RECIRCULATED PUBLIC REVIEW DRAFT

CITY OF FRESNO
INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION
FOR
Del Oro-Metropolitan District and New Horizons Mobile Home Park Water System Consolidation Project

State Clearinghouse Number: 2024070988

Department of Public Utilities
1626 E. Street
Fresno, CA 93706

Prepared by:

Provost & Pritchard Consulting Group
400 East Main Street, Suite 300
Visalia, CA 93291

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 DEL ORO-METROPOLITAN DISTRICT AND NEW HORIZONS MOBILE HOME PARK WATER SYSTEM CONSOLIDATION PROJECT

NOTICE IS HEREBY GIVEN that the City of Fresno (City) plans to adopt a Mitigated Negative Declaration for the Del Oro-Metropolitan District (Del Oro) and New Horizons Mobile Home Park (NHMHP) Water System Consolidation Project (Project).

Pursuant to CEQA §15073.5 (b)(2), this ISMND is recirculating due to substantial revision.

The City's Department of Public Utilities proposes to consolidate the Del Oro and NHMHP water systems with the City of Fresno water system with two connection points. The consolidation of these water systems would allow the communities to have access to affordable and reliable sources of safe drinking water.

Both Del Oro and NHMHP communities are located outside of city limits but within the Sphere of Influence (SOI).

- New Horizon Mobile Home Park is located near the intersections of Olive and Marks Avenues and serves approximately 77 residential units with single groundwater well and residential septic system.
- The Del Oro community is located near the intersection of Olive and Marty Avenues, west of the City, and currently serves approximately 29 residential units with a single groundwater well and residential septic system.

Pursuant to Section 15063 of the California Environmental Quality Act (CEQA), 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.

The City of Fresno is designated the Lead Agency, in accordance with Section 15050 of the CEQA Guidelines. The Lead Agency is the public agency which has the principal responsibility for approving the necessary environmental clearances and analyses for any project in the City of Fresno. Copies of the Initial Study and proposed Mitigated Negative Declaration are on file and available for public review at the City Clerk, Fresno City Hall, 2nd Floor, Room 2133, 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 **February 10, 2025**, and end on **March 11, 2025**.

This public notice provides staff's finding in the manner prescribed by § 15072 of the CEQA Guidelines and by § 21092 of the PRC Code (CEQA provisions). Additional information on the proposed project and proposed environmental finding of a Mitigated Negative Declaration and the Initial Study may be obtained from the Fresno City Hall, 2nd Floor, Room 2133, 2600 Fresno Street, Fresno, CA 93721. Please contact Debbie Khounsavath at (559) 621-1624 for more information or by e-mail at Debbie.Khounsavath@fresno.gov. Para información en español, comuníquense con Jaime Sandoval (al número de teléfono 559-621-8613). **ANY INTERESTED PERSON**

may comment on the proposed environmental finding. Comments must be in writing and must state (1) the commentor's name and address; (2) the commentor's interest in, or relationship to, the project; (3) the environmental determination being commented upon; and (4) the specific reason(s) why the proposed environmental determination should or should not be made. Any comments may be submitted at any time between the publication date of this notice and close of business on **March 4, 2025.** Please direct comments to Debbie Khounsavath, 1626 E. Street, Fresno, California, 93706; or by email to Debbie.Khounsavath@fresno.gov

APPENDIX G/INITIAL STUDY FOR A MITIGATED NEGATIVE DECLARATION

Environmental Checklist Form for:
Del Oro-Metropolitan District and New Horizons Mobile Home Park Water System Consolidation Project

1.	**Del Oro-Metropolitan District and New Horizons Mobile Home Park Water System Consolidation Project**
2.	**Lead agency name and address:** City of Fresno Department of Public Utilities 1626 E. Street Fresno, CA 93706
3.	**Contact person and phone number:** Debbie Khounsavath, Planner II City of Fresno Department of Public Utilities Debbie.Khounsavath@fresno.gov (559) 621-1624
4.	**Project location:** The Project is located in the County 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 along W. Olive Avenue from North Blythe and North Marks Avenues. The centroid of the Project site is 36° 45' 26.68" N, 119° 51' 28.79" W.
5.	**Project sponsor's name and address:** City of Fresno Department of Public Utilities 1626 E. Street Fresno, CA 93706
6.	**General & Community plan land use designation:** City of Fresno: Medium Density Residential; Medium-Low Density Residential; Low Density Residential; Medium-High Density Residential County of Fresno: Rural Residential
7.	**Zoning:** City of Fresno: RM-MH (Mobile Home Park) County of Fresno: RR NB (Rural Residential); RCC (Rural Commercial Center); TP NB (Trailer Park Residential)
8.	**Description of project:** **Project Background and Purpose** The Del Oro-Metropolitan District (Del Oro), which is located within the City's Sphere of Influence (SOI), but outside of the City limits, serves water to approximately 96 residents through 29 metered service connections via one production well. The two

issues of concern for the Del Oro community are Nitrate levels in excess of the Maximum Contaminant Level (MCL) in their single water supply and the lack of redundant water supply. The State Water Resources Control Board, Division of Drinking Water (DDW) issued a compliance order on January 7, 2020, for Nitrate levels exceeding the MCL.

The New Horizons Mobile Home Park (NHMHP), which is located within the City's SOI, but outside of the City limits, serves an estimated 70 residents through 77 unmetered service connections via one active well. The issues of concern for the NHMHP water system include notices of violation for the Lead & Copper Rule, Coliform, 1,2,3 - Trichloropropane (TCP), and Nitrate as well as the lack of redundant water supply.

Project Description

The City of Fresno, Department of Public Utilities proposes to consolidate the Del Oro and NHMHP water systems with the City of Fresno water system with two master metered connection points. The consolidation of the two water systems would allow the Del Oro and NHMHP water systems to provide affordable and reliable sources of safe drinking water as Del Oro and NHMHP would continue to operate their respective water system downstream of the metered connection points with the City of Fresno. The Project components include:

- 8,200 linear feet (LF) of 16-inch water main along Olive Avenue from Blythe Avenue to Marks Avenue
- For the Del Oro system:
    - 230 LF of 4-inch water main along Knoll Drive from Olive Avenue to the master meter connection point
    - New 4-inch master meter at Knoll Drive and Olive Avenue
    - New 6-inch Pressure Reducing Valve and Backflow Preventor at Knoll Drive and Olive Avenue
    - Destruction of one (1) existing well and one (1) tank, onsite.
- For the NHMHP system:
    - New 4-inch master meter and service line at the connection point with the City system
    - New 4-inch Pressuring Reducing Valve and Backflow Preventor at the connection point with the City system
    - 430 LF of up to 4-inch water main along APN: 449-090-39 from the master meter connection to the existing water system
    - Destruction of three (3) existing wells and one (1) tank, onsite.

The width and depth of ground disturbance required for trench excavation would be four to five feet and four to six feet, respectively, dependent on crossings.

Operation and Maintenance

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

The City would be responsible for the O&M up to the master meters. Del Oro would continue to have the responsibility of operating and maintaining the on-site distribution

system downstream of the master meter, including the master meter, and would continue to operate as a small system apart from the metered connection. NHMHP would continue to operate the system beyond the master meter but would no longer operate as a public water system. This is not an item of concern as both communities are familiar with operating and maintaining the existing water systems.

The Project area is approximately 15 acres.

9. **Surrounding land uses and setting:**

	Planned Land Use	Existing Zoning	Existing Land Use
North	Low Density Residential Medium Low Density Residential Medium Density Residential General Commercial	RR – Rural Residential (County) CG – Commercial General (City)	Residential, Agricultural, and Vacant Lots
East	Medium High Density Residential Medium Density Residential	RR – Rural Residential (County)	Residential
South	Medium Low Density Residential Medium Density Residential Medium High Density Residential Elementary School	RR – Rural Residential (County) C6 – General Commercial (County) TP – Trailer Park Residential (County) RM-MH – Mobile Home Park (City)	Residential, Commercial, and Vacant Lots
West	Low Density Residential Medium Density Residential	R1 – Single Family Residential (County) RS-3 – Residential Single-Family, Low Density (City) RM-MH – Mobile Home Park (City)	Residential

10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):**

- State Water Resources Control Board
- County of Fresno

	• Fresno Local Agency Formation Commission
11.	**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?** 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. 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 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. Currently, the Table Mountain Rancheria Tribe and the Dumna Wo Wah Tribe have requested to be notified pursuant to Assembly Bill 52 (AB 52). On November 25, 2024, letters were mailed out to the above-mentioned tribes, in addition to 14 other tribes provided by the Native American Heritage Commission (NAHC). There was an initial request for consultation from North Fork Rancheria of Mono in November 2024; however, a follow up response dated February 6, 2025, indicated there were no concerns from the tribe at this time and no consultation was needed.

