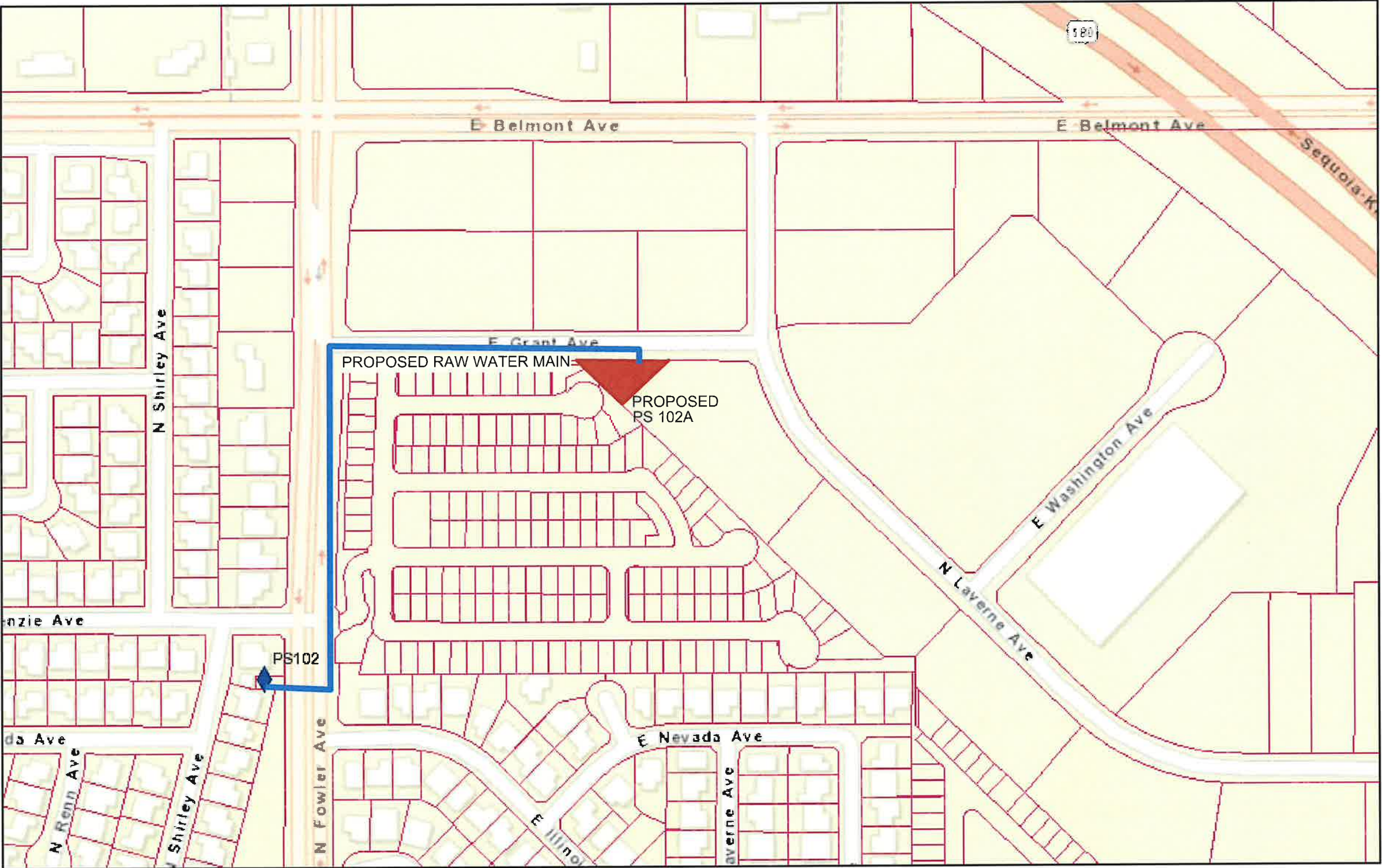


VICINITY MAP



ATTACHMENT 1

PROJECT LOCATION MAP - PROPOSED PUMP STATION 102A



8/11/2021, 4:47:33 PM

Water Wells Aban

<all other values>

ABAN

Water Wells Prop

<all other values>

PROP

Water Wells Priv

<all other values>

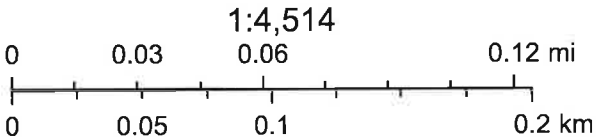
PRIV

Water Wells

Active

Live Not Accepted

Parcels



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

Web AppBuilder for ArcGIS

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