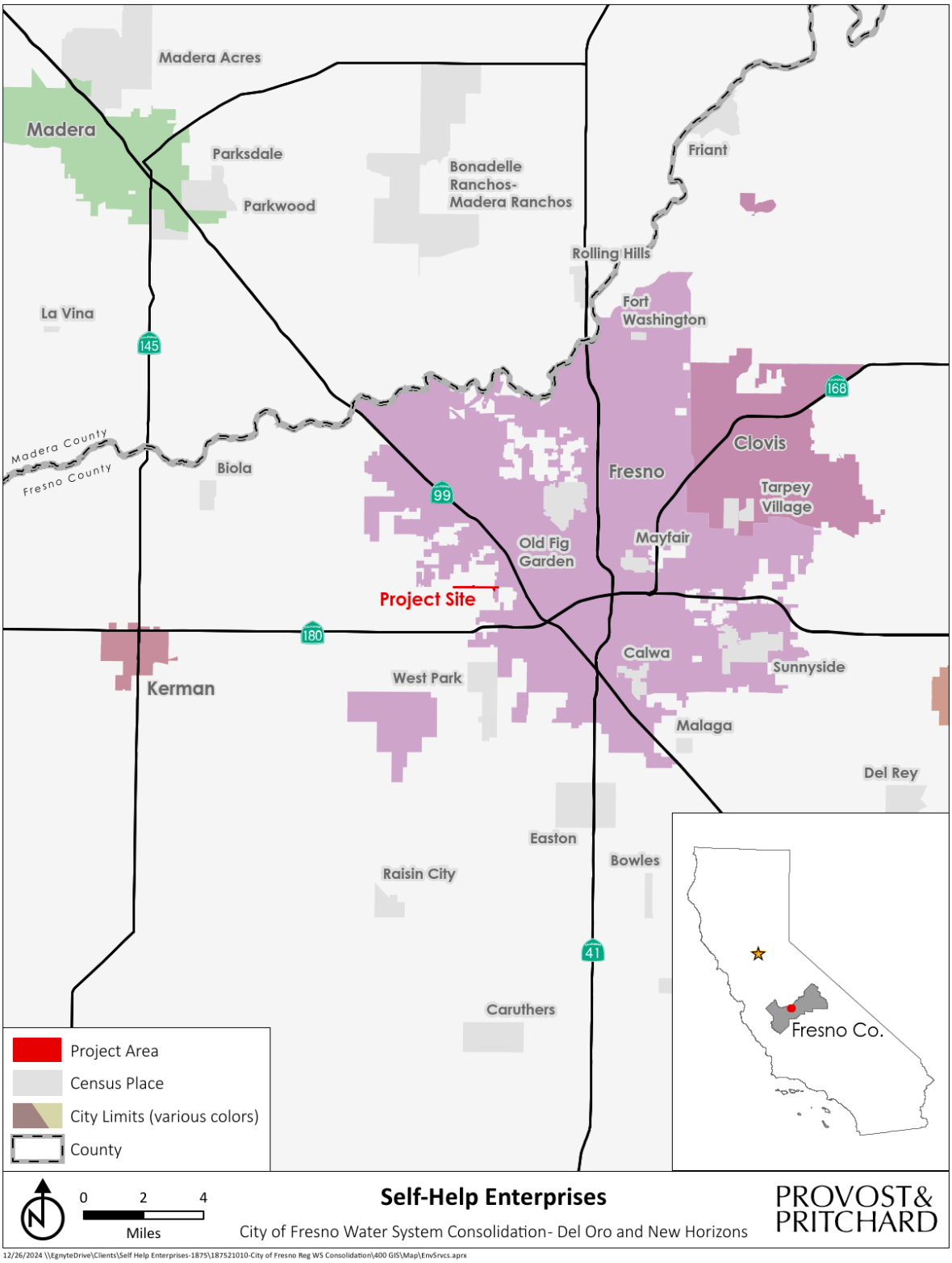

Figure 1: Regional Location Map

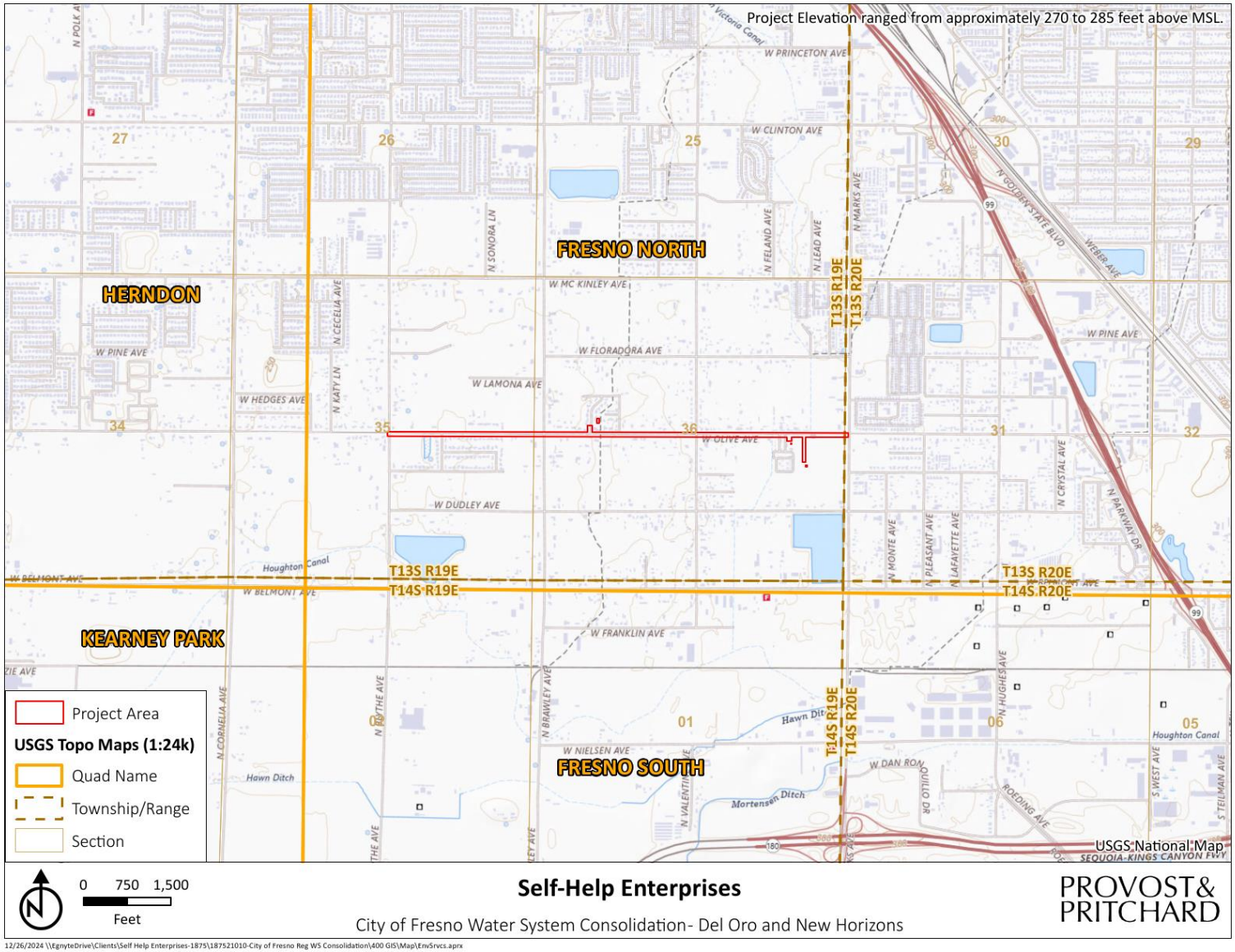

Figure 2: Topographic Map

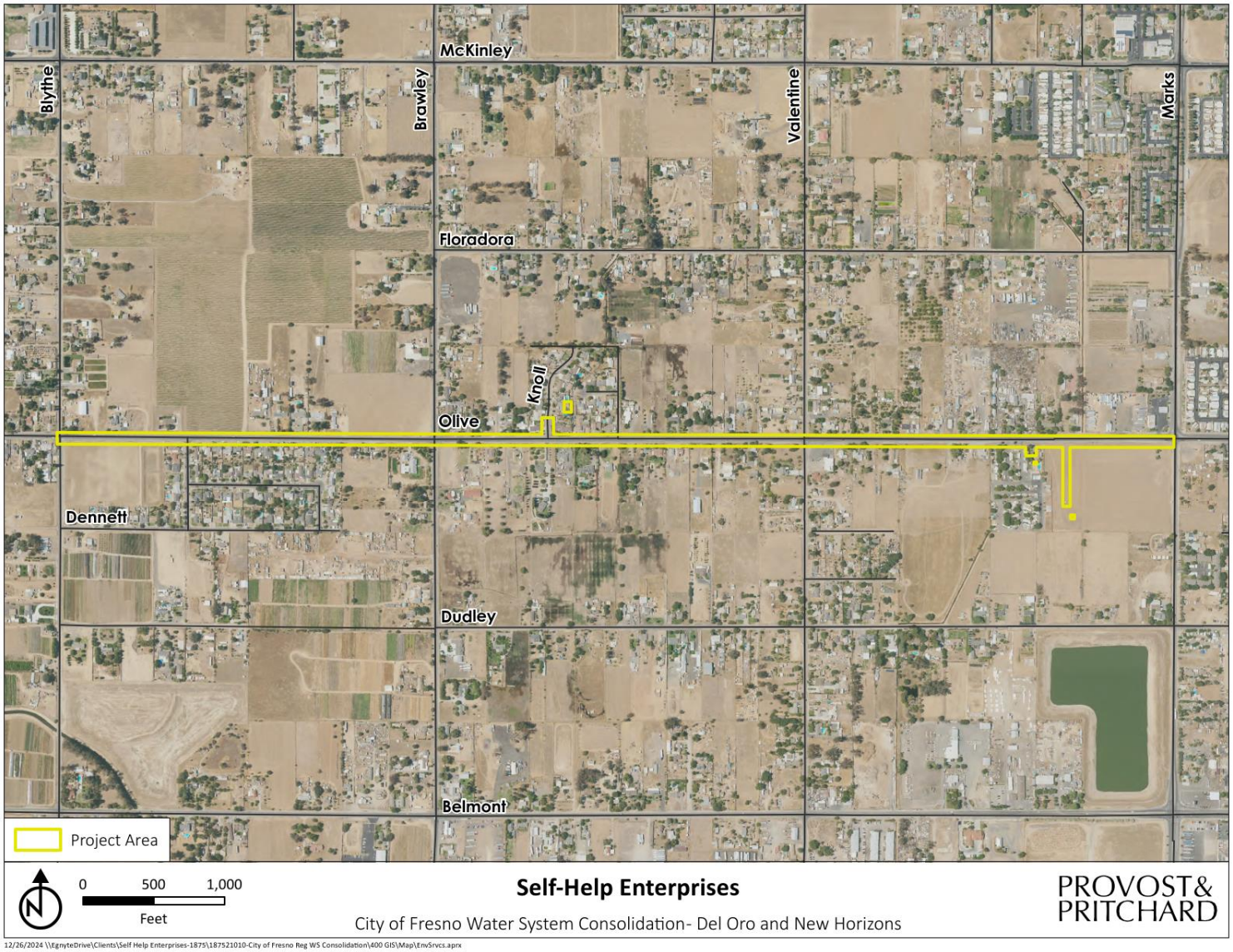

Figure 3: Aerial Map of Project Site

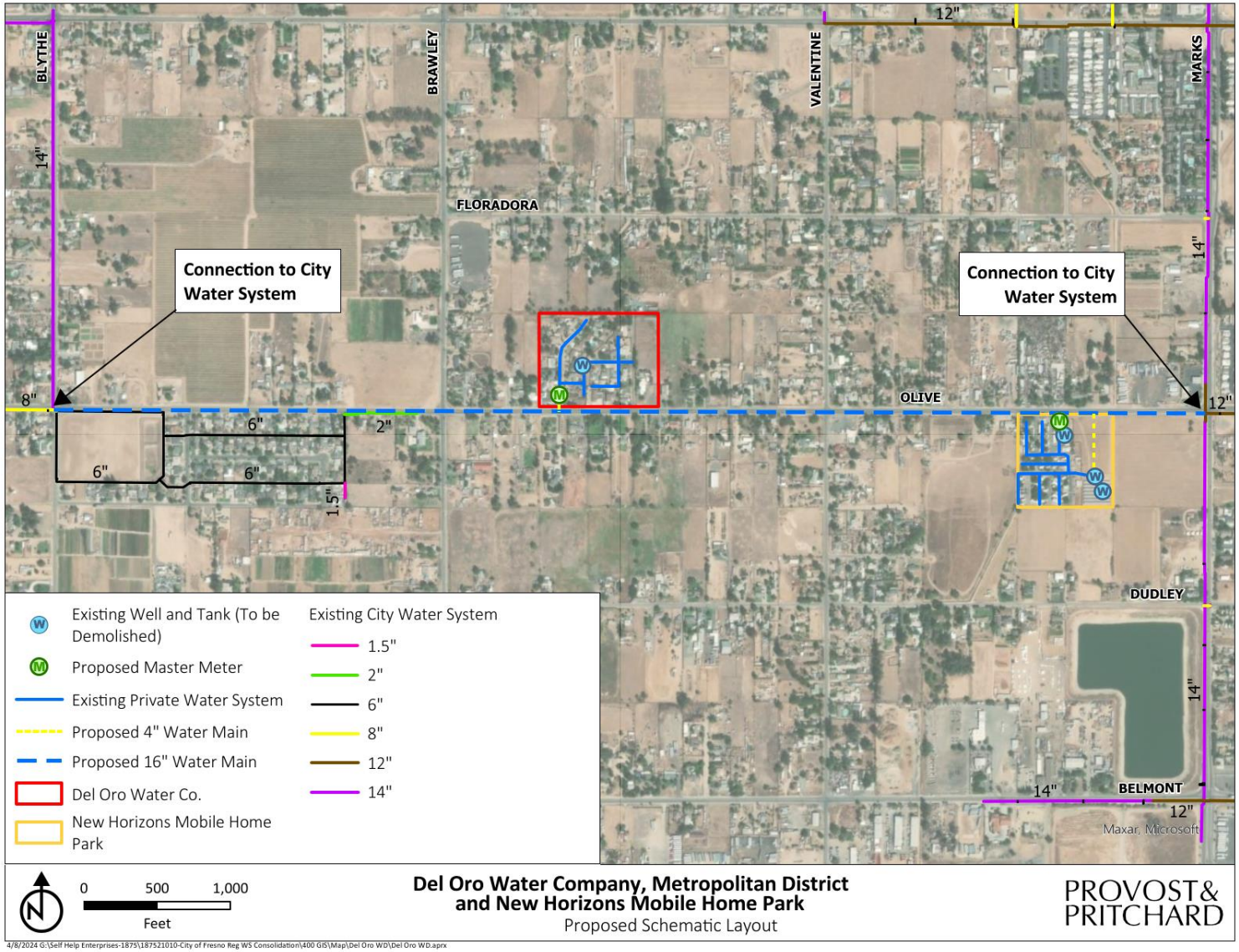

Figure 4: Site Plan

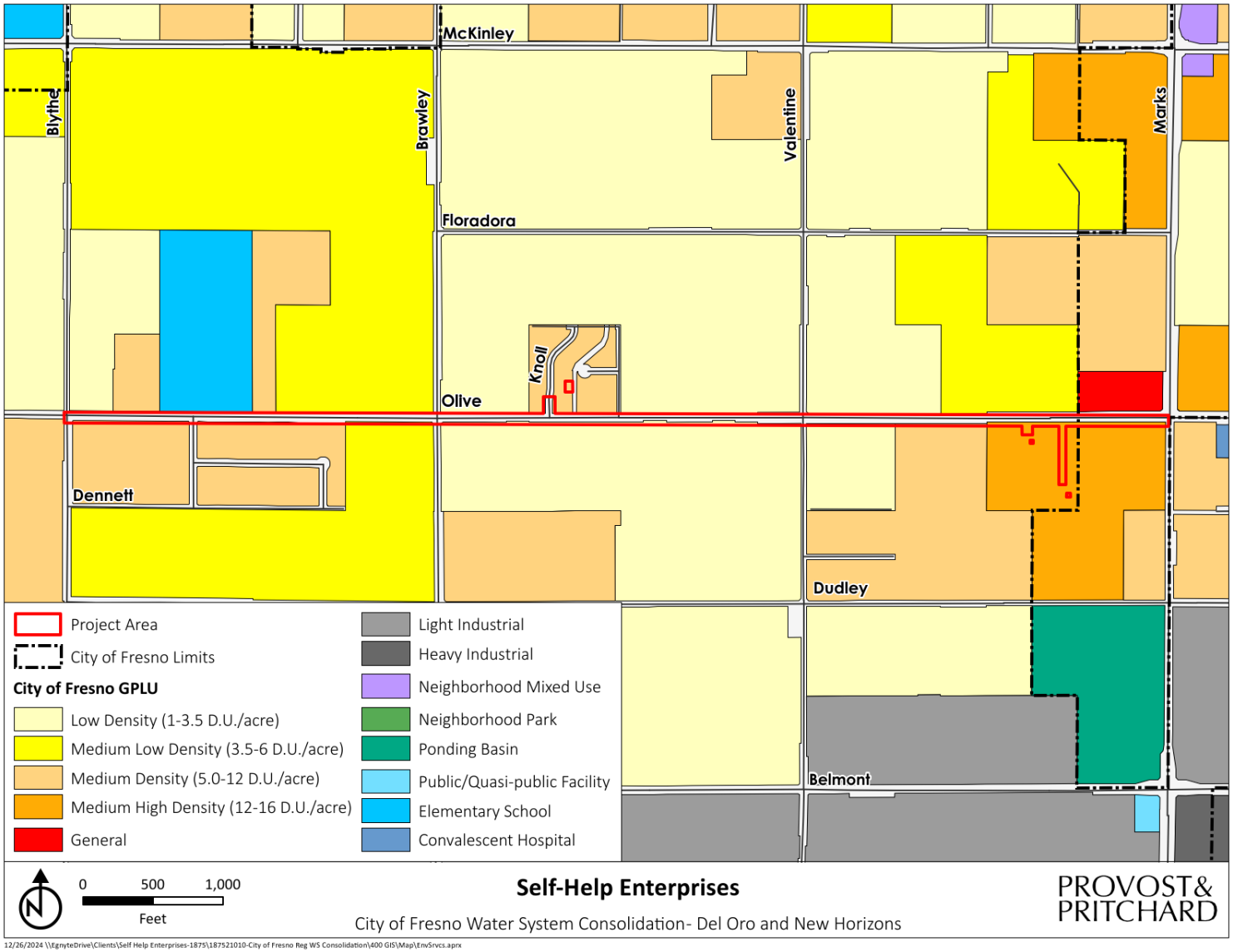

Figure 5: General Plan Land Use Designation Map

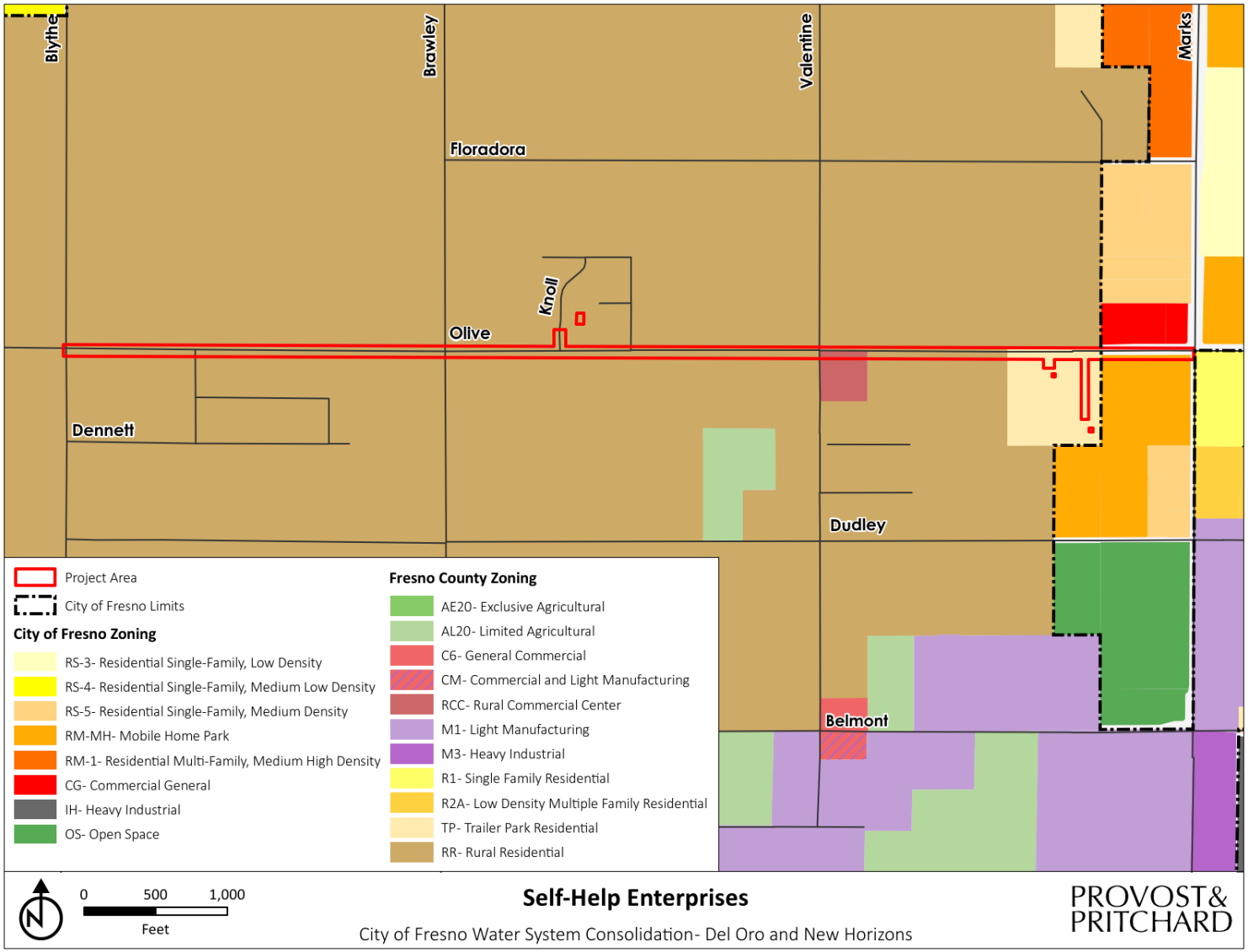

Figure 6: Zone District Map

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.

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

Debbie Khounsavath 02-10-2025

Debbie Khounsavath, Planner II 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.

    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.

c. Identify which, if any, effects from the above checklist were within the scope of an applicable program-level EIR, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

d. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from a previously adopted CEQA 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 significant.

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 out-croppings, 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
I. AESTHETICS – Except as provided in PRC Section 21099, would the project:				
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 Project site is surrounded by residential development, both rural and low to medium density. The area also contains a few commercial developments. Neither the General Plans of the City of Fresno nor the County of Fresno identify any scenic vistas within proximity of, nor viewable from or near, the Project site. Scenic resources identified in these General Plans include the Sierra Nevada mountain range; however, views are obstructed due to trees, buildings, and often smog.

California maintains a Scenic Highway Program, which was created in 1963. Its purpose is to protect and enhance the natural scenic beauty of California's highways and adjacent corridors through conservation efforts.[1] The nearest designated State scenic highway is State Route (SR) 180, which is located approximately 23 miles west of the Project site.[2]

[1] (California Department of Transportation, 2024)
[2] (California Department of Transportation, 2023)

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. Project components would either be constructed underground and would not be visible, or would be constructed at a lower elevation than the existing structures in the vicinity. Therefore, the Project would not obstruct existing public views, specifically 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. There are no identified scenic resources, trees, rock outcroppings, or historic buildings on or near the Project site. In addition, there are no State scenic highways within the Project's vicinity as the nearest one is located approximately 23 miles away. Therefore, the Project would have no impact on scenic resources such as trees and rock outcroppings, historic buildings, or state scenic highways. There would be no impact.

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 site is located just outside of the City of Fresno city limits but within the County of Fresno and within the City of Fresno's SOI. The County of Fresno is not considered an urban area; however, the City of Fresno is. The Project would, for the most part, be located in the un-zoned Right-of-Way (ROW), while a small component of the Project area would be located within residentially zoned lands. The Project would not conflict with an applicable zoning designation as drinking water facilities are permitted within residentially zoned lands and un-zoned ROW. As mentioned in the above sections, no Project component would obstruct any scenic views or damage a scenic resource. The Project would not degrade the existing visual character as Project components would be located out of sight once construction is complete or attached to like-facilities. Therefore, impacts would be less than significant.

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

No Impact. The Project involves construction of pipelines and meters, and the destruction of two existing wells and water storage tanks. The Project would not require any lighting. Therefore, there would be no impact.

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
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:				
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 located in area just outside of the City of Fresno city limits that predominantly contains low to medium density residential developments; however, there are areas that contain row crops. The Project site is designated Farmland of Local Importance, Urban and Built-Up Land, and Rural Residential Land in the California Department of Conservation's (DOC) 2018 Farmland Mapping and Monitoring Program.[3] The Project area is zoned mobile home park (City), trailer park residential (County), rural residential, and rural commercial center (see **Figure 6**). Project lands are not subject to a Williamson Act contract**.**

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. No portion of the Project site is designated as Prime Farmland, Unique

[3] (California Department of Conservation, 2020)

Farmland, or Farmland of Statewide Importance. As such, the Project would 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 site is zoned for mainly residential and some commercial uses. There are no lands zoned for agricultural use. Furthermore, no Project parcel is subject to a Williamson Act contract. Therefore, 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's General Plan, the Planning Area does not include any land used or designated for timber, forest land, or timber harvesting industry. The Project is not located in an area of the County that contains forest land. 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 utilities in existing ROW and would not involve additional changes to the existing environment that would change that would lead to conversion of farmlands to non-agricultural uses as there are none within the Project site. 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.

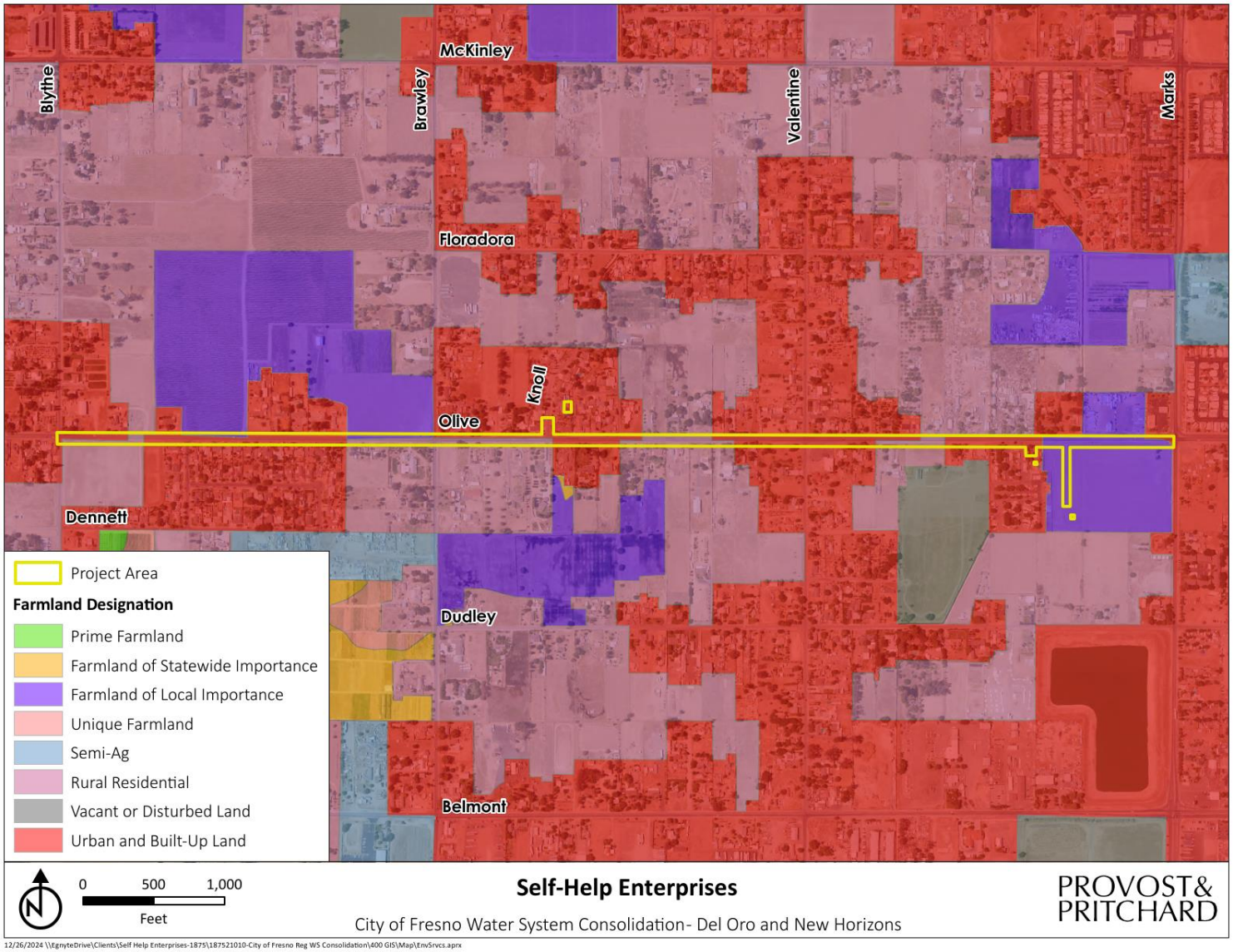

Figure 7: Farmland Designation Map

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

The Project site is located within the boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD) and the San Joaquin Valley Air Basin (SJVAB). The SJVAB is positioned within the San Joaquin Valley of California. The San Joaquin Valley is bounded by the Sierra Nevada Mountain Range to the east and the Coastal Mountain Range to the west. Wind within the SJVAB typically channels south-southwest during the summer months, while wind flows to the north-northwest during the winter months. Wind velocity for the region is considered low for an area of such size.[4] Due to a lack of strong wind and the natural confinement of the mountain ranges surrounding the SJVAB, the

[4] (San Joaquin Valley Air Pollution Control District, 2006-2012)

region experiences some of the worst air quality in the world.

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 (O_3), carbon monoxide (CO), and nitrogen dioxide (NO_2) as “does not meet the primary standards,” “cannot be classified,” or “better than national standards.” For sulfur dioxide (SO_2), 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 USEPA uses the same sub-categories for nonattainment status: serious, severe, and extreme. In 1991, USEPA assigned new nonattainment designations to areas that had previously been classified as Group I, II, or III for particulate matter 10 microns in size (PM1)0 based on the likelihood that they would violate national PM10 standards. All other areas are designated “unclassified.”

According to the USEPA the SJVAPCD was not in non-attainment for two pollutant concentrations, with particulate matter 2.5 microns in size $PM_{2.5}$ (2012) being classified as in serious non-attainment, and 8-hour Ozone (2015) classified as being in extreme non-attainment as of July 31st, 2023.[5]

[5] (United States Environmental Protection Agency 2023)

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

Pollutant	Averaging Time	Federal Standard	State Standard	Federal Attainment Status	State Attainment Status
O_3	1 hour	N/A	0.09 ppm	N/A	Nonattainment/ Severe
O_3	8 hours	0.070 ppm (4th highest in 3 years)	0.070 ppm	Nonattainment/ Extreme	Nonattainment
PM_{10}	24 hours	150 µg/m^3 (expected number of days above standard < or equal to 1)	50 µg/m^3	Attainment	Nonattainment
PM_{10}	Annual	N/A	20 µg/m^3	N/A	Nonattainment
$PM_{2.5}$	24 hours	35 µg/m^3	N/A	Nonattainment	N/A
$PM_{2.5}$	Annual	12.0 µg/m^3	12 µg/m^3	Nonattainment	Nonattainment
CO	1 hour	35 ppm	20 ppm	Attainment/ Unclassified	Attainment/ Unclassified
CO	8 hours	9 ppm	9.0 ppm	Attainment/ Unclassified	Attainment/ Unclassified
NO_2	1 hour	0.100 ppm	0.18 ppm	Attainment/ Unclassified	Attainment
NO_2	Annual	0.053 ppm	0.030 ppm	Attainment/ Unclassified	Attainment
SO_2	1 hour	0.075 ppm (99th percentile over 3 years)	0.25 ppm	Attainment/ Unclassified	Attainment
SO_2	3 hours	0.5 ppm	N/A	Attainment/ Unclassified	N/A
SO_2	24 hours	0.14 ppm	0.04 ppm	Attainment/ Unclassified	Attainment
SO_2	Annual	0.030 ppm	N/A	Attainment/ Unclassified	N/A
Pb	Monthly	N/A	1.5 µg/m^3	N/A	Attainment
Pb	Rolling 3-month average	0.15 µg/m^3	N/A	No Designation/ Classification	N/A
H_2S	1 hour	N/A	0.03 ppm	N/A	Unclassified
Sulfates	24 hours	N/A	25 µg/m^3	N/A	Attainment
Visibility Reducing Particles (VRP)	8 hours	N/A	Visibility of 10 miles or more at relative humidity less than 70 %	N/A	Unclassified
Vinyl Chloride	24 hours	N/A	0.01 ppm	N/A	Attainment

Source: (San Joaquin Valley Air Pollution Control District, n.d.)

Thresholds

Air pollutant emissions have regional effects and localized effects. This analysis assesses the regional effects of the Project's criteria pollutant emissions in comparison to SJVAPCD thresholds of significance for short-term construction activities and long-term operation of the Project. Localized emissions from Project construction and operation are also assessed using concentration-based thresholds that determine if the Project would result in a localized exceedance of any ambient air quality standards or would make a cumulatively considerable contribution to an existing exceedance.

The primary pollutants of concern during Project construction and operation are reactive organic gases (ROG), NO_X, PM_{10}, and $PM_{2.5}$. The SJVAPCD *Guide for Assessing and Mitigating Air Quality Impacts* (GAMAQI) adopted in 2015 contains thresholds for ROG and Nitrogen Oxides (NO_X); Sulfur Oxides (SO_X), CO, PM_{10}, and $PM_{2.5}$.

Ozone is a secondary pollutant that can be formed miles away from the source of emissions through reactions of ROG and NO_X emissions in the presence of sunlight. Therefore, ROG and NO_X are termed O_3 precursors. The SJVAB often exceeds the state and national O_3 standards. Therefore, if the Project emits a substantial quantity of O_3 precursors, the Project may contribute to an exceedance of the O_3 standard. The SJVAB also exceeds air quality standards for PM_{10}, and $PM_{2.5}$; therefore, substantial Project emissions may contribute to an exceedance for these pollutants.

The SJVAPCD adopted significance thresholds for construction-related and operational ROG, NO_X, PM, CO, and SO_X, these thresholds are included in **Table 2**.

Table 2: Project-Level Air Quality CEQA Thresholds of Significance

Pollutant	Significance Threshold	
	Construction Emissions (tons/year)	**Operational Emissions (tons/year)**
ROG	10	10
NO_X	10	10
CO	100	100
SO_X	27	27
PM_{10}	15	15
$PM_{2.5}$	15	15
Source: SJVAPCD. 2015. Guidance for Assessing and Mitigating Air Quality Impacts. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF		

DISCUSSION

Would the project:

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

Less than Significant Impact. The Project would not conflict with or obstruct implementation of the applicable air quality plan. The Project would align with the standards and guidelines set by the SJVAPCD. Therefore, there would be no impact.

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 result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment. As shown below in **Table 3**, the Project would not exceed an emissions threshold which has been set by the SJVAPCD for construction related emissions. No net increase in operational emissions are anticipated due to the decommissioning of the existing water infrastructure and connecting to existing City infrastructure. Therefore, impacts would be less than significant.

Table 3: Unmitigated Short-Term Construction Generated Emissions of Criteria Pollutants

Source	Annual Emissions (Tons per Year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Maximum Annual Project Construction Emissions	0.02	0.14	0.15	<0.005	0.01	0.01
SJVAPCD Threshold	10	10	100	27	15	15
Threshold Exceeded?	No	No	No	No	No	No
Source: Appendix A						

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. Due to the linear nature of the Project, the Project would be constructed in segments resulting in the generation of emissions in segments as well. Rather than total construction emissions generated at one location, emissions would be lesser due to the various segments along the proposed pipeline corridor. Sensitive receptors, composed solely of residences, are located along the linear project and would be approximately 20 to 50 feet away from any one segment of emission sources. There are no schools or known day care facilities in the vicinity of the Project. Emissions would be temporary and exposure to TACs to each individual sensitive receptor would decrease as construction progresses. Therefore, impacts would be less than significant.

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." Project construction activities 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

Mitigation measures are not warranted for impacts related to Air Quality.

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

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES – Would the project:				
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
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 is located in the County of Fresno, California, approximately 160 miles south of Sacramento and 100 miles north of Bakersfield. The Del Oro community and the New Horizons Mobile Home Park (NHMHP) are both located within the City's Sphere of Influence (SOI), but outside of the City limits. Specifically, the site is located along West Olive Avenue, between North Blythe Avenue and North Marks Avenue, and includes portions along North Knoll Drive and off of North Olive Avenue and four well locations to the north and south of North Olive Avenue. The site includes paved roads, sidewalks, residential housing, a ruderal field, and two well sites. The surrounding lands are a mixture of residential housing, agricultural land, a small solar array, and vacant lots. The topography of the site is relatively flat with elevations ranging from approximately 270 to 285 feet above mean sea level.

Like most of California, the Project site experiences a Mediterranean climate. Warm, dry summers are followed by cool, moist winters. In the summer, average high temperatures range between 85- and 95-degrees Fahrenheit (°F), but often exceed 95 °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 Fresno region receives approximately 12 inches of precipitation in the form of rain yearly, most of which occurs between October and March, and the Project site would be expected to receive similar amounts of precipitation.

Soils

Three soil mapping units representing two soil types were identified within the Project site (see Appendix D of **Appendix B** for the Web Soil Survey Report). The soils are displayed with their core properties in the **Table 4** below, according to the Major Land Resource Area of California.

Table 4: List of Soils Located Onsite and Their Basic Properties

Soil	Soil Map Unit	Percent of Site	Hydric Soil Category	Drainage	Permeability	Runoff
Exeter	Sandy loam, shallow	8.7%	Predominantly Nonhydric	Well drained	Moderately slow	High
San Joaquin	Sandy loam, 0 to 3 percent slopes	19.8%	Predominantly nonhydric	Moderately well drained	Very slow	Very high
	Sandy loam, shallow, 0 to 3 percent slopes	71.4%	Predominantly nonhydric	Moderately well drained	Very slow	Very high

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. All soils of the site are predominantly nonhydric.

Biotic Habitats

Two biotic habitats exist within the Project site: developed and ruderal. These habitats and their constituent plant and animal species are described in more detail in the following sections.

Developed

The developed habitat within the Project site consisted of paved roads, sidewalks, driveways, and single-family homes. Vegetation within this habitat is comprised of various ornamental trees, shrubs, and grasses. Several bird species in this habitat, including cedar waxwing (*Bombycilla cedrorum*), Eurasian collard dove (*Streptopelia decaocto*), mourning dove (Zenaida macroura), and yellow-rumped warbler (*Setophaga coronata*).

Ruderal

The ruderal habitat within the Project site consisted of the road shoulder along Olive Avenue, a portion of a ruderal field, vacant lots, and the well sites. Two of the well sites are located within a fenced solar array which is surrounded by a ruderal field. A portion of this field is located within the site, and the entire field appears to undergo annual discing. There were no observations of small mammal burrows within the ruderal field. Vegetation within this habitat is minimal and appears to be maintained and consisted of grasses, and nonnative species such as prickly lettuce (*Lactuca serriola*), Russian thistle (*Kali tragus*), yellow-star thistle (*Centaurea solstitialis*), redstem filaree (Erodium cicutarium), and cheese weed mallow (Malva parviflora). Bird species observed in this habitat included American crow (Corvus brachyrhynchos), European starling (Sturnus vulgaris), house finch (Haemorhous mexicanus), turkey vulture (Cathartes aura), house sparrow (Passer domesticus), and yellow-rumped warbler.

Natural Communities of Special Concern and Riparian Habitat

Natural communities of special concern are those that are of limited distribution, distinguished by significant biological diversity, or home to special status species. The California Department of Fish and Wildlife (CDFW) has classified and mapped vegetation data which can be used to assess the presence of Natural Communities of Special Concern and Riparian Habitat. Just as the special status plant and animal species, these natural communities of special concern can be found within the California Natural Diversity Database (CNDDB). As of December 2023, there are no recorded natural communities of special concern within the project site. Additionally, no natural communities of special concern were observed during the biological survey.

Riparian habitat is composed of plant communities that occur along the banks, and sometimes over the banks, of most waterways and is an important habitat for numerous wildlife species. CDFW has jurisdiction over most riparian habitat in California. No waterways or riparian habitat was observed by a Provost & Pritchard biologist in January 2024 within the Project site.

Designated Critical Habitat

The United States Fish and Wildlife Service (USFWS) often designates 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, which may require special management and protection. According to the U.S. Fish & Wildlife Service Information for Planning and Consultation (IPaC), as of January 2024 designated critical habitat is absent from the project site and vicinity.

Wildlife Movement Corridors and Native Wildlife Nursery Sites

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.

The project area does not contain features that are likely to function as wildlife movement corridors.

Native wildlife nursery sites are areas where a species or group of similar species raise their young in a concentrated place, such as maternity bat roosts. No native wildlife nursery sites were found within the Project site.

Methodology

A query of the CNDDB for occurrences of special status plant and animal species was conducted in December 2023 for the Fresno North U.S. Geological Survey (USGS) 7.5-minute quadrangles that contains the Project site, and for the eight surrounding USGS quadrangles: Clovis, Fresno South, Friant, Gregg, Herndon, Kearney Park, Lanes Bridge, and Malaga. A query of the IPaC was also completed for the Project site. These species, and their potential to occur within the Project site, are listed in **Table 4** and **Table 5** below. Other special status species that did not show up in the CNDDB query, but have the potential to occur in the vicinity, are also included in **Table 4**. Species lists obtained from CNDDB and IPaC are available as Appendices B and C of **Appendix B**. All relevant sources of information, as discussed in this section, as well as field observations, were used to determine if any special status species have the potential to occur within the Project site.

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

Species	Status*	Habitat	Occurrence within the Site
California jewelflower (*Caulanthus californicus*)	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 200 and 6,100 feet. Blooms February – April.	**Absent.** The project site lacked suitable habitat for this species.
California satintail (*Imperata brevifolia*)	CNPS 2B	Often found in wet springs, meadows, streambanks, and floodplains, and can also be found in coastal scrub, riparian scrub, Mojavean desert scrub, chaparral, and alkali seeps at elevations below 1,600 feet. Blooms September – May.	**Absent.** The project site lacked suitable habitat for this species.
Dwarf downingia (*Downingia pusilla*)	CNPS 2B	Found in vernal pools in valley and foothill grassland communities at elevations below 1,600 feet. Blooms March – May.	**Absent.** The project site lacked suitable habitat for this species.
Greene's tuctoria (*Tuctoria greenei*)	FE, CNPS 1B	Found in the San Joaquin Valley and other parts of California in vernal pools within valley grassland, wetland, and riparian communities at elevations below 3,500 feet. Blooms May – September.	**Absent.** The project site lacked suitable habitat for this species.
Hairy Orcutt grass (*Orcuttia pilosa*)	FE, CE, CNPS 1B	Found in vernal pools in valley grassland, wetland, and riparian communities at elevations below 650 feet. Blooms May – September.	**Absent.** The project site lacked suitable habitat for this species.

Species	Status*	Habitat	Occurrence within the Site
Hartweg's golden sunburst (*Pseudobahia bahifolia*)	FE, CE, CNPS 1B	Found in valley and foothill grassland and cismontane woodland communities in clay soils that are often acidic. Occurs predominantly on northern slopes, but also along shady creeks and near vernal pools at elevations between 300 and 650 feet. Blooms March – May.	**Absent.** The project site lacked suitable habitat and soils for this species.
Hoover's calycadenia (*Calycadenia hooveri*)	CNPS 1B	Found in valley and foothill grassland and cismontane woodland communities on exposed, rocky, barren soil at elevations between 300 and 1,300 feet. Blooms June – September.	**Absent.** The project site lacked suitable habitat and soils for this species.
Madera leptosiphon (*Leptosiphon serrulatus*)	CNPS 1B	Found within openings of foothill woodland, often yellow-pine forest, and chaparral at elevations between 1,000 and 4,300 feet. Blooms April – May.	**Absent.** The project site lacked suitable habitat and lies outside of the lower elevational range of this species.
Munz's tidy-tips (*Layia munzii*)	CNPS 1B	Found in the San Joaquin Valley in alkaline clay soils; often along hillsides in alkali scrub and sometimes valley and foothill grassland at elevations between 100 and 2,700 feet. Blooms March – April.	**Absent.** The project site lacked suitable habitat and soils for this species.
Pincushion navarretia (*Navarretia myersii* spp. *myersii*)	CNPS 1B	Found in vernal pools in clay soils at elevations between 50 and 300 feet. Often associated with non-native grasslands. Blooms in May.	**Absent.** The project site lacked suitable habitat for this species.
San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*)	FT, CE, CNPS 1B	Found in the eastern San Joaquin Valley and the Sierra Nevada foothills in vernal pools within valley grassland, freshwater wetland, and wetland-riparian communities at elevations below 2,600 feet. Blooms April – September.	**Absent.** The project site lacked suitable habitat for this species.
Sanford's arrowhead (*Sagittaria sanfordii*)	CNPS 1B	This species is an aquatic plant and is found in the San Joaquin Valley and other parts of California in freshwater marshes, ponds, canals, and ditches at elevations below 1,000 feet. Blooms May – October.	**Absent.** The project site lacked suitable habitat for this species.
Spiny-sepaled button-celery (*Eryngium spinosepalum*)	CNPS 1B	Found in the Sierra Nevada foothills and the San Joaquin Valley. Occurs in vernal pools, swales, and roadside ditches. Often associated with clay soils in vernal pools within grassland communities. Occurs at elevations between 50 and 4,200 feet. Blooms April – July.	**Absent.** The project site lacked suitable habitat and soils for this species.
Succulent owl's-clover (*Castilleja campestris* var. *succulenta*)	FT, CE, CNPS 1B	Found in vernal pools, often in acidic soils at elevations below 2,500 feet. Blooms April – July.	**Absent.** The project site lacked suitable habitat and soils for this species.

Table 6: List of Special Status Animals with Potential to Occur Onsite and/or in the Vicinity

Species	Status*	Habitat	Occurrence within the Site
American badger (*Taxidea taxus*)	CSSC	Occurs most abundantly in drier open stages of shrub, forest, and herbaceous habitats with friable soils to burrow, but can be found within numerous habitats throughout California, including the margins of agricultural lands. Needs a sufficient prey base of burrowing rodents.	**Unlikely.** The project site lacked the habitats preferred by this species. The nearest recorded observation of this species occurred approximately six miles north of the project site in 1988.
Blunt-nosed leopard lizard (*Gambelia sila*)	FE, CE, CFP	Occurs in the San Joaquin Valley region in expansive, arid areas with scattered vegetation. Today they inhabit non-native grassland and alkali sink scrub communities of the valley floor marked by poorly drained, alkaline, and saline soils. They can be found at elevations ranging from 98 to 2,600 feet.	**Absent.** The project site lacked suitable habitat for this species.
Burrowing owl (*Athene cunicularia*)	CC	Resides in open, dry grasslands, deserts, scrublands, and other areas with low growing vegetation. Nests and roosts underground in existing burrows created by mammals, most often by ground squirrels, and human-made structures.	**Absent.** The project site lacked suitable habitat for this species.
California glossy snake (*Arizona elegans occidentalis*)	CSSC	Inhabits arid scrub, rocky washes, grasslands, and chaparral. Prefers open areas with loose soil for easy burrowing. In Fresno County, it is restricted to the far west of the county.	**Absent.** The project site lacked suitable habitat for this species. The project site is east of the current known range of this species.
California tiger salamander (*Ambystoma californiense*)	FT, CT	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 1,500 feet in elevation. Can migrate up to 1.3 miles to breed.	**Absent.** The project site lacked suitable upland habitat and there is no suitable breeding habitat for this species within 1.3 miles of the project site.
Coast horned lizard (*Phrynosoma blainvillii*)	CSSC	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.** The project site lacked suitable habitat for this species.
Crotch bumble bee (*Bombus crotchii*)	CCE	Occurs throughout coastal California, as well as east to the Sierra Nevada-Cascade crest, and south into Mexico. Food plant genera include snapdragons, scorpionweeds, primroses, poppies, and buckwheats. Nests are often	**Unlikely.** The project site lacked suitable nesting sites for this species. The nearest recorded observation of this species was a historical observation from 1899 in the general vicinity of Fresno.

Species	Status*	Habitat	Occurrence within the Site
		located underground in abandoned rodent nests, or above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees. This species overwinters under leaf litter or soft soil.	
Fresno kangaroo rat (*Dipodomys nitratoides exilis*)	FE, CE	An inhabitant of alkali sinks and open grassland habitats in Merced, Kings, Fresno, and Madera counties. Prefers bare, alkaline, clay-based soils subject to seasonal inundation with more friable soil mounds around shrubs and grasses. The most recent recorded observation of this species in California was in 1992 in Fresno County.	**Absent.** The project site and adjacent areas lacked suitable habitat for this species. No small mammal burrows were observed within the site.
Hardhead (*Mylopharodon conocephalus*)	CSSC	Occurs in low- to mid-elevation streams in the Sacramento-San Joaquin drainage. Clear, deep pools with sand-gravel-boulder bottoms and slow-moving water are required. This species is often sympatric with Sacramento pikeminnow and Sacramento sucker. Hardhead are typically absent from streams occupied by sunfishes and from heavily altered habitats.	**Absent.** The project site lacked suitable aquatic habitat for this species.
Least Bell's vireo (*Vireo bellii pusillus*)	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.	**Absent.** The project site is outside of the current known rage of this species and lacked suitable habitat.
Monarch butterfly (*Danaus plexippus*)	FPT	Roosts in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Larval host plants consist of milkweeds (*Asclepias* sp.). Winter roost sites extend along the Pacific Coast from northern Mendocino to Baja California, Mexico.	**Absent.** The project site did not provide suitable habitat to support this species. There are no recorded observations of this species in CNDDB within the regional vicinity of the project.
Northern California legless lizard (*Anniella pulchra*)	CSSC	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.** The project site lacked suitable habitat for this species. The soils within the project site have been historically developed.
Northwestern pond turtle (*Actinemys marmorata*)	FPT, CSSC	An aquatic turtle of ponds, marshes, slow-moving rivers, streams, and irrigation ditches with riparian vegetation. Requires adequate basking sites and sandy banks or grassy open fields to deposit eggs.	**Absent.** The project site lacked suitable aquatic and upland habitat for this species.

Species	Status*	Habitat	Occurrence within the Site
Pallid bat (*Antrozous pallidus*)	CSSC	Found in grasslands, chaparral, and woodlands, where it feeds on ground- and vegetation-dwelling arthropods, and occasionally takes insects in flight. Prefers to roost in rock crevices, but may also use tree cavities, caves, bridges, and other human-made structures.	**Unlikely**. The project site contained only marginal roosting sites for this species in the form of trees or buildings. The project does not propose to impact any potential roosting sites. The nearest recorded observation of this species occurred approximately 5 miles east of the project site in 1909.
San Joaquin kit fox (*Vulpes macrotis mutica*)	FE, CT	Opportunistically forages in a variety of habitats. Dens in burrows within alkali sink, valley grassland, and woodland habitats in valleys and adjacent foothills and in human-made structures in cities, rangeland, and agricultural areas.	**Unlikely.** There are no known core or satellite populations of this species in the region (United States Fish and Wildlife Service, 2020) and no burrows were observed within the site. The nearest recorded observation of this species occurred approximately 4.5 miles north of the project site in 1993.
Spotted bat (*Euderma maculatum*)	CSSC	Roosts in cliffs, rock crevices, and caves. Often forages over water and along washes. This species feeds almost exclusively on moths.	**Absent.** The project site and surrounding area lacked suitable roosting habitat for this species.
Swainson's hawk (*Buteo swainsoni*)	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 trees within the project area did not appear to be tall enough to support this species and the nearest recorded observation of this species was a historical observation from 1956 in the general vicinity of Fresno.
Tricolored blackbird (*Agelaius tricolor*)	CT, CSSC	Nests colonially near fresh water in dense cattails or tules, or in thickets of riparian shrubs. Forages in grassland and cropland. Large colonies are often found foraging in dairy farm feed fields.	**Absent.** The project site lacked suitable nesting and foraging habitat for this species.
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT	Lives in mature elderberry shrubs in the Central Valley and adjacent foothills from Tehama County south through Merced and Mariposa Counties with two scattered populations in Madera and Fresno Counties. Adults are active from March to June.	**Absent.** The project site is outside of the current known range of this species and lacks suitable habitat.
Vernal pool fairy shrimp (*Branchinecta lynchi*)	FT	Occupies vernal and seasonal pools, with clear to tea-colored water, in grass or mud-bottomed swales, and basalt depression pools.	**Absent.** The project site lacked suitable habitat for this species.
Western mastiff bat (*Eumops perotis californicus*)	CSSC	Found in open, arid to semi-arid habitats, including dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas, where it feeds on insects in flight. Roosts most commonly in crevices in cliff faces but may also use high buildings and tunnels.	**Unlikely.** The project site lacked suitable roosting habitat for this species.
Western spadefoot (*Spea hammondii*)	CSSC	The majority of the time this species is terrestrial and occurs in small mammal burrows and soil cracks, sometimes in the bottom of dried pools. Prefers open areas with	**Absent.** The project site lacked suitable aquatic and upland habitat for this species.

Species	Status*	Habitat	Occurrence within the Site
		sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Vernal or seasonal pools, that hold water for a minimum of three weeks, are necessary for breeding.	
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	FT, CE	Suitable nesting habitat in California includes dense riparian willow-cottonwood and mesquite habitats along a perennial river. Once common in the California Central Valley, as well as coastal valleys and riparian habitats east of the Sierra Nevada, habitat loss now constrains the California breeding population to small numbers of birds.	**Absent.** The project site is outside the current range of this species.

***EXPLANATION OF OCCURRENCE DESIGNATIONS AND STATUS CODES**

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

STATUS CODES

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CC	California Candidate
FPT	Federally Threatened (Proposed)	CT	California Threatened
		CCE	California Endangered (Candidate)
		CFP	California Fully Protected
		CSSC	California Species of Special Concern

CNPS LISTING

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 CDFW and/or USFWS if activities associated with a project have the potential to result in the "take" of a species listed as threatened or endangered under the California Endangered Species Act (CESA) and/or Endangered Species Act (ESA), respectively. Take is defined by CESA 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 ESA to include "harm" [16 United States Code (USC), Section 1532(19), 50 CFR, Section 17.3]. CDFW and USFWS are responsible agencies under CEQA and National Environmental Policy Act (NEPA). Both agencies review CEQA and NEPA documents in order to determine the adequacy of the treatment of endangered species issues and to make project-specific recommendations for their conservation.

Migratory Birds
The 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 almost all bird's native to the United States, even those that are non-migratory. The MBTA encompasses whole birds, parts of birds, and bird nests and eggs. Additionally, California Fish and Game Code makes it unlawful to take or possess any non-game birds covered by the MBTA (Section 3513), as well as any other native non-game birds (Section 3800).

Birds of Prey
Birds of prey are protected in California under provisions of California 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 Bald and Golden Eagle Protection Act (16 United States Code 668), which makes it unlawful to kill birds or their eggs, or take feathers or nests, without a permit issued by the U.S. Secretary of the Interior.

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.

Wetlands And Other "Jurisdictional Waters"
The definition of "waters of the United States" (WOTUS) often changes from one presidential administration to the next. The current definition, established under the Biden Administration that became effective on March 20, 2023 (i.e. "new rule"), has adopted much of the same WOTUS designations as the pre-2015 rules, but has incorporated the most recent science and court case rulings. Traditional navigable waters, territorial seas, and interstate waters remain covered under the new rule. Natural drainage channels and

adjacent wetlands may be considered “waters of the United States” or “jurisdictional waters” subject to the jurisdiction of the United States Army Corps of Engineers (USACE) based on the “relatively permanent standard,” which is defined in the new rule as “relatively permanent, standing or continuously flowing waters connected to paragraph Traditional Navigable Waters, and waters with a continuous surface connection to such relatively permanent waters or to Traditional Navigable Waters. The extent of jurisdiction has been defined in the Code of Federal Regulations but is also subject to interpretation by the federal courts. Jurisdictional waters generally include the following categories:

1. Traditional Navigable Waters, the territorial seas, or interstate waters (not including interstate wetlands);
2. Impoundments of waters of the United States;
3. Tributaries of:
    a. Traditional Navigable Waters, territorial seas, or interstate waters (not including interstate wetlands); or
    b. Impoundments of water of the United States when the tributaries meet the relatively permanent standard.
4. Wetlands:
    a. Adjacent to Traditional Navigable Waters, the territorial seas, or interstate waters;
    b. Adjacent to and with a continuous surface connection to relatively permanent impoundments of waters of the United States
    c. Adjacent to and with a continuous surface connection to relatively permanent jurisdictional tributaries.
5. Intrastate lakes and ponds not identified in items 1 through 4 of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in items 1 or 3 above.

Exclusions under the new definition include the following:

1. Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act (CWA);
2. Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with USEPA;
3. Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;
4. Artificially irrigated areas that would revert to dry land if the irrigation ceased;
5. Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
6. Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;

7. Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and
8. Swales and erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow.

The new rule has incorporated the best available science, relevant supreme court cases, public comment, technical expertise, and experience gained from more than 45 years of implementing the Pre-2015 “waters of the United States” framework to inform jurisdictional limits. One significant court case involves the U.S. Supreme Court in its 2001 *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers* (SWANCC) decision. (*Solid Waste Agency v. US ACE* (2001) 531 U.S. 159.) It was determined that channels and wetlands isolated from other jurisdictional waters cannot be considered jurisdictional on the basis of their use, hypothetical or observed, by migratory birds.

Similarly, in its 2006 consolidated *Carabell/Rapanos* decision, the United States Supreme Court ruled that a significant nexus between a wetland and other navigable waters must exist for the wetland itself to be considered jurisdictional waters. (*Rapanos v. U.S.* (2006) 547 U.S. 715.) The Supreme Court heard *Sackett v. United States Environmental Protection Agency* in May 2023, to determine governing standards of a significant nexus between waters of the United States and adjacent wetlands. (*Sackett v. EPA* (2023) 598 U.S. 651.) The court decided that an adjacent wetland would be protected under the CWA only if it maintained a continuous surface water connection with a federally regulated, navigable water body. This decision has limited protection for networks of wetlands connected to navigable waters through subsurface flow. The final decision was issued in September 2023.

The USACE regulates the filling or grading of waters of the United States under the authority of Section 404 of the CWA. The extent of jurisdiction within drainage channels is defined by “ordinary high-water marks” on opposing channel banks. All activities that involve the discharge of dredge or fill material into Waters of the United States are subject to the permit requirements of the USACE. Such permits are typically issued on the condition that the applicant agrees to provide mitigation that results in no net loss of wetland functions or values. No permit can be issued until the Regional Water Quality Control Board (RWQCB) issues a Section 401 Water Quality Certification (or waiver of such certification) verifying that the proposed activity will meet state water quality standards.

Under the Porter-Cologne Water Quality Control Act of 1969, the State Water Resources Control Board (SWRCB) has regulatory authority to protect the water quality of all surface water and groundwater in the State of California (“Waters of the State”). Nine RWQCBs oversee water quality at the local and regional level. 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, such as a Section 404 CWA permit. Discharges into all Waters of the State, even those that are not also Waters of the United States, require Waste Discharge Requirements (WDRs), or waivers of WDRs, from the RWQCB. The RWQCB also administers the Construction Storm Water Program and the federal National Pollutant Discharge Elimination System (NPDES) program. Projects that disturb one acre or more of soil must obtain a Construction General Permit under the Construction Storm Water Program. A prerequisite for this permit is the development of a Storm Water Pollution Prevention Plan (SWPPP) by a Qualified SWPPP Developer. Projects that discharge wastewater, storm water, or other pollutants into a Water of the United States may require a NPDES permit.

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 that certain measures will be implemented to protect the habitat values of the lake or drainage in question. The Project would not require a Lake or Streambed Alteration.

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 Project site contains suitable nesting and foraging habitat for a variety of protected bird species, such as migratory birds and raptors. It is anticipated that during the nesting bird season (February 1 to September 15), protected birds could nest on the ground, shrubs, trees, or structures within the Project site and forage within the site. Protected birds located within or adjacent to the site during construction have the potential to be injured or killed by Project-related activities. In addition to the direct “take” of protected birds within the Project site or adjacent areas, these birds nesting in these areas could be disturbed by Project-related activities resulting in nest abandonment. Projects that adversely affect the nesting success of protected birds or result in the mortality of these birds would be a violation of state and federal laws and considered a potentially significant impact under CEQA.

Implementation of mitigation measures **BIO-1**, **BIO-2**, and **BIO-3** identified below will reduce potential impacts to protected nesting birds to a less than significant level under CEQA and will help guide compliance with state and federal laws protecting these bird species.

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

Of the 23 regionally occurring special status animal species, all are considered absent from or unlikely to occur within the Project site due to past or ongoing disturbance and/or the absence of suitable habitat. Since it is unlikely that these species would occur onsite, implementation of the Project would have no impact on these 23 special status species through construction mortality, disturbance, or loss of habitat.

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

Of the 14 regionally occurring special status plant species, all are considered absent from or unlikely to occur within the Project site due to past or ongoing disturbance and/or the absence of suitable habitat. Since it is unlikely that these species would occur onsite, implementation of the Project would have no impact on these 14 special status species through construction mortality, disturbance, or loss of habitat.

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. Riparian habitat is absent from the Project site. There are no CNDDB-designated "natural communities of special concern" recorded within the Project site or surrounding lands. 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?

Less than Significant Impact. Typical wetlands, vernal pools, and other waters were not observed on the Project site at the time of the biological survey. The nearest water source is East Branch Victoria Canal which would not be impacted by the Project.

Since construction would involve ground disturbance over an area greater than one acre, the Project would be required to obtain a Construction General Permit under the Construction Storm Water Program administered by the RWQCB. A prerequisite for this permit is the development of a Storm Water Pollution Prevention Plan (SWPPP) to ensure construction activities do not adversely affect water quality. With implementation of said regulatory requirements, impacts would be less than significant.

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 Project site does not contain features that would be likely to function as wildlife movement corridors or native wildlife nursery sites. Therefore, the Project would have no impact on wildlife movement corridors or other native wildlife nursery sites.

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 Fresno County General Plan. There are no other known applicable Habitat Conservation Plans (HCPs) or Natural Community Conservation Plans (NCCPs) in the Project vicinity. Therefore, there would be no impact.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The Project is not within an applicable designated HCP, NCCP, or any other State or local habitat conservation plan. While the City of Fresno is located within the Pacific Gas & Electric (PG&E) San Joaquin Valley Operation and Maintenance (O&M) HCP, this HCP only applies to "activities associated with the O&M (including limited minor new construction) of PG&E's gas and electric transmission and distribution system as mandated for public safety."[6] Because this Project does not propose to conduct O&M or minor construction activities on behalf of PG&E, the Project cannot conflict with this HCP. There would be no impact.

Mitigation Measures

BIO-1 (Avoidance) 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 (Pre-construction Surveys) If activities must occur within nesting bird season (February 1 to September 15), a qualified biologist will conduct a pre-construction survey within five calendar days prior to the start of construction for nesting migratory birds within up to 100 feet outside of the project site and for nesting raptors within up to 500 feet outside of the Project site. All raptor nests would be considered "active" upon the nest-building stage. If no active nests are observed, no further action is required.

BIO-3 (Avoidance Buffers) On discovery of any active nests near work areas, a qualified biologist will determine appropriate avoidance buffer distances based on applicable CDFW and/or USFWS guidelines, the biology of the species, conditions of the

[6] (Jones & Stoakes, 2006)

nest(s), and the level of project disturbance.

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

Pedestrian Survey

A Phase I Cultural Resources Assessment was prepared for the Project in March 2024 by Taylored Archaeology (See **Appendix C**). On February 24, 2024, a pedestrian survey was conducted along all exposed ground along the entire length of the APE. Four-meter transect on both sides of all roadways in all unpaved areas were walked within the APE. Both well sites were surveyed and the open field adjacent to the New Horizons Mobile Home Park was also walked using 15 meter transects. All portions of the APE were accessible and surveyed. The APE was checked for both prehistoric deposits and historical features, structures, and artifacts more than 50 years old that may be present on the ground surface.

Cultural Records Search

On February 9, 2024, a cultural resource records search was requested from the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS) at California State University in Bakersfield, California. The purpose of this request was to identify and review prior cultural resource investigations completed in or near the APE and identify any prehistoric or historical resources that had been previously recorded within the APE and a 0.5-mile radius of the surrounding area. SSJVIC staff researched historical USGS topographic maps, reports of previous cultural resource investigations, archaeological site and survey base maps, cultural resource records (DPR forms) as well as listings of the Historic Properties Directory of the Office of Historic Preservation, General Land Office Maps, Archaeological Determinations of Eligibility, and the California Inventory of Historic Resources. The search confirmed there have been six previous cultural resource studies conducted within

the Project area and there have been five previous cultural resource studies conducted within the 0.5-mile radius. The search did not identify any cultural resources within the Project APE; however, one cultural resource, the historic-era Houghton Canal was identified within a 0.5-mile radius of the Project APE (**Appendix C**).

Archival Research
Archival research was conducted to investigate the historical background for any potential archaeological deposits, historical deposits or built environment properties that may exist in the APE. Historical maps, historical aerial photographs, historical USGS topographic maps, Google Street View photos, books, scholarly articles, and other records were used to better understand the prehistory and history of the APE and surrounding area. Research data was used to identify potential areas within the APE where archaeological deposits may exist, or historical buildings, structures or objects may exist (**Appendix C**).

Native American Outreach
On February 9, 2024, A request was sent to the NAHC as part of this archaeological survey report for a Sacred Lands File (SLF) search. The objective of the SLF search was to identify any known resources, places of spiritual, sacred lands, activity or traditional use or gathering areas present in or near the APE. The NAHC responded via email on February 21, 2024, with a letter including contact information for local Native American tribal representatives who may have knowledge or interest in sharing information about the APE and surrounding area. Each Native American representative listed was sent a nongovernmental outreach letter via email or certified mail to those who may not have an email address and a map notifying them of the Project and asking if they had any knowledge of the Project area or surrounding vicinity. Follow-up communication was performed via email or phone call as appropriate. As of the date of this report, no responses were received by the Native American representatives, nor was any information shared. The SLF can be found in **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 February 9, 2024, was sent to the SSJVIC at California State University in Bakersfield, California. 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 six previous cultural resource studies conducted within the Project area and five cultural resource studies conducted within the 0.5-mile radius. The search also confirmed the absence of identified cultural resources within the Project APE; however, a segment of the Houghton Canal, which is a confirmed resource, is located within the 0.5-mile radius of the Project APE. The proposed Project construction activities would not impact this

resource.

The majority of the Project is located on land that has been previously disturbed and is 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 February 9, 2024, was sent to the SSJVIC. According to the information in their files, there are no recorded resources within the Project area. There is one recorded resource in the 0.5-mile radius of the Project APE (Houghton Canal). The proposed Project construction activities would not impact this resource.

The majority of the Project is located on land that has been previously disturbed and is 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 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 throughout 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 contribute to reductions in energy use as well as reductions 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 would 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 any impact 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:				
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	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS – Would the project:				
iii. Seismic-related ground failure, including liquefaction?			X	
iv. Landslides?			X	
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.[7] 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.

[7] (California Department of Conservation, 2002)

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. The nearest major fault is the Ortigalia Fault, located approximately 58 miles west of the Project site. The San Andreas fault, the dominant active tectonic feature of the Coast Ranges and represents the boundary of the North American and Pacific plates, is located approximately 77 miles west.[8]

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. 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.[9]

Soil Subsidence
There are two types of Subsidence: Land subsidence and hydrocompaction subsidence. Hydrocompaction subsidence occurs when a large land area settles due to over-saturation. These areas are typically composed of open-textured soils that become saturated, high in silt or clay content. Land subsidence occurs when an extensive amount of ground water, oil, or natural gas is withdrawn from below the ground surface. The San Joaquin Valley has become an area that has increasingly experienced subsidence due to excessive groundwater pumping activities lowering the water table. The Project site's underlying soil consists of Exeter sandy loam and San Joaquin Sandy Loam. Soils onsite represent a low risk of subsidence (see Appendix D of **Appendix B** for the Web Soil Survey Report).

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 Friant Dam which forms the 520-thousand-acre-foot Lake Millerton, approximately 18 miles north-northeast of the Project site. If Friant Dam were to fail, a large portion of Fresno County, including a portion of the City of Fresno, would be inundated with water.

DISCUSSION

[8] (California Department of Conservation, 2023)
[9] Ibid.

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 would be a less than significant impact.

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

Less than Significant Impact. The Project site contains disturbed and improved land that is relatively flat, and thus only minor grading activities would be required to ensure

necessary drainage occurs. Therefore, impacts would be less than significant.

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 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 DOC 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 USGS 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 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 Exeter and San Joaquin sandy loam according to an NRCS Web Soil Survey on the Project site (see Appendix D of **Appendix B**). Sandy loam soil is evenly balanced of sand, silt, and clay. Sandy loam soils drain well which assists in preventing soils from shrinking and expanding. Therefore, impacts would be less than significant.

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

No Impact. The Project would not require or propose any septic systems or alternative wastewater disposal systems. The Project would include installation of pipelines and meters to connect two communities to the City of Fresno's water system. There would be no impact.

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

Less than Significant Impact with Mitigation Incorporated. The Project would be constructed within existing right-of-way which has been previously disturbed. There are no known paleontological resources, sites, or unique geological features in the Project area. However, in the event that paleontological resources are discovered, **GEO-1** would be implemented in order to reduce impacts to a less than significant level.

Mitigation Measures

GEO-1 Subsequent to a preliminary City review of the project grading plans, if there is evidence that a project will include excavation or construction activities within previously undisturbed soils, a field survey and literature search for unique paleontological/ geological resources shall be conducted. The following procedures shall be followed:

- If unique paleontological/geological resources are not found during either the field survey or literature search, excavation and/or construction activities can commence. In the event that unique paleontological/geological resources are discovered during excavation and/or construction activities, construction shall stop in the immediate vicinity of the find and a qualified paleontologist shall be consulted to determine whether the resource requires further study. The qualified paleontologist 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. If the resources are determined to be significant, mitigation measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate mitigation 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 paleontological/geological resources 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

- If unique paleontological/geological resources are found during the field survey or literature review, the resources shall be inventoried and evaluated for significance. If the resources are found to be significant, mitigation measures shall be identified by the qualified paleontologist. Similar to above, appropriate mitigation 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. In addition, appropriate mitigation for excavation and construction activities in the vicinity of the resources found during the field survey or literature review shall include a paleontological monitor. The monitoring period shall be determined by the qualified paleontologist. If additional paleontological/geological resources are found during excavation and/or construction activities, the procedure identified above for the discovery of unknown resources shall be followed.

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 Greenhouse Gas (GHG) emissions and sources include the following:

Carbon dioxide (CO_2) 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 (CH_4) 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 (N_2O), 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 (O_3) is known as a photochemical pollutant and is a greenhouse gas; however, unlike other greenhouse gases, O_3 in the troposphere is relatively short-lived and, therefore, is not global in nature. O_3 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 (SF_6) 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 CO_2 to the global atmosphere during the past 20 years are due to fossil fuel burning. Atmospheric concentrations of CO_2, CH_4, and N_2O have increased by at least 40 percent, 150 percent, and 20 percent respectively since the year 1750. GHG emissions are typically expressed in carbon dioxide-equivalents (CO_2e), based on the GHG's Global Warming Potential (GWP). The GWP is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. For example, one ton of CH_4 has the same contribution to the greenhouse effect as approximately 25 tons of CO_2. Therefore, CH_4 is a much more potent GHG than CO_2.

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 37.6 $MTCO_2e$. The Project is not expected to result in the generation of GHG emissions that would exceed the AB 32 consistency threshold of 1,100 $MTCO_2e$ annually during construction activities. Operational emissions would be offset by the decommissioning of the existing Del Oro and NHMHP wells. Therefore, 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 Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. The Project would comply with all applicable SJVAPCD policies and regulations and would not exceed an applicable threshold for GHG emissions. The 2020 UWMP demonstrates that the City's system uses approximately 22% less energy than simply groundwater wells. The Project would not conflict with the statewide goals of 40 percent below 1990 levels by 2030 (SB 32), carbon neutrality by 2045 [Executive Order (EO) B-55-18], and 80 percent below 1990 levels by 2050 (EO S-03-05), and the 2017 and 2022 Scoping Plans as the amortized construction emissions and additional operational emissions from City facilities would be offset by the decommissioning of the existing Del Oro and NHMHP wells. Therefore, 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	

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:				
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	
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 February 2024 determined that there are no known active hazardous waste generators or hazardous material spill sites within the Project site or immediate surrounding vicinity.[10]

Airports
The nearest airport to the Project site is the Fresno-Chandler Executive Airport, located approximately 1.8 miles southeast. The Project is not located inside the Airport Influence Area and Safety Zones of the Fresno-Chandler Executive Airport, as identified in the Fresno County ALUCP.[11]

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. As the Project is primarily located within the ROW, various residences surround the Project.

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. Project operations would not require the use and transport of hazardous materials; however, 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. 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

[10] (California State Waterboards, 2023); (California Department of Toxic Substances Control, 2022)
[11] (Fresno Council of Governments, 2018)

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 (OSHA). 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. As mentioned, Project operations would not require the use of hazardous materials, but construction of the Project would. As discussed in Impact Analysis "a" above, all materials used during construction would be contained, stored, and handled in compliance with applicable standards and regulations established by DTSC, the EPA and OSHA. 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. The nearest school is McKinley Elementary School, located 0.5 miles north of the Project site along N. Blythe Avenue. Therefore, further analysis is not warranted, and there would be 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?

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 DTSC. A search of the DTSC EnviroStor database and the SWRCB Geotracker performed in February 2024 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 nearest airport to the Project site is the Fresno-Chandler Executive Airport. The Project is not located inside the Airport Influence Area and Safety Zones of the Fresno-Chandler Executive Airport, as identified in the Fresno County ALUCP.[12] However, the Project is located within two miles of the nearest runway of the airport. The Project would not result in any structures higher than surrounding buildings and would not cause glare. Impacts would be less than

[12] (Fresno Council of Governments, 2018)

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 or minor detours for the purpose of connecting to existing infrastructure and for construction vehicles. Such encroachments in the public ROW 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 land designated as a very high fire hazard severity zone is located approximately 31 miles away.[13] 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	

[13] (ArcGIS, 2023)

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:				
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 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).[14] 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.[15] The Department of Water Resources (DWR) classified the Kings Basin as being in a state of critical overdraft in its Bulletin 118-80. The City contains no unmetered connections[16], offers rebates for the fitment of water-conserving appliances and fixtures[17], and is a founding member of the North Kings Groundwater Sustainability Agency (North Kings GSA). The City has reported in 2021 that it has acquired enough water resources to reduce its reliance on groundwater by 66% and can rely on a variety of non-groundwater sources during multiple dry years.[18]

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

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. Construction activities may result in a potential impact through the erosion of soils and the build-up of silt and debris in runoff areas; however, under California Construction General Permit (CGP) 2022-0057-DWQ guidelines, implementing a SWPPP would be required prior to construction, handling, and transportation of hazardous materials within the Project site area. The Project would involve construction activities that include trenching, grading, and excavation over an area exceeding one (1) acre. Projects that have such activities over an area of one acre must develop and implement a SWPPP. In addition, construction activities could result in accidental spills of fuels, paints, and other hazardous materials entering storm drains and other runoff areas. Through a SWPPP carried out by the contractor and a Qualified SWPPP Developer, the Project would design and utilize best management practices in order to stabilize any sedimentation and erosion from leaving the Project site. Construction would be temporary which would result in a new pipeline and water meters, and demolition of two wells and two water storage tanks to ultimately improve overall water quality and water reliability for the communities of Del Oro and NHMHP. Therefore, impacts would be less than significant.

[14] (California Department of Water Resources, 2018)
[15] (California Department of Water Resources, 2006)
[16] (California State Water Quality Control Board, 2024)
[17] (City of Fresno, 2024)
[18] (City of Fresno, 2021)

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 to connect two communities to the City of Fresno water system, which receives two-thirds of its drinking water from surface water sources and the remaining from groundwater.[19] The proposed connection would result in decreased water consumption within the basin as the two communities would no longer pump from their community wells. Therefore, the Project 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. Construction impacts would be minimized by following California CGP 2022-0057-DWQ guidelines and implementing a SWPPP in accordance with the SWRCB prior to construction activities beginning. The Project would improve water supply reliability and water quality for the communities served by the two existing water systems while adhering to drinking water standards set forth by the SWRCB. Because the Project site is located on flat land, has low potential for soil erosion, and would comply with applicable SWRCB requirements such as implementation of a SWPPP, impacts related to soil and erosion pollution 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 Fresno Metropolitan Flood Control District (FMFCD). Implementation of the Project would not increase the impermeability of the Project site. 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. 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

[19] (City of Fresno, 2021)

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 Federal Emergency Management Agency (FEMA) Flood Map Service Center, the Project site is also not located in a flood hazard zone. The nearest flood zones are located at least one mile from the Project site (see **Figure 8**). 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 (SGMA), the GSA adopted its plan on November 21, 2019. The City of Fresno has several projects in the Groundwater Sustainability Plan. Some of these projects have been completed, while others are in progress or planned. They are shown below in **Table 7**.

Table 7: 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

Project	Description	Benefit	Milestone Year
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 FACILITY EXPANSION	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 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.	30,840 AF/yr	2025
SOUTHEAST RECLAMATION FACILITY AND	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	8,227 AF/yr	2030

Project	Description	Benefit	Milestone Year
DISTRIBUTION SYSTEM	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.		

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.

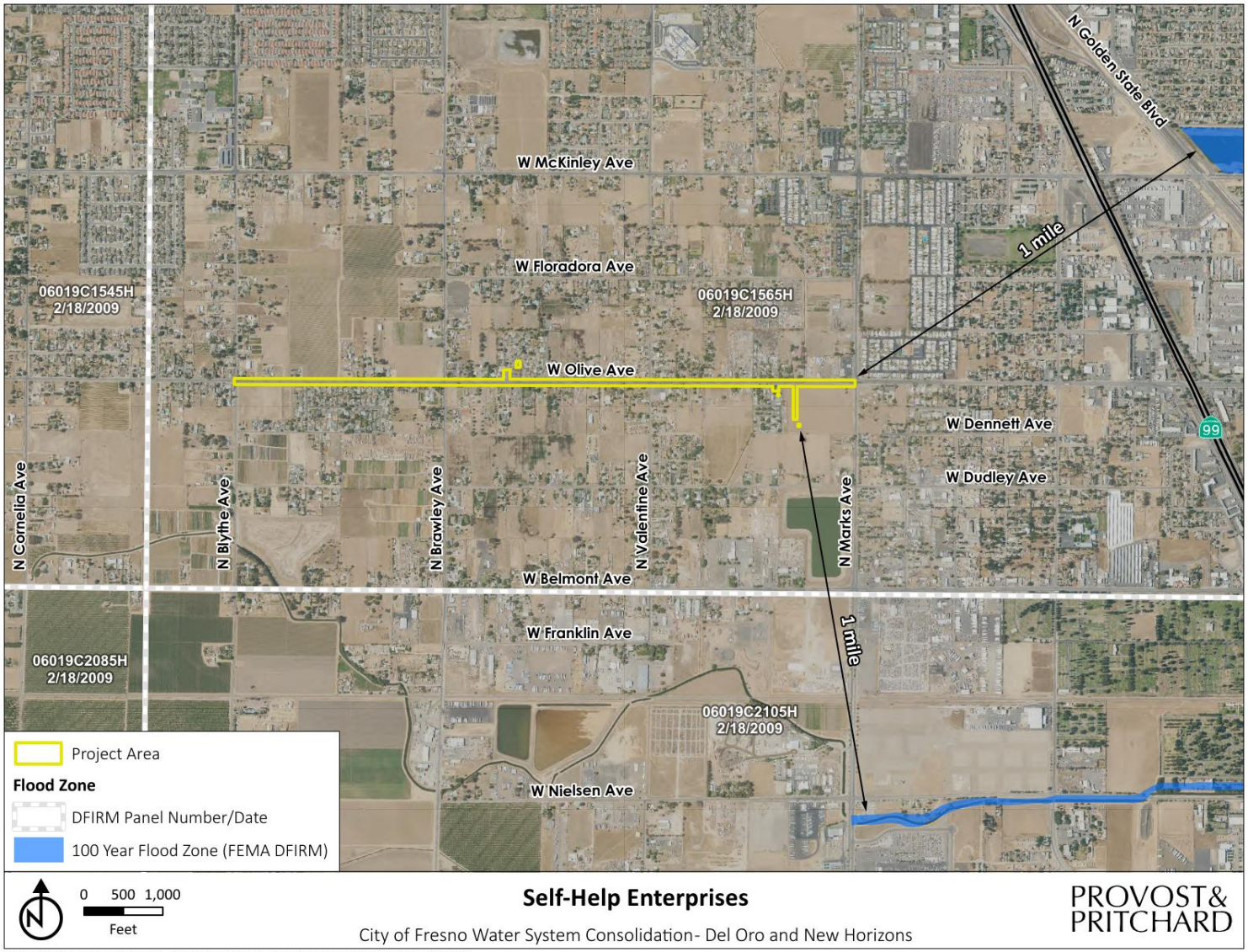

Figure 8: FEMA Flood Zone Map

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 County of Fresno but within the City of Fresno's SOI. The surrounding area is planned for residential with varying densities, general commercial, and an elementary school. Existing land uses in the surrounding area consist of single-family residences and a few commercial establishments. See **Figure 5** and **Figure 6** for the Project site's General Plan land use designation and zoning, respectively.

DISCUSSION

a) Physically divide an established community?

No Impact. The Project would occur in existing ROW and on existing developed residential communities. No new barriers would be constructed, and no ROW is proposed to be abandoned. Construction of the Project would require work in the existing ROW; however, it is anticipated that minor detours to allow vehicles to maneuver around active construction areas would be implemented. Impacts to the ROW would be temporary. 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. There would be no impact.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The Project would be consistent with respective General Plan objectives and policies and would not significantly conflict with applicable land use plans, policies or regulations of the City of Fresno or the County of Fresno. Implementation of drinking water facilities would be allowed by-right. Therefore, there would be no 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). As seen in Figure 7-12 of the Fresno County General Plan Background Report, most of the 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.[20] This area includes the Project site.

[20] (The County of Fresno, 2023)

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 at the Project site. 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 identified and discussed previously, 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 the Biological Resources section. 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 10.5 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	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE – Would the project result in:				
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 rural and low to low-medium density residential land uses. As the Project is primarily located in the ROW, there are single-family residences on the north and south side of the Project site. In addition, there are a few commercial establishments in the Project vicinity. The nearest airport to the Project site is the Fresno-Chandler Executive Airport. The Project is not located inside the Airport Influence Area and Safety Zones of the Fresno-Chandler Executive Airport, as identified in the Fresno County ALUCP.[21] However, the Project is located within two miles of the airstrip at the Fresno-Chandler Executive Airport. SR 99, located 0.7 miles east, 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 (see **Table 8** below). Typically, these noise levels would be considered to exceed the noise

[21] (Fresno Council of Governments, 2018)

level standards as set forth in the Fresno County Municipal Code. However, pursuant to Section 8.40.060(c)1, the County's Noise Control Ordinance, construction activities would be restricted to the hours of 6:00 a.m. and 9:00 p.m. on weekdays and 7:00 a.m. and 9:00 p.m. on Saturdays and Sundays to be exempt from compliance with the noise control ordinance. As such, impacts would be less than significant. During operations, there would be no generation of noise. Impacts would be less than significant.

Table 8: Typical Construction Equipment Noise Levels

Equipment	Typical Noise Level (dBA L_{max}) 50 feet from Source
Backhoe/Front-End Loader	80
Compactor	80
Concrete Mixer Truck	85
Dozer	85
Grader	85
Excavator/ Scraper	85
Air Compressor	80
Gradall (Forklift)	85
Generator	82
Truck (Dump/Flat Bed	84
Paver	85
Pneumatic Tool	85
Pump	77
Roller	85
Concrete Saw	90
Source: **(Federal Highway Administration, 2017)**	

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

Less than Significant Impact. There are no federal or State standards that address construction noise or vibration. The Federal Transit Administration (FTA) publication concerning noise and vibration impact assessment from transit activities has vibration standards suggestions. Although the FTA guidelines are to be applied to transit activities and construction, they may be reasonably applied to the assessment of the potential for annoyance or structural damage resulting from other activities. To prevent vibration annoyance in residences, a level of 80 VdB (vibration velocity level in dB) or less is suggested when there are fewer than 70 vibration events per day. A level of 100 VdB or less is suggested by the FTA guidelines to prevent damage to fragile buildings. **Table 9** below describes the typical construction equipment vibration levels. While these construction-related activities would result in groundborne vibration, such groundborne noise or vibration, would attenuate rapidly from the source and would not be generally perceptible outside of the construction-related areas. In addition, there would not be any vibrational impacts from operation and maintenance activities.

Table 9: Typical Construction Equipment Vibration Sources Levels

Equipment	PPV at 25 ft, in/sec	Approximate Lv* at 25 ft
Large bulldozer	0.089	87
Caisson drilling	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58
*RMS velocity in decibels, VdB re 1 micro-in/sec Source: (John A. Volpe National Transportation Systems Center, 2018)		

Construction-related activities in general can have the potential to create groundborne vibrations. However, based on the soil types found in the general Project site, it is unlikely that any blasting or pile-driving would be required in connection with construction of the Project. Therefore, the potential for groundborne vibrations to occur as part of construction-related activities of the Project would not be significant. Additionally, the operation of the Project would not contain any activities that would create excessive groundborne vibrations. The Project would not result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. Therefore, 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 outside the Fresno-Chandler Executive Airport's influence and safety zones, it is located within two miles of the nearest airstrip of the airport. However, the Project would not expose people residing or working in the Project area to excessive noise levels. The Project would not result in habitable structures, nor are Project-affiliated people such as construction crewmembers anticipated to be on site for long periods of time due to the temporary nature of construction. Therefore, impacts would be less than significant.

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 County of Fresno but within the City of Fresno's SOI. As of 2022, the City of Fresno and the unincorporated areas of the County of Fresno have an estimated population of 543,428 and 158,846, respectively.[22] The Project site is located in a primarily rural residential area with single-family residences located in the surrounding vicinity.

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 would connect the Del Oro and the NHMHP water systems to the City of Fresno to alleviate contamination issues. Implementation of the Project would provide more reliable drinking water to both communities. The Project would not directly induce population growth because it would not propose any new housing or land use changes. Future population growth due to the extension of water services to the two communities would be speculative. Any impacts would be less than significant.

[22] (Fresno Council of Governments, 2023)

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:				
i. Fire protection?				X
ii. Police protection?				X
iii. Schools?				X
iv. Parks?				X
v. Other public facilities?			X	

Baseline Conditions

Fire Protection: The Project site is served by the Fresno County Fire Department for its fire protection services. Fire Station No. 87 is located approximately 6.8 miles southeast of the Project site.

Police Protection: The Project site is served by the Fresno County Sheriff's Department for its police protection services. The closest existing Sheriff's Office is located approximately 3.3 miles southeast of the Project site in downtown Fresno.

Schools: The nearest school is McKinley Elementary School, located 0.5 miles north of the Project site along N. Blythe Avenue.

Parks: Basin XX, located northeast of the Project site, is approximately 0.47 miles away.

Landfills: Solid waste disposal is provided by the County of Fresno via Republic Services.[23] Republic Services' facility site is located four miles north-northwest of the Project site.

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?

No Impact. The Project proposes to add the Del Oro and the NHMHP water systems to the City of Fresno by installing a water main and connecting them to the City's system. The rationale for the Project is to provide the Del Oro and the NHMHP water systems with a reliable and safe drinking water supply. The proposed infrastructure is not designed to increase capacity or serve future growth. The Project would result in a net decrease of aboveground structures. Therefore, additional fire protection services would not be necessary. There would be no impact.

ii. Police protection?

No Impact. The Project would result in a net decrease of aboveground structures. There would be no impacts to police protection services.

iii. Schools?

No Impact. The Project would not result in an increase in the area population. Thus, because of the nature of the Project, there would be no increased demand for schools. The Project would not result in the need for new or physically altered school facilities. There would be no impact.

iv. Parks?

No Impact. As mentioned, the Project would not involve development any residential units that would increase population growth in the area. The Project

[23] (County of Fresno, 2023)

would be meant to serve the existing residents at each community. Therefore, the Project would not result in the need for new or physically altered parks. There would be no impact.

v. Other public facilities?

Less than Significant Impact. As previously discussed, the Project would not result in an increase in residents that would require other public services such as libraries or post offices. Thus, the Project would not result in the need for new or altered facilities to provide other public services and no impact would occur as a result of the Project.

Solid waste generated from facilities at the Project site are hauled to the Republic Services solid waste facility located approximately four miles north-northwest of the Project site. Implementation of the Project would not increase the solid waste generated onsite. 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 Project is located in the County of Fresno, but within the SOI of the City of Fresno. The City of Fresno has numerous neighborhood parks located throughout the City and three regional parks serving the entire metropolitan area. The City's General Plan identifies a level of service goal by park type to meet the needs of the residents. The goal is to provide three acres per 1,000 residents for pocket parks, neighborhood parks, and community parks; and two acres per 1,000 residents for regional parks, open space or natural areas, and special use parks.[24] The nearest park to the Project site is Basin XX, located approximately 0.47 miles northeast. Basin XX is considered both a "neighborhood park" and "joint-use" recreational facility. A neighborhood park is typically between two to ten acres and contributes to a distinct neighborhood identity. A joint-use recreational facility provides uses in addition to park space such as stormwater detention and/or groundwater recharge.[25]

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 Project would provide the Del Oro and the NHMHP with a clean and reliable source of water. Although two new water service connections would be made, the Project would not result in planned or unplanned population growth that could increase the use of existing neighborhood and regional parks, or other recreational facilities. The Project would serve the existing residents within the Del Oro and the NHMHP. Therefore, there would be no impact.

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. The Project would not include recreational facilities, nor would it require additional or the expansion of recreational facilities. Therefore, there would be no impact.

Mitigation Measures

Mitigation measures are not warranted for impacts regarding Recreation.

[24] (City of Fresno, 2017)
[25] (City of Fresno, 2017)

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 Project is located in Fresno County and contains roadways maintained by Fresno County. Typically, Fresno County's roadway network is primarily rural in nature due to the large expanse of agricultural lands scattered across the County's 6,000-plus square miles. The Project area contains W. Olive Avenue, N. Blythe Avenue, N. Brawley Avenue, and N. Marks Avenue. Sections of W. Olive Avenue, N. Blythe Avenue, N. Valentine Avenue, and N. Brawley Avenue that are located in the Project area are, for the most part, located in the County; while N. Marks Avenue and the eastern 650 feet of Olive Avenue is located in the City of Fresno. In addition, the Project contains Knoll Drive, which is a privately owned roadway that leads into the Del Oro community.

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 full or partial closure of streets, or minor detours, 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 projects that generate less than 500 average daily trips (ADTs). The Project, which involves connecting the Del Oro and NHMHP water systems with the City of Fresno water system, is anticipated to generate less than one (1) ADT from operation and maintenance activities. In conclusion, the Project would result in a less than significant VMT impact and would be 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 would not propose any off-site improvements to the local transportation network that would result in sharp curves, dangerous intersections, or other hazards. Since the Project is compatible with surrounding land uses, there are no off-site improvements, and all on-site improvements would be made adhering to the latest design standards for the County of Fresno, preventing hazardous conditions. There would be no impact.

d) Result in inadequate emergency access?

Less than Significant Impact. The Project would not involve a change to any emergency response plans. Construction of the Project would require work in the existing ROW; however, it is anticipated that minor detours to allow vehicles to maneuver around active construction areas, or partial/full road closures would be implemented temporarily. Work in the ROW would require preparation of and compliance with a Traffic Control Plan prepared in accordance with the 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:				
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		
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

The APE is in the Southern Valley Yokuts ethnographic territory of the San Joaquin Valley. The Yokuts were generally divided into three major groups, the Northern Valley Yokuts, the Southern Valley Yokuts, and the Foothill Yokuts. The Yokuts are a sub-group of the Penutian language that covers much of coastal and central California and Oregon.

Sacred Lands File Search

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.

The NAHC supplied a list of Native American representatives to contact for information or knowledge of cultural resources in the APE and the surrounding area. The following Native American organizations/individuals were contacted from the list provided by NAHC below:

1. Chairperson Robert Ledger of the Dumna Wo-Wah Tribal Government
2. Chairperson Fred Beihn of North Fork Rancheria of Mono Indians
3. Environmental/Heritage Manager Mary Stalter of North Fork Rancheria of Mono Indians
4. Tribal Compliance Officer Timothy Perez of Northern Valley Yokuts/ Ohlone Tribe
5. Tribal Historic Preservation Officer Heather Airey of Picayune Rancheria of the Chukchansi Indians
6. Chairperson Tracey Hopkins of Picayune Rancheria of the Chukchansi Indians
7. Cultural Specialist I Nichole Escalon of Santa Rosa Rancheria Tachi Yokuts Tribe
8. THPO Shana Powers of Santa Rosa Rancheria Tachi Yokuts Tribe
9. Cultural Specialist II Samantha McCarty of Santa Rosa Rancheria Tachi Yokuts Tribe
10. Chairperson Michelle Heredia-Cordova of Table Mountain Rancheria
11. Cultural Resource Director Bob Pennell of Table Mountain Rancheria
12. Chairperson David Alvarez of the Traditional Choinumni Tribe
13. Tribal Archaeologist Joey Garfield of the Tule River Tribe
14. Chairperson Neil Peyron of the Tule River Tribe
15. Environmental Department Kerri Vera of the Tule River Tribe
16. Chairperson Kenneth Woodrow of the Wuksachi Indian Tribe/Eshom Valley Band

The outreach letters were sent to all the Native American representatives on the contact list on February 27, 2024 and November 25, 2024. The letters included a description of the Project and a topographic map of the location. Follow-up emails were sent on March 7, 2024. As of the date of this report, no responses were received by the Native American representatives, nor was any information shared regarding tribal cultural resources pertaining to the APE.

Public Resources Code Section 21080.3.1, et seq. (Codification of AB 52, 2013-14)

PRC Section 21080.3.1, et seq. (codification of AB 52, 2013-14) requires that a lead agency, within 14 days of determining that it would 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 inquire whether the Tribe wishes to initiate request formal consultation. Tribes 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 would be made.

Currently, the Table Mountain Rancheria Tribe and the Dumna Wo Wah Tribe have requested to be notified pursuant to AB 52. On November 25, 2024, letters were mailed out to the above-mentioned tribes, in addition to the 14 other tribes listed above that were provided by the NAHC. No tribes requested consultation.

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 with Mitigation Incorporated. No requests 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. This has been memorialized as **CUL-1**. Therefore, with the inclusion of **CUL-1**, the Project would have a less than significant impact with mitigation incorporated.

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 with Mitigation Incorporated. No requests 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 remains 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 determined 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 uncovering of human remains. This would be carried out with the implementation of CUL-2. With the inclusion of **CUL-2**, impacts would be less than significant with mitigation incorporated.

Mitigation Measures

See CUL-1 and CUL-2 in Section V 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	

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:				
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?				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 private wells for water delivery, individual septic tanks for wastewater treatment, and the County of Fresno for solid waste disposal and stormwater management. 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 site is within and adjacent to a developed public street, where utilities are present. One of the Project components is approximately 8,200 LF of 16-inch diameter water main along Olive Avenue from Blythe Avenue to Marks Avenue. The pipeline connection would be within existing road right of way. There would be 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?

Less than Significant Impact. An increase in water consumption is not anticipated as a result of the Project. The Project proposes to connect two existing communities to the City of Fresno water system, which together currently consume approximately 19 acre-feet annually.[26] Considering the current water contamination issues presently existing for both communities, completion of the Project would result in improved water quality and supply reliability for those reliant on their current respective water systems. While the source of water will change from solely groundwater to a combination of groundwater and surface water, as depicted in the 2020 Urban Water Management Plan (UWMP), the change in source water would allow for such groundwater to be extracted during dry years should the City's surface water allocation for that year not satisfy the City's demand.[27] Based on the available supplies depicted in the UWMP Table ES-2, the City has sufficient capacity to serve the Project. The Project is an infrastructure project that would not directly result in an increase in population. Impacts would be less than significant.

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?

No Impact. The Project would not require or propose any wastewater collection or treatment, and therefore would not create or increase any wastewater demand on any wastewater treatment provider. There would be no impact.

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

Less than Significant Impact. The Project would likely generate minimal solid waste from construction activities; however, these would not be generated in large quantities. Operation of the newly connected water system will not create solid waste. 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. Construction of the project may result in a temporary increase in solid waste, which would be disposed of in accordance with applicable state and local laws and regulations, such as CALGreen Sections 4.408 and 5.408,

[26] (Provost & Pritchard Consulting Group, 2023)
[27] (City of Fresno, 2021)

which require diversion of at least 75% of construction waste. 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 in the County of Fresno adjacent to the City of Fresno city limits and within the City's SOI. The Project is located in an urbanized setting and is predominantly surrounded by rural to low-medium residential uses. The Project site is not located in or near land classified as a Very High Fire Hazard Severity Zone or a State Responsibility Area (SRA). The nearest SRA is located approximately 13.2 miles northeast near the intersection of De Wolf Avenue and E. Shepherd Avenue.[28] The nearest Very High Fire Hazard Severity Zone is located approximately 31 miles east-northeast near Hog Mountain, CA.[29]

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 County of Fresno as a Very High Fire Hazard Severity Zone. As mentioned above, the nearest SRA is approximately 13.2 miles northeast of the Project site. Additionally, the site is approximately 31 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. 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 and SRA 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 SRA or lands classified as very high fire hazard severity zones; therefore, there would be no impact.

[28] (California Department of Forestry and Fire Protection, 2023)
[29] (ArcGIS, 2023)

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.

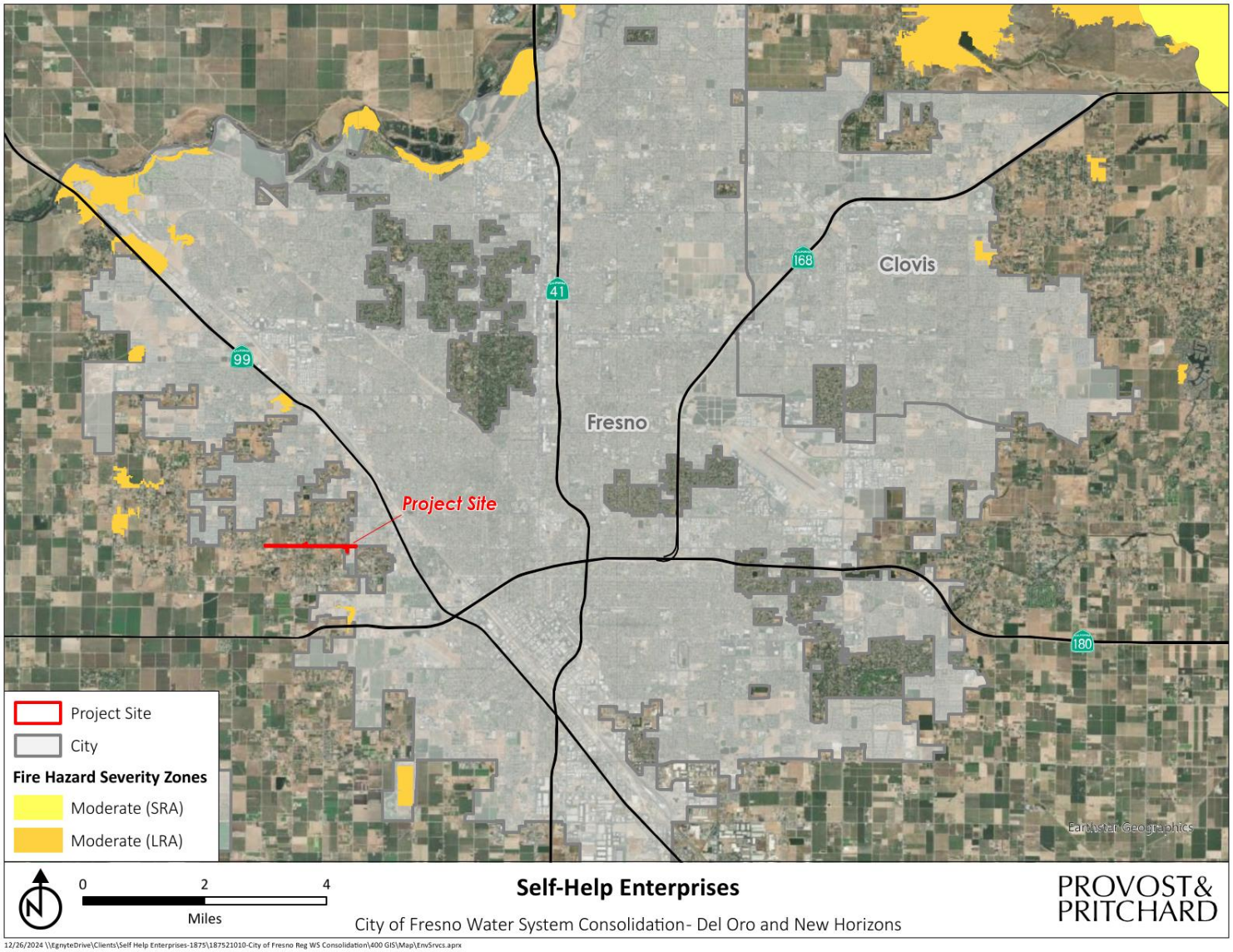

Figure 9: Fire Hazard Severity Zone Map

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 with Mitigation Incorporated. As described in the Biological Resources section, with the implementation of Mitigation Measures **BIO-1**, **BIO-2**, and **BIO-3**, **CUL-1**, **CUL-2**, and **GEO-1**, 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 conveyance facilities, water meters, and the demolition of two existing wells and water storage tanks. In the event of future multiple water system consolidations, the City's 2020 UWMP demonstrated that given existing and future population growth, the City would continue to have adequate water supply and reduce its reliance on groundwater, even in the event of multiple dry years.[30] 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.

[30] (City of Fresno, 2021)

Mitigation Measure Monitoring Program for
Del Oro-Metropolitan District and New Horizons Mobile Home Park Water System Consolidation

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 **Del Oro Metropolitan and New Horizons Mobile Home Park Water System Consolidation** (Project). The MMRP, which is found in **Table 10** 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 10: 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 Agriculture.				
III. AIR QUALITY				
There are no significant impacts to Air Quality.				
IV. BIOLOGICAL RESOURCES				
BIO-1 (Avoidance): 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	Lead Agency	Lead Agency	
BIO-2 (Pre-construction Surveys): If activities must occur within nesting bird season (February 1 to September 15), a qualified biologist will conduct a pre-construction survey within five calendar days prior to the start of construction for nesting migratory birds within up to 100 feet outside of the project site and for nesting raptors within up to 500 feet outside of the project site. All raptor nests would be considered "active" upon the nest-building stage. If no active nests are observed, no further action is required.	If construction commences between February 1 and September 15	Lead Agency	Lead Agency	
BIO-3 (Avoidance Buffers): On discovery of any active nests near work areas, a qualified biologist will determine appropriate avoidance buffer distances based on applicable CDFW and/or USFWS guidelines, the biology of the species, conditions of the nest(s), and the level of project disturbance. .	Upon discovery of active nests or breeding colonies near work areas	Lead Agency	Lead Agency	
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 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	Upon discovery of previously-unknown cultural resources	Lead Agency	Lead Agency	

Table 10: Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
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 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.	Upon discovery of human remains	Lead Agency	Lead Agency	

Table 10: Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
VI. ENERGY				
There are no significant impacts to Energy.				
VII. GEOLOGY AND SOILS				
GEO-1: Subsequent to a preliminary City review of the project grading plans, if there is evidence that a project will include excavation or construction activities within previously undisturbed soils, a field survey and literature search for unique paleontological/ geological resources shall be conducted. The following procedures shall be followed: • If unique paleontological/geological resources are not found during either the field survey or literature search, excavation and/or construction activities can commence. In the event that unique paleontological/geological resources are discovered during excavation and/or construction activities, construction shall stop in the immediate vicinity of the find and a qualified paleontologist shall be consulted to determine whether the resource requires further study. The qualified paleontologist 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. If the resources are determined to be significant, mitigation measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate mitigation 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 paleontological/geological resources 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	Upon preliminary review of project grading plans Upon discovery of unique paleontological/geological resources	Lead Agency	Lead Agency	

Table 10: Mitigation Monitoring and Reporting Program

MITIGATION MEASURE	Timing for Mitigation Measure	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
• If unique paleontological/geological resources are found during the field survey or literature review, the resources shall be inventoried and evaluated for significance. If the resources are found to be significant, mitigation measures shall be identified by the qualified paleontologist. Similar to above, appropriate mitigation 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. In addition, appropriate mitigation for excavation and construction activities in the vicinity of the resources found during the field survey or literature review shall include a paleontological monitor. The monitoring period shall be determined by the qualified paleontologist. If additional paleontological/geological resources are found during excavation and/or construction activities, the procedure identified above for the discovery of unknown resources shall be followed.				
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				

Table 10: 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 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				
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	Lead Agency	Lead Agency	
See BIO-2 above.	If construction commences between February 1 and September 15	Lead Agency	Lead Agency	
See BIO-3 above.	Upon discovery of active nests or breeding colonies near work areas	Lead Agency	Lead Agency	
See GEO-1 above.	Upon preliminary review of project grading plans Upon discovery of unique paleontological/geological resources			

References

ArcGIS. (2023). *Is Your Home in a Fire Hazard Severity Zone?* Retrieved from https://www.arcgis.com/apps/Styler/index.html?appid=5e96315793d445419b6c96f89ce5d153

California Department of Conservation. (2002). *California Geomorphic Provinces Note 36.* Retrieved from https://www.conservation.ca.gov/cgs/Documents/Publications/CGS-Notes/CGS-Note-36.pdf

California Department of Conservation. (2020). *California Important Farmland Finder*. Retrieved from https://maps.conservation.ca.gov/DLRP/CIFF/

California Department of Conservation. (2023). *Earthquake Zones of Required Investigation*. Retrieved from https://maps.conservation.ca.gov/cgs/EQZApp/app/

California Department of Forestry and Fire Protection. (2023). *California State Responsibility Areas*. Retrieved from https://www.arcgis.com/apps/mapviewer/index.html?layers=5ac1dae3cb2544629a845d9a19e83991

California Department of Toxic Substances Control. (2022). *California Department of Toxic Substances Control EnviroStor*. Retrieved from California Department of Toxic Substances Control EnviroStor: https://www.envirostor.dtsc.ca.gov/public/

California Department of Transportation. (2023). *California State Scenic Highway System Map*. Retrieved October 28, 2022, from California Department of Transportation Scenic Highways: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa

California Department of Transportation. (2024). *Scenic Highways - Frequently Asked Questions*. Retrieved from Caltrans: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways/lap-liv-i-scenic-highways-faq2

California Department of Water Resources. (2006). *San Joaquin Valley Groundwater Basin Kings Subbasin .* Retrieved from https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/5_022_08_KingsSubbasin.pdf

California Department of Water Resources. (2018). *DWR Groundwater Basin Boundary Assessment Tool*. Retrieved from DWR Groundwater Basin Boundary Assessment Tool: https://gis.water.ca.gov/app/bbat/

California State Waterboards. (2023). *GeoTracker*. Retrieved from https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Sacramento

City of Fresno. (2017). *Fresno Parks Master Plan.* Retrieved January 2024, from https://www.fresno.gov/darm/wp-content/uploads/sites/10/2018/05/FresnoPMPFinalDocumentwithAppA051818.pdf

City of Fresno. (2021, July 21). *2020 Urban Water Management Plan.* Retrieved from https://www.fresno.gov/wp-content/uploads/2023/03/Fresno-2020-UWMP_Final_2021-07-21-1.pdf

County of Fresno. (2023). *ESA Waste Haulers*. Retrieved from County of Fresno: https://gisportal.co.fresno.ca.us/portal/apps/webappviewer/index.html?id=9eb6f60acbce4565a634a931a9cc6f42

Federal Highway Administration. (2017, August 24). *U.S. Department of Transportation Federal Highway Administration*. Retrieved from Construction Noise Handbook: https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm

Fresno Council of Governments. (2018). *Fresno County Airport Land Use Compatibility Plan.* Retrieved from https://fresnocog.wpenginepowered.com/wp-content/uploads/2022/09/Fresno-ALUCP-12-04-17-final-with-Amended-Table.pdf

Fresno Council of Governments. (2023). *Fresno Multi-Jurisdictional 2023-2031 Housing Element HCD Review Draft.* Retrieved from https://www.fresnocountyca.gov/files/assets/county/v/1/2023-2031_mjhe_regional_fresnocounty.pdf

John A. Volpe National Transportation Systems Center. (2018). *FTA Transit Noise and Vibration Impact Assessment Manual .* Retrieved from https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf

Jones & Stoakes. (2006, December). *PG&E San Joaquin Valley Operation & Maintenance Habitat Conservation Plan.* Retrieved from https://ecos.fws.gov/docs/plan_documents/thcp/thcp_838.pdf

San Joaquin Valley Air Pollution Control District. (2006-2012). *Air Quality Attainment Plans*. Retrieved from http://valleyair.org/Air_Quality_Plans/air-quality-plans.htm

San Joaquin Valley Air Pollution Control District. (n.d.). *San Joaquin Valley Attainment Status*. Retrieved from San Joaquin Valley Air Pollution Control District: https://ww2.valleyair.org/air-quality-information/ambient-air-quality-standards-valley-attainmnet-status/

The County of Fresno. (2023). *Fresno County General Plan Background Report.* Retrieved from https://www.fresnocountyca.gov/files/sharedassets/county/v/2/public-works-and-planning/development-services/planning-and-land-use/general-plan/fcgpr-background-report-2023-05-10.pdf

United States Environmental Protection Agency. (2023). *Current Nonattainment Counties for All Criteria Pollutants*. Retrieved July 31, 2023, from https://www3.epa.gov/airquality/greenbook/ancl.html

Appendix A: CalEEMod Output Files

Del Oro Water New Horizons Water System Consolidation Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Del Oro Water New Horizons Water System Consolidation
Construction Start Date	1/1/2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	22.6
Location	36.75753567998018, -119.85924309493976
County	Fresno
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2458
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Linear	1.50	Mile	0.63	0.00	—	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.76	0.64	4.74	5.33	0.02	0.18	0.02	0.20	0.17	0.01	0.17	—	1,688	1,688	0.07	0.01	0.10	1,694
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.06	0.89	6.07	6.49	0.02	0.23	0.02	0.25	0.21	0.01	0.22	—	1,804	1,804	0.07	0.02	< 0.005	1,810
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.13	0.11	0.75	0.83	< 0.005	0.03	< 0.005	0.03	0.03	< 0.005	0.03	—	226	226	0.01	< 0.005	0.01	227
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	0.02	0.14	0.15	< 0.005	0.01	< 0.005	0.01	< 0.005	< 0.005	0.01	—	37.4	37.4	< 0.005	< 0.005	< 0.005	37.6

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2024	0.76	0.64	4.74	5.33	0.02	0.18	0.02	0.20	0.17	0.01	0.17	—	1,688	1,688	0.07	0.01	0.10	1,694
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.06	0.89	6.07	6.49	0.02	0.23	0.02	0.25	0.21	0.01	0.22	—	1,804	1,804	0.07	0.02	< 0.005	1,810
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.13	0.11	0.75	0.83	< 0.005	0.03	< 0.005	0.03	0.03	< 0.005	0.03	—	226	226	0.01	< 0.005	0.01	227
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.02	0.02	0.14	0.15	< 0.005	0.01	< 0.005	0.01	< 0.005	< 0.005	0.01	—	37.4	37.4	< 0.005	< 0.005	< 0.005	37.6

3. Construction Emissions Details

3.1. Linear, Grubbing & Land Clearing (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.3. Linear, Grading & Excavation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	0.87	6.05	6.36	0.02	0.23	—	0.23	0.21	—	0.21	—	1,782	1,782	0.07	0.01	—	1,788
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.53	0.56	< 0.005	0.02	—	0.02	0.02	—	0.02	—	156	156	0.01	< 0.005	—	157
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.10	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.9	25.9	< 0.005	< 0.005	—	25.9

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.13	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.0	22.0	< 0.005	< 0.005	< 0.005	22.3
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.00	2.00	< 0.005	< 0.005	< 0.005	2.03
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.34
Vendor	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	0.00
Hauling	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	0.00

3.5. Linear, Drainage, Utilities, & Sub-Grade (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.80	1.05	< 0.005	0.05	—	0.05	0.04	—	0.04	—	152	152	0.01	< 0.005	—	153
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.80	1.05	< 0.005	0.05	—	0.05	0.04	—	0.04	—	152	152	0.01	< 0.005	—	153
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.7	11.7	< 0.005	< 0.005	—	11.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.94	1.94	< 0.005	< 0.005	—	1.94

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.08	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.4	12.4	< 0.005	< 0.005	0.05	12.6
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	< 0.005	11.2
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.87	0.87	< 0.005	< 0.005	< 0.005	0.89
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15
Vendor	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	0.00
Hauling	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	0.00

3.7. Linear, Paving (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	0.62	4.73	5.17	0.02	0.18	—	0.18	0.17	—	0.17	—	1,663	1,663	0.07	0.01	—	1,669
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	54.7	54.7	< 0.005	< 0.005	—	54.9
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.05	9.05	< 0.005	< 0.005	—	9.08
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.16	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	24.8	24.8	< 0.005	< 0.005	0.10	25.2
Vendor	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	0.00
Hauling	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.75	0.75	< 0.005	< 0.005	< 0.005	0.76
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.12	0.12	< 0.005	< 0.005	< 0.005	0.13
Vendor	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	0.00
Hauling	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	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description

Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	1/1/2024	1/12/2024	5.00	8.00	—
Linear, Grading & Excavation	Linear, Grading & Excavation	1/13/2024	2/26/2024	5.00	32.0	—
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	2/27/2024	4/6/2024	5.00	28.0	—
Linear, Paving	Linear, Paving	4/7/2024	4/23/2024	5.00	12.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Linear, Grading & Excavation	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Linear, Grading & Excavation	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Linear, Grading & Excavation	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Linear, Drainage, Utilities, & Sub-Grade	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Linear, Paving	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Linear, Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Linear, Paving	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	0.00	7.70	LDA,LDT1,LDT2

Linear, Grubbing & Land Clearing	Vendor	0.00	4.00	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	4.00	7.70	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	4.00	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	—	—	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	2.00	7.70	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	4.00	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	0.00	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	—	—	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	4.00	7.70	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	4.00	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Linear, Grubbing & Land Clearing	—	—	0.63	0.00	—
Linear, Grading & Excavation	—	—	0.63	0.00	—
Linear, Drainage, Utilities, & Sub-Grade	—	—	0.63	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Linear	0.63	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.6	annual days of extreme heat
Extreme Precipitation	2.05	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	80.0
AQ-PM	94.6
AQ-DPM	15.5
Drinking Water	86.0
Lead Risk Housing	58.9
Pesticides	63.5
Toxic Releases	68.2
Traffic	4.84
Effect Indicators	—
CleanUp Sites	17.1
Groundwater	37.6
Haz Waste Facilities/Generators	89.7
Impaired Water Bodies	0.00
Solid Waste	64.7
Sensitive Population	—
Asthma	88.6
Cardio-vascular	54.2

Low Birth Weights	95.6
Socioeconomic Factor Indicators	—
Education	83.3
Housing	57.9
Linguistic	67.5
Poverty	92.4
Unemployment	98.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	24.56050302
Employed	2.669061979
Median HI	10.79173617
Education	—
Bachelor's or higher	3.079686898
High school enrollment	100
Preschool enrollment	1.873476197
Transportation	—
Auto Access	21.6091364
Active commuting	1.039394328
Social	—
2-parent households	81.86834339
Voting	2.04029257
Neighborhood	—
Alcohol availability	57.39766457

Park access	13.08866932
Retail density	14.66700885
Supermarket access	21.30116771
Tree canopy	3.233671243
Housing	—
Homeownership	32.58052098
Housing habitability	51.73873989
Low-inc homeowner severe housing cost burden	71.62838445
Low-inc renter severe housing cost burden	66.98319004
Uncrowded housing	23.82907738
Health Outcomes	—
Insured adults	37.58501219
Arthritis	68.4
Asthma ER Admissions	14.2
High Blood Pressure	56.0
Cancer (excluding skin)	89.7
Asthma	16.4
Coronary Heart Disease	69.4
Chronic Obstructive Pulmonary Disease	35.3
Diagnosed Diabetes	39.3
Life Expectancy at Birth	4.1
Cognitively Disabled	68.5
Physically Disabled	8.1
Heart Attack ER Admissions	29.8
Mental Health Not Good	17.1
Chronic Kidney Disease	55.3
Obesity	24.2

Pedestrian Injuries	87.6
Physical Health Not Good	28.8
Stroke	45.2
Health Risk Behaviors	—
Binge Drinking	45.1
Current Smoker	22.4
No Leisure Time for Physical Activity	17.1
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	59.5
Elderly	80.0
English Speaking	38.3
Foreign-born	31.7
Outdoor Workers	5.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	84.2
Traffic Density	8.1
Traffic Access	0.0
Other Indices	—
Hardship	84.1
Other Decision Support	—
2016 Voting	7.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	91.0

Healthy Places Index Score for Project Location (b)	5.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Off-Road Equipment	Added construction equipment.
Construction: Trips and VMT	Adding total vehicles

Appendix B: Biological Evaluation

SELF HELP ENTERPRISES

CITY OF FRESNO WATER SYSTEM CONSOLIDATION- DEL ORO AND NEW HORIZONS PROJECT BIOLOGICAL EVALUATION

FRESNO COUNTY
JANUARY 2025

PREPARED FOR:
Self Help Enterprises
8445 West Elowin Court, Visalia, California 93291

PREPARED BY:
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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

ACRONYMS AND ABBREVIATIONS

CDFW ..... California Department of Fish and Wildlife
CEQA ..... California Environmental Quality Act
CESA ..... California Endangered Species Act
CFR ..... Code of Federal Regulations
CNDDB ..... California Natural Diversity Database
CNPS ..... California Native Plant Society
CWA ..... Clean Water Act
EFH ..... Essential Fish Habitat
ESA ..... Endangered Species Act
HCP ..... Habitat Conservation Plan
IPaC ..... Information for Planning and Consultation System
MBTA ..... Migratory Bird Treaty Act
NCCP ..... Natural Community Conservation Plan
NEPA ..... National Environmental Policy Act
NPDES ..... National Pollution Discharge Elimination System
NRCS ..... Natural Resources Conservation Service
Provost & Pritchard ..... Provost & Pritchard Consulting Group
RWQCB ..... Regional Water Quality Control Board
SWPPP ..... Storm Water Pollution Prevention Plan
SWRCB ..... State Water Resources Control Board
USACE ..... United States Army Corps of Engineers
USFWS ..... United States Fish and Wildlife Service
USGS ..... United States Geological Survey
WDR ..... Waste Discharge Requirements

1 INTRODUCTION

This Biological Evaluation report, prepared by Provost & Pritchard Consulting Group (Provost & Pritchard) in compliance with the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA), includes a description of the biological resources present or with potential to occur within the proposed City of Fresno Water System Consolidation- Del Oro and New Horizons Project (or "project") and evaluates potential project-related impacts to those resources.

1.1 PROJECT DESCRIPTION

The project site (or "site") is located in the San Joaquin Valley, west of the City of Fresno in the middle portion of Fresno County, California (see Figure 1). Specifically, the site is located along West Olive Avenue, between North Blythe Avenue and North Marks Avenue, and includes portions along North Knoll Drive and off of North Olive Avenue and four well locations to the north and south of North Olive Avenue (see Figure 2 and Figure 3). The site includes paved roads, sidewalks, residential housing, a ruderal field, and two well sites, for approximately 16 acres. The surrounding lands are a mixture of residential housing, agricultural land, a small solar array, and vacant lots.

The project includes the construction of the following items:

- 8,200 linear feet (LF) of 16-inch water main along Olive Avenue from Blythe Avenue to Marks Avenue
- For the Del Oro System:
    - 230 LF of up to 4-inch water main along Knoll Drive from Olive Avenue to the master meter connection point
    - New 4-inch master meter at Knoll Drive and Olive Avenue
    - New 4-inch Pressure Reducing Valve and Backflow Preventor at Knoll Drive and Olive Avenue
    - Destruction of one (1) existing well and one (1) tank, onsite

- For NHMHP:
    - New 4-inch master meter and service line at the connection point with the City system
    - New 4-inch Pressuring Reducing Valve and Backflow Preventor at the connection point with the City system
    - 430 LF of up to 4-inch water main along APN: 449-090-39 from the master meter connection point to the existing water system
    - Destruction of three (3) existing wells and one (1) tank, onsite

1.2 REPORT OBJECTIVES

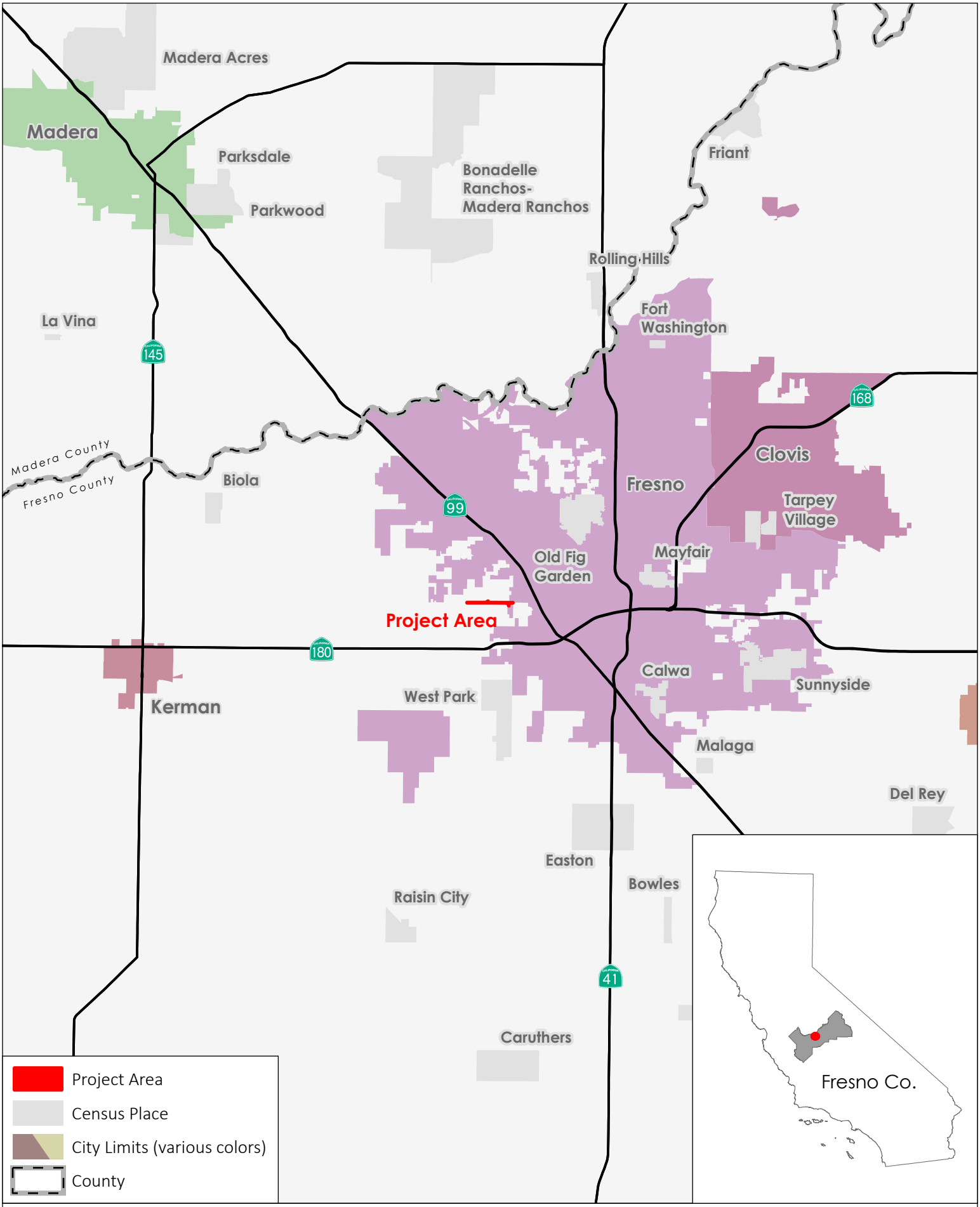
Construction activities such as those proposed by the project could potentially damage biological resources or habitats that are crucial for sensitive plant and wildlife species. In cases such as these, development may be regulated by state or federal agencies, and/or addressed by local regulatory agencies.

This report addresses issues related to the following:

- The presence of sensitive biological resources on the project site, or with the potential to occur on the project site.
- The federal, state, and local regulations regarding these resources.
- Mitigation measures that may be required to reduce the magnitude of anticipated impacts and/or comply with permit requirements of state and federal resource agencies.

Therefore, the objectives of this report are:

- Summarize all project site-specific information related to existing biological resources.
- Make reasonable inferences about the biological resources that could occur on the project site based on habitat suitability and the proximity of the project site to a species' known range.
- Summarize all state and federal natural resource protection laws that may be relevant to implementation of the project.
- Identify and discuss project impacts and effects to biological resources likely to occur onsite within the context of CEQA, NEPA, and/or state or federal laws.
- Identify and prescribe a set of avoidance and mitigation measures that would reduce impacts to a less-than-significant level (as identified by CEQA) or avoid and minimize effects (as identified by NEPA) and are generally consistent with recommendations of the resource agencies for affected biological resources.

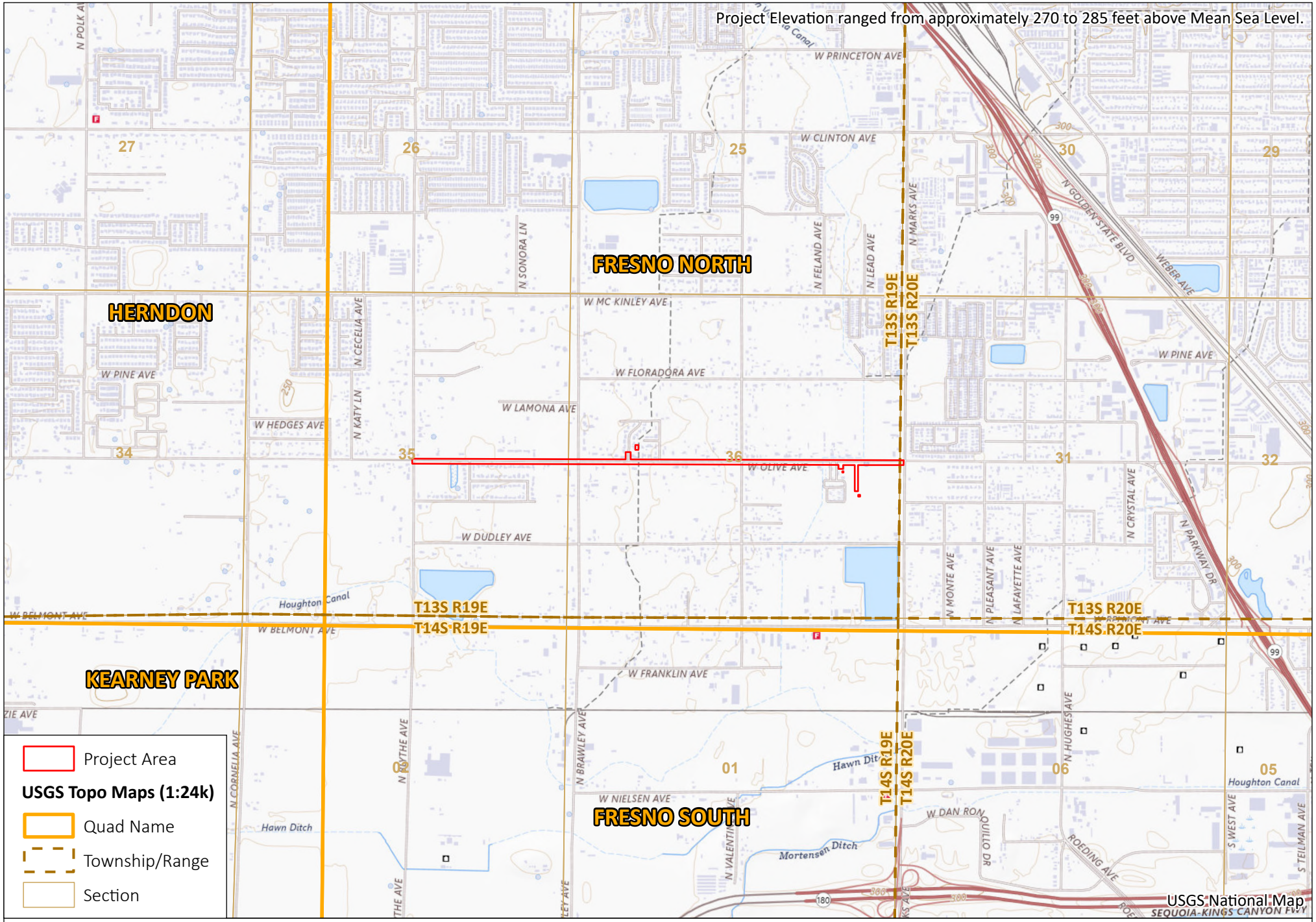


Regional Vicinity Map

City of Fresno Water System Consolidation- Del Oro and New Horizons

PROVOST& PRITCHARD

Fig. 1 Page 1-3



Topographic Map

City of Fresno Water System Consolidation- Del Oro and New Horizons

PROVOST& PRITCHARD

Fig. 2 Page 1-4

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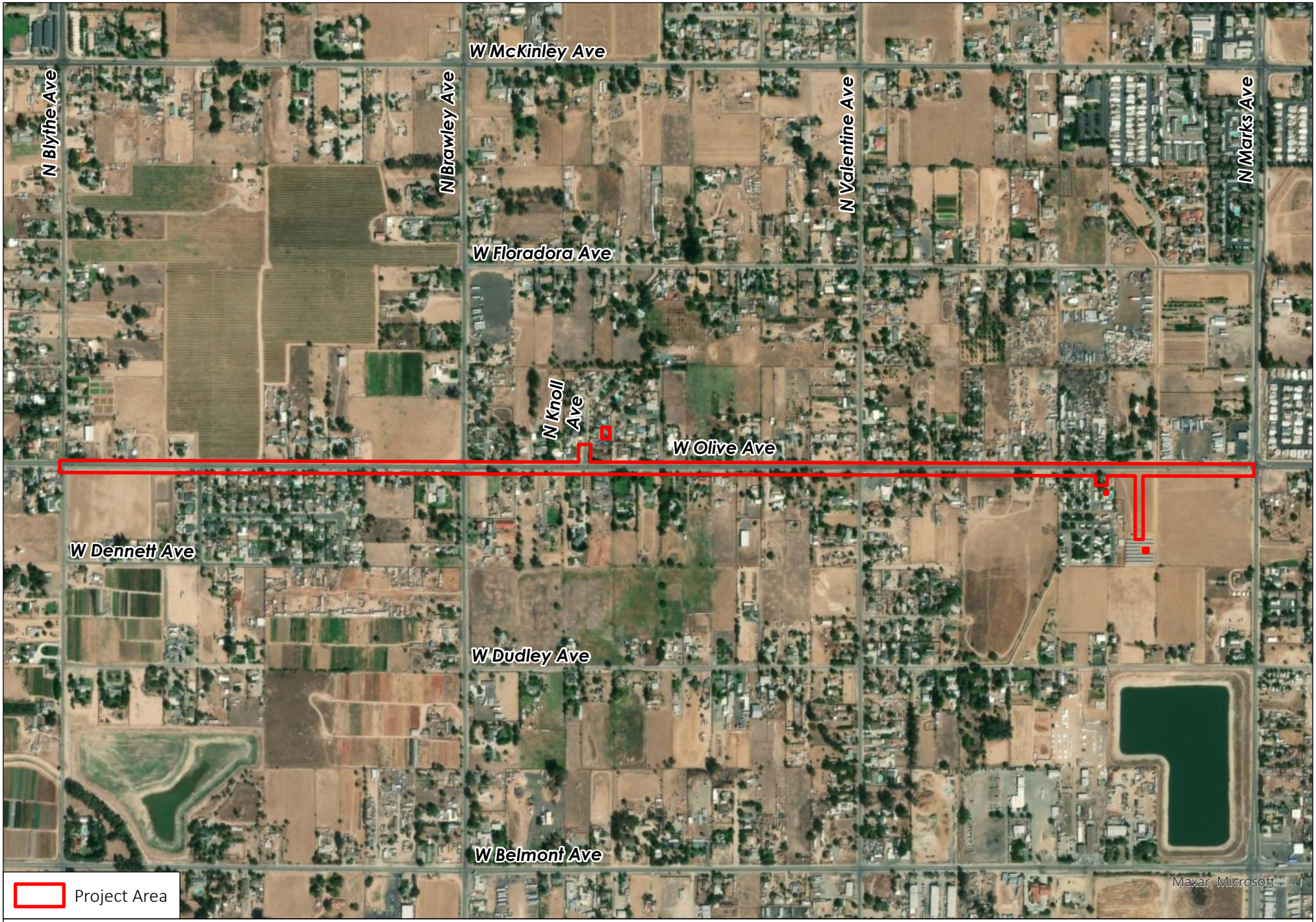


0 500 1,000

Feet

Aerial Map

City of Fresno Water System Consolidation- Del Oro and New Horizons

PROVOST& PRITCHARD

Fig. 3 Page 1-5

1.3 STUDY METHODOLOGY

A reconnaissance-level field survey of the project site was initially conducted on January 5, 2024, by Provost & Pritchard biologist, Roman Endicott and a follow up reconnaissance-level field survey was conducted on January 3, 2025, by Shaylea Stark. The survey consisted of walking and driving throughout the project site while identifying and noting land uses, biological habitats and communities, and plant and animal species encountered. Habitats were also assessed for potential suitability for various rare or protected plant and animal species. Representative photographs of the site were taken and are presented in Appendix A. Two additional well sites adjacent to the field survey areas were analyzed via historical aerial imagery.

Mr. Endicott and Ms. McCarthy then utilized the results of the field survey to analyze potential project-related impacts to biological resources based on the resources known to occur or with potential to occur within the project site. Sources of information used in preparation of this analysis included: the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB; see Appendix B for the species list) and California Wildlife Habitat Relationships database; California Native Plant Society's (CNPS) Online Inventory of Rare and Endangered Vascular Plants of California; CalFlora's online database of California native plants; Jepson Herbarium's online database (i.e., Jepson eFlora); United States Fish and Wildlife Service's (USFWS) Environmental Conservation Online System (ECOS), Information for Planning and Consultation system (IPaC; see Appendix C for the species list), and National Wetlands Inventory (NWI); iNaturalist; NatureServe Explorer's online database; United States Department of Agriculture (USDA) Natural Resources Conservation Service's (NRCS) Web Soil Survey (see Appendix D for the Web Soil Survey Report); California Herps website; and various manuals, reports, and references related to plants and animals of the San Joaquin Valley region.

The field survey did not include focused surveys for special status species. The field survey conducted included the appropriate level of detail to assess the significance of potential impacts to sensitive biological resources resulting from implementing the project. Furthermore, the field survey was sufficient to generally describe those features of the project that could be subject to the jurisdiction of federal and/or state agencies, such as the United States Army Corps of Engineers (USACE), CDFW, Regional Water Quality Control Board (RWQCB) and the State Water Resources Control Board (SWRCB).

2 EXISTING CONDITIONS

2.1 REGIONAL SETTINGS

2.1.1 TOPOGRAPHY

The site is in the *Fresno North* United States Geological Survey (USGS) 7.5-minute quadrangle within the center of Sections 35 and 36 of Township 13 South, Range 19 East and the western center of Section 31 of Township 13 South, Range 20 East (see Figure 2). The topography of the site is relatively flat with elevations ranging from approximately 270 to 285 feet above mean sea level.

2.1.2 CLIMATE

Like most of California, the project site experiences a Mediterranean climate. Warm, dry summers are followed by cool, moist winters. In the summer, average high temperatures range between 85- and 95-degrees Fahrenheit (°F), but often exceed 95 °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 Fresno region receives approximately 12 inches of precipitation in the form of rain yearly, most of which occurs between October and March, and the project site would be expected to receive similar amounts of precipitation.

2.1.3 HYDROLOGY

The nearest surface water to the project is the East Branch Victoria Canal, which is underground in this area aand bisects the project site.

2.1.4 SOILS

Three soil mapping units representing two soil types were identified within the project site and are listed in Table 1 (see Appendix D for the Web Soil Survey Report). The soils are displayed with their core properties in the table below, according to the Major Land Resource Area of California.

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

Soil	Soil Map Unit	Percent of Site	Hydric Soil Category	Drainage	Permeability	Runoff
Exeter	Sandy loam, shallow	8.7%	Predominantly Nonhydric	Well drained	Moderately slow	High
San Joaquin	Sandy loam, 0 to 3 percent slopes, MLRA 17	19.8%	Predominantly nonhydric	Moderately well drained	Very slow	Very high
	Sandy loam, shallow, 0 to 3 percent slopes	71.4%	Predominantly nonhydric	Moderately well drained	Very slow	Very high

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. All soils of the site are predominantly nonhydric.

2.2 BIOTIC HABITATS

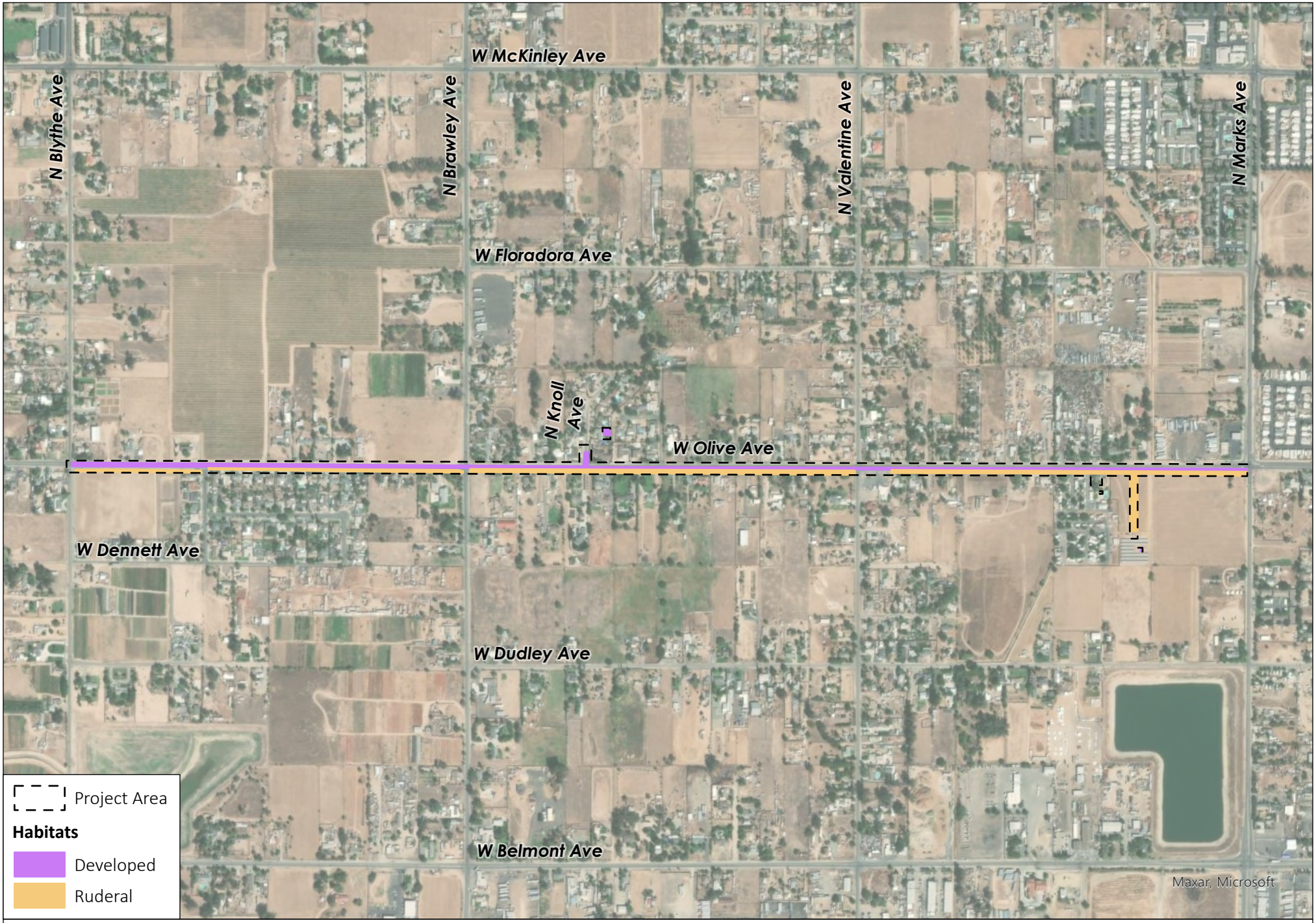
Two biotic habitats were observed within the project site and included developed and ruderal (see Figure 4). These habitats and their constituent plant and animal species are described in more detail in the following sections.

2.2.1 DEVELOPED

The developed habitat within the project site consisted of paved roads, sidewalks, driveways, and single-family homes. Vegetation within this habitat was comprised of various ornamental trees, shrubs, and grasses. Several bird species were observed in this habitat, including cedar waxwing (*Bombycilla cedrorum*), Eurasian collard dove (*Streptopelia decaocto*), mourning dove (*Zenaida macroura*), and yellow-rumped warbler (*Setophaga coronata*).

2.2.2 RUDERAL

The ruderal habitat within the project site consisted of the road shoulder along Olive Avenue, a portion of a ruderal field, vacant lots, and the well sites. Two of the well sites are located within a fenced solar array which is surrounded by a ruderal field. A portion of this field is located within the site, and the entire field appears to undergo annual discing. There were no observations of small mammal burrows within the ruderal field. Vegetation within this habitat was minimal and appeared to be maintained and consisted of invasive grasses, a species of mushroom (*Strophariaceae sp.*), and nonnative species such as prickly lettuce (*Lactuca serriola*), Russian thistle (*Kali tragus*), yellow-star thistle (*Centaurea solstitialis*), redstem filaree (*Erodium cicutarium*), and cheese weed mallow (*Malva parviflora*). Bird species observed in this habitat included American crow (*Corvus brachyrhynchos*), European starling (*Sturnus vulgaris*), house finch (*Haemorhous mexicanus*), turkey vulture (*Cathartes aura*), house sparrow (*Passer domesticus*), and yellow-rumped warbler.



Habitats Map

City of Fresno Water System Consolidation- Del Oro and New Horizons

PROVOST& PRITCHARD

Fig. 4 Page 2-3

1/7/2025 \\EgnyteDrive\Clients\Self Help Enterprises-1875\187521010-City of Fresno Reg WS Consolidation\400 GIS\Map\EnvSrvcs.aprx

2.3 NATURAL COMMUNITIES OF SPECIAL CONCERN AND RIPARIAN HABITAT

Natural communities of special concern are those that are of limited distribution, distinguished by significant biological diversity, or home to special status species. CDFW has classified and mapped all-natural communities in California. Just as the special status plant and animal species, these natural communities of special concern can be found within the CNDDB. There are no recorded natural communities of special concern within the project site. Additionally, no natural communities of special concern were observed during the biological survey.

Riparian habitat is composed of plant communities that occur along the banks, and sometimes over the banks, of most waterways and is an important habitat for numerous wildlife species. CDFW has jurisdiction over most riparian habitat in California. No waterways or riparian habitat was observed within the project site.

2.4 DESIGNATED CRITICAL HABITAT

The USFWS often designates 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, which may require special management and protection. According to the IPaC, designated critical habitat is absent from the project site and vicinity.

2.5 WILDLIFE MOVEMENT CORRIDORS AND NATIVE WILDLIFE NURSERY SITES

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. The project area does not contain features that are likely to function as wildlife movement corridors.

Native wildlife nursery sites are areas where a species or group of similar species raise their young in a concentrated place, such as maternity bat roosts. No native wildlife nursery sites were found within the project site.

2.6 SPECIAL STATUS PLANTS AND ANIMALS

California contains several rare plant and animal species. In this context, "rare" is defined as a species known to have low populations or limited distributions. Conversion of habitats to accommodate human population growth in turn reduces the already-limited suitable habitat for rare species. This results in rare and sensitive species becoming increasingly more vulnerable to extirpation. State and federal regulations have provided the CDFW and USFWS with a mechanism for conserving and protecting the diversity of plant and animal species native to California. Numerous native plants and animals have been formally designated as "threatened" or "endangered" under state and federal endangered species legislation. Other formal designations include "candidate" for listing or "species of special concern" by CDFW. The CNPS has its list of native plants considered rare, threatened, or endangered. Collectively these animals and plants are referred to as "special status species."

A query of the CNDDB for occurrences of special status plant and animal species was conducted for the *Fresno North* USGS 7.5-minute quadrangle that contains the project site, and for the 8 surrounding USGS quadrangles: *Clovis, Fresno South, Friant, Gregg, Herndon, Kearney Park, Lanes Bridge,* and *Malaga*. A query of the IPaC was also completed for the project site. These species, and their potential to occur within the project site, are listed in Table 2 and Table 3. Other special status species that did not show up in the CNDDB query, but have the potential to occur in the vicinity, are also included in Table 3. Species lists obtained

from CNDDB and IPaC are available in Appendix B and Appendix C, respectively. All relevant sources of information, as discussed in the Study Methodology section of this report, as well as field observations, were used to determine if any special status species have the potential to occur within the project site.

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

Species	Status*	Habitat	Occurrence within the Site
California jewelflower (*Caulanthus californicus*)	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 200 and 6,100 feet. Blooms February – April.	**Absent.** The project site lacked suitable habitat for this species.
California satintail (*Imperata brevifolia*)	CNPS 2B	Often found in wet springs, meadows, streambanks, and floodplains, and can also be found in coastal scrub, riparian scrub, Mojavean desert scrub, chaparral, and alkali seeps at elevations below 1,600 feet. Blooms September – May.	**Absent.** The project site lacked suitable habitat for this species.
Dwarf downingia (*Downingia pusilla*)	CNPS 2B	Found in vernal pools in valley and foothill grassland communities at elevations below 1,600 feet. Blooms March – May.	**Absent.** The project site lacked suitable habitat for this species.
Greene's tuctoria (*Tuctoria greenei*)	FE, CNPS 1B	Found in the San Joaquin Valley and other parts of California in vernal pools within valley grassland, wetland, and riparian communities at elevations below 3,500 feet. Blooms May – September.	**Absent.** The project site lacked suitable habitat for this species.
Hairy Orcutt grass (*Orcuttia pilosa*)	FE, CE, CNPS 1B	Found in vernal pools in valley grassland, wetland, and riparian communities at elevations below 650 feet. Blooms May – September.	**Absent.** The project site lacked suitable habitat for this species.
Hartweg's golden sunburst (*Pseudobahia bahifolia*)	FE, CE, CNPS 1B	Found in valley and foothill grassland and cismontane woodland communities in clay soils that are often acidic. Occurs predominantly on northern slopes, but also along shady creeks and near vernal pools at elevations between 300 and 650 feet. Blooms March – May.	**Absent.** The project site lacked suitable habitat and soils for this species.
Hoover's calycadenia (*Calycadenia hooveri*)	CNPS 1B	Found in valley and foothill grassland and cismontane woodland communities on exposed, rocky, barren soil at elevations between 300 and 1,300 feet. Blooms June – September.	**Absent.** The project site lacked suitable habitat and soils for this species.

Species	Status*	Habitat	Occurrence within the Site
Madera leptosiphon (*Leptosiphon serrulatus*)	CNPS 1B	Found within openings of foothill woodland, often yellow-pine forest, and chaparral at elevations between 1,000 and 4,300 feet. Blooms April – May.	**Absent.** The project site lacked suitable habitat and lies outside of the lower elevational range of this species.
Munz's tidy-tips (*Layia munzii*)	CNPS 1B	Found in the San Joaquin Valley in alkaline clay soils; often along hillsides in alkali scrub and sometimes valley and foothill grassland at elevations between 100 and 2,700 feet. Blooms March – April.	**Absent.** The project site lacked suitable habitat and soils for this species.
Pincushion navarretia (*Navarretia myersii* spp. *myersii*)	CNPS 1B	Found in vernal pools in clay soils at elevations between 50 and 300 feet. Often associated with non-native grasslands. Blooms in May.	**Absent.** The project site lacked suitable habitat for this species.
San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*)	FT, CE, CNPS 1B	Found in the eastern San Joaquin Valley and the Sierra Nevada foothills in vernal pools within valley grassland, freshwater wetland, and wetland-riparian communities at elevations below 2,600 feet. Blooms April – September.	**Absent.** The project site lacked suitable habitat for this species.
Sanford's arrowhead (*Sagittaria sanfordii*)	CNPS 1B	This species is an aquatic plant and is found in the San Joaquin Valley and other parts of California in freshwater marshes, ponds, canals, and ditches at elevations below 1,000 feet. Blooms May – October.	**Absent.** The project site lacked suitable habitat for this species.
Spiny-sepaled button-celery (*Eryngium spinosepalum*)	CNPS 1B	Found in the Sierra Nevada foothills and the San Joaquin Valley. Occurs in vernal pools, swales, and roadside ditches. Often associated with clay soils in vernal pools within grassland communities. Occurs at elevations between 50 and 4,200 feet. Blooms April – July.	**Absent.** The project site lacked suitable habitat and soils for this species.
Succulent owl's-clover (*Castilleja campestris* var. *succulenta*)	FT, CE, CNPS 1B	Found in vernal pools, often in acidic soils at elevations below 2,500 feet. Blooms April – July.	**Absent.** The project site lacked suitable habitat and soils for this species.

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

Species	Status*	Habitat	Occurrence within the Site
American badger (*Taxidea taxus*)	CSSC	Occurs most abundantly in drier open stages of shrub, forest, and herbaceous habitats with friable soils to burrow, but can be found within numerous habitats throughout California, including the margins of agricultural lands. Needs a sufficient prey base of burrowing rodents.	**Unlikely.** The project site lacked the habitats preferred by this species. The nearest recorded observation of this species occurred approximately six miles north of the project site in 1988.
Blunt-nosed leopard lizard (*Gambelia sila*)	FE, CE, CFP	Occurs in the San Joaquin Valley region in expansive, arid areas with scattered vegetation. Today they inhabit non-native grassland and alkali sink scrub communities of the valley floor marked by poorly drained, alkaline, and saline soils. They can be found at elevations ranging from 98 to 2,600 feet.	**Absent.** The project site lacked suitable habitat for this species.
Burrowing owl (*Athene cunicularia*)	CC	Resides in open, dry grasslands, deserts, scrublands, and other areas with low growing vegetation. Nests and roosts underground in existing burrows created by mammals, most often by ground squirrels, and human-made structures.	**Absent.** The project site lacked suitable habitat for this species.
California glossy snake (*Arizona elegans occidentalis*)	CSSC	Inhabits arid scrub, rocky washes, grasslands, and chaparral. Prefers open areas with loose soil for easy burrowing. In Fresno County, it is restricted to the far west of the county.	**Absent.** The project site lacked suitable habitat for this species. The project site is east of the current known range of this species.
California tiger salamander (*Ambystoma californiense*)	FT, CT	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 1,500 feet in elevation. Can migrate up to 1.3 miles to breed.	**Absent.** The project site lacked suitable upland habitat and there is no suitable breeding habitat for this species within 1.3 miles of the project site.
Coast horned lizard (*Phrynosoma blainvillii*)	CSSC	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	**Absent.** The project site lacked suitable habitat for this species.

Species	Status*	Habitat	Occurrence within the Site
		along sandy washes with scattered shrubs.	
Crotch bumble bee (*Bombus crotchii*)	CCE	Occurs throughout coastal California, as well as east to the Sierra Nevada-Cascade crest, and south into Mexico. Food plant genera include snapdragons, scorpionweeds, primroses, poppies, and buckwheats. Nests are often located underground in abandoned rodent nests, or above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees. This species overwinters under leaf litter or soft soil.	**Unlikely.** The project site lacked suitable nesting sites for this species. The nearest recorded observation of this species was a historical observation from 1899 in the general vicinity of Fresno.
Fresno kangaroo rat (*Dipodomys nitratoides exilis*)	FE, CE	An inhabitant of alkali sinks and open grassland habitats in Merced, Kings, Fresno, and Madera counties. Prefers bare, alkaline, clay-based soils subject to seasonal inundation with more friable soil mounds around shrubs and grasses. The most recent recorded observation of this species in California was in 1992 in Fresno County.	**Absent.** The project site and adjacent areas lacked suitable habitat for this species. No small mammal burrows were observed within the site.
Hardhead (*Mylopharodon conocephalus*)	CSSC	Occurs in low- to mid-elevation streams in the Sacramento-San Joaquin drainage. Clear, deep pools with sand-gravel-boulder bottoms and slow-moving water are required. This species is often sympatric with Sacramento pikeminnow and Sacramento sucker. Hardhead are typically absent from streams occupied by sunfishes and from heavily altered habitats.	**Absent.** The project site lacked suitable aquatic habitat for this species.
Least Bell's vireo (*Vireo bellii pusillus*)	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.	**Absent.** The project site is outside of the current known rage of this species and lacked suitable habitat.
Monarch butterfly (*Danaus plexippus*)	FPT	Roosts in wind-protected tree groves (eucalyptus, Monterey	**Absent.** The project site did not provide suitable habitat to support

Species	Status*	Habitat	Occurrence within the Site
		pine, cypress), with nectar and water sources nearby. Larval host plants consist of milkweeds (*Asclepias* sp.). Winter roost sites extend along the Pacific Coast from northern Mendocino to Baja California, Mexico.	this species. There are no recorded observations of this species in CNDDB within the regional vicinity of the project.
Northern California legless lizard (*Anniella pulchra*)	CSSC	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.** The project site lacked suitable habitat for this species. The soils within the project site have been historically developed.
Northwestern pond turtle (*Actinemys marmorata*)	FPT, CSSC	An aquatic turtle of ponds, marshes, slow-moving rivers, streams, and irrigation ditches with riparian vegetation. Requires adequate basking sites and sandy banks or grassy open fields to deposit eggs.	**Absent.** The project site lacked suitable aquatic and upland habitat for this species.
Pallid bat (*Antrozous pallidus*)	CSSC	Found in grasslands, chaparral, and woodlands, where it feeds on ground- and vegetation-dwelling arthropods, and occasionally takes insects in flight. Prefers to roost in rock crevices, but may also use tree cavities, caves, bridges, and other human-made structures.	**Unlikely**. The project site contained only marginal roosting sites for this species in the form of trees or buildings. The project does not propose to impact any potential roosting sites. The nearest recorded observation of this species occurred approximately 5 miles east of the project site in 1909.
San Joaquin kit fox (*Vulpes macrotis mutica*)	FE, CT	Opportunistically forages in a variety of habitats. Dens in burrows within alkali sink, valley grassland, and woodland habitats in valleys and adjacent foothills and in human-made structures in cities, rangeland, and agricultural areas.	**Unlikely.** There are no known core or satellite populations of this species in the region (United States Fish and Wildlife Service, 2020) and no burrows were observed within the site. The nearest recorded observation of this species occurred approximately 4.5 miles north of the project site in 1993.
Spotted bat (*Euderma maculatum*)	CSSC	Roosts in cliffs, rock crevices, and caves. Often forages over water and along washes. This species feeds almost exclusively on moths.	**Absent.** The project site and surrounding area lacked suitable roosting habitat for this species.
Swainson's hawk (*Buteo swainsoni*)	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 trees within the project area did not appear to be tall enough to support this species and the nearest recorded observation of this species was a historical observation from 1956 in the general vicinity of Fresno.
Tricolored blackbird (*Agelaius tricolor*)	CT, CSSC	Nests colonially near fresh water in dense cattails or tules, or in thickets of riparian shrubs.	**Absent.** The project site lacked suitable nesting and foraging habitat for this species.

Species	Status*	Habitat	Occurrence within the Site
		Forages in grassland and cropland. Large colonies are often found foraging in dairy farm feed fields.	
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT	Lives in mature elderberry shrubs in the Central Valley and adjacent foothills from Tehama County south through Merced and Mariposa Counties with two scattered populations in Madera and Fresno Counties. Adults are active from March to June.	**Absent.** The project site is outside of the current known range of this species and lacks suitable habitat.
Vernal pool fairy shrimp (*Branchinecta lynchi*)	FT	Occupies vernal and seasonal pools, with clear to tea-colored water, in grass or mud-bottomed swales, and basalt depression pools.	**Absent.** The project site lacked suitable habitat for this species.
Western mastiff bat (*Eumops perotis californicus*)	CSSC	Found in open, arid to semi-arid habitats, including dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas, where it feeds on insects in flight. Roosts most commonly in crevices in cliff faces but may also use high buildings and tunnels.	**Unlikely.** The project site lacked suitable roosting habitat for this species.
Western spadefoot (*Spea hammondii*)	CSSC	The majority of the time this species is terrestrial and occurs in small mammal burrows and soil cracks, sometimes in the bottom of dried pools. Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Vernal or seasonal pools, that hold water for a minimum of three weeks, are necessary for breeding.	**Absent.** The project site lacked suitable aquatic and upland habitat for this species.
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	FT, CE	Suitable nesting habitat in California includes dense riparian willow-cottonwood and mesquite habitats along a perennial river. Once common in the California Central Valley, as well as coastal valleys and riparian habitats east of the Sierra Nevada, habitat loss now	**Absent.** The project site is outside the current range of this species.

Species	Status*	Habitat	Occurrence within the Site
		constrains the California breeding population to small numbers of birds.	

***EXPLANATION OF OCCURRENCE DESIGNATIONS AND STATUS CODES**

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

STATUS CODES

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CC	California Candidate
FPT	Federally Threatened (Proposed)	CT	California Threatened
		CCE	California Endangered (Candidate)
		CFP	California Fully Protected
		CSSC	California Species of Special Concern

CNPS LISTING

1B	Plants rare, threatened, or endangered in California and elsewhere.	2B	Plants rare, threatened, or endangered in California, but more common elsewhere.

3 IMPACTS AND MITIGATION

3.1 SIGNIFICANCE CRITERIA

3.1.1 CEQA

General plans, area plans, and specific projects are subject to the provisions of CEQA. The purpose of CEQA is to assess the impacts of proposed projects on the environment prior to project implementation. Impacts to biological resources are just one type of environmental impact assessed under CEQA and vary from project to project in terms of scope and magnitude. Projects requiring removal of vegetation may result in the mortality or displacement of animals associated with this vegetation. Animals adapted to humans, roads, buildings, and pets may replace those species formerly occurring on a site. Plants and animals that are rare may be destroyed or displaced. Sensitive habitats such as wetlands and riparian woodlands may be altered or destroyed. Such impacts may be considered either "significant" or "less than significant" under CEQA. According to *CEQA Statute and Guidelines* (AEP 2023), "significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic interest. Specific project impacts to biological resources may be considered "significant" if they would:

- 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 CDFW or USFWS;
- 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 CDFW or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (CWA) (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- 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.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state HCP.

Furthermore, CEQA Guidelines Section 15065(a) states that a project may trigger the requirement to make a "mandatory finding of significance" if the project has 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, 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."

3.1.2 NEPA

Federal projects are subject to the provisions of NEPA. The purpose of NEPA is to assess the effects of a proposed action on the human environment, assess the significance of those effects, and recommend measures that if implemented would mitigate those effects. As used in NEPA, a determination that certain

effects on the human environment are "significant" requires considerations of both context and intensity (40 Code of Federal Regulations (CFR) 1508.27).

For the purposes of assessing effects of an action on biological resources, the relevant context is often local. The analysis may, however, require a comparison of the action area's biological resources with the biological resources of an entire region. Project activities must have a federal nexus and discuss federally listed species, and/or designated critical habitat that may be affected in the action area.

Federal agencies are required to determine whether their actions may affect listed or proposed species and designated critical habitat. The primary role of this document is to provide agencies conclusion and the rationale to support those conclusions regarding the effects of any proposed actions of the project on protected resources. Document content and recommended elements are identified in 50 CFR 402.12(f).

Under section 7 of the Endangered Species Act (ESA), federal agencies must consult with National Oceanic and Atmospheric Administration Fisheries or the USFWS, depending on the species, through an informal or formal consultation when any action the agency carries out, funds, or authorizes may affect either a species listed as threatened or endangered under the Act, or any critical habitat designated for it.

Once resources are assessed an ESA Section 7 finding needs to be made regarding proposed or listed species and/or designated critical habitat that may be present in the project area. This report will provide the necessary information for the lead federal agency to make a determination on affects. This finding may result in one of the following determinations:

- *"*No effect*"* - means there will be no impacts, positive or negative, to listed or proposed resources. Generally, this means no listed resources will be exposed to action and its environmental consequences. Concurrence from the Service is not required.
- *"*May affect, but not likely to adversely affect" means that all effects are beneficial, insignificant, or discountable. Beneficial effects have contemporaneous positive effects without any adverse effects to the species or habitat. Insignificant effects relate to the size of the impact and include those effects that are undetectable, not measurable, or cannot be evaluated. Discountable effects are those extremely unlikely to occur. These determinations require written concurrence from the Service.
- *"*May affect, likely to adversely affect" means that listed resources are likely to be exposed to the action or its environmental consequences and will respond in a negative manner to the exposure.

3.2 RELEVANT GOALS, POLICIES, AND LAWS

3.2.1 FRESNO COUNTY ORDINANCE

The project is located within Fresno County. The Fresno County General Plan (Fresno County Planning Commission, 2000) contains the following goals and policies related to the project:

3.2.1.1 FISH AND WILDLIFE HABITAT

Goal OS-E: To help protect, restore, and enhance habitats in Fresno County that support fish and wildlife species so that populations are maintained at viable levels.

Policy OS-E.2: The County shall require adequate buffer zones between construction activities and significant wildlife resources, including both onsite habitats that are purposely avoided and significant habitats that are adjacent to the project site, in order to avoid the degradation and disruption of critical life cycle activities such as breeding and feeding. The width of the buffer zone should vary depending on the location, species, etc. A final determination shall be made based on informal consultation

with the US Fish and Wildlife Service and/or the California Department of Fish and Game.

Policy OS-E.5: The County shall support preservation of habitats of rare, threatened, endangered, and/or other special-status species including fisheries. The County shall consider developing a formal HCP in consultation with Federal and State agencies, as well as other resource conservation organizations. Such a plan should provide a mechanism for the acquisition and management of lands that support special-status species.

Policy OS-E.11: The County shall protect significant aquatic habitats against excessive water withdrawals that could endanger special-status fish and wildlife or would interrupt normal migratory patterns.

Policy OS-E.18: The County should preserve areas identified as habitats for rare or endangered plant and animal species primarily through the use of open space easements and appropriate zoning that restrict development in these sensitive areas.

3.2.1.2 VEGETATION

Goal OS-F: To preserve and protect the valuable vegetation resources of Fresno County.

Policy OS-F.4: The County shall ensure that landmark trees are preserved and protected whenever possible.

Policy OS-F.8: The County should encourage landowners to maintain natural vegetation or plant suitable vegetation along fence lines, drainage, and irrigation ditches and on unused or marginal land for the benefit of wildlife.

3.2.2 THREATENED AND ENDANGERED SPECIES

Permits may be required from CDFW and/or USFWS if activities associated with a project have the potential to result in the "take" of a species listed as threatened or endangered under the California Endangered Species Act (CESA) and/or ESA, respectively. Take is defined by CESA 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 ESA to include "harm" (16 USC, Section 1532(19), 50 CFR, Section 17.3). CDFW and USFWS are responsible agencies under CEQA and NEPA. Both agencies review CEQA and NEPA documents in order to determine the adequacy of the treatment of endangered species issues and to make project-specific recommendations for their conservation.

3.2.3 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 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.

3.2.4 MIGRATORY BIRDS

The 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 almost all bird's native to the United States, even those that are non-migratory. The MBTA encompasses whole birds, parts of birds, and bird nests and eggs. Additionally, California Fish and Game Code makes it unlawful to take or possess any non-game birds covered by the MBTA (Section 3513), as well as any other native non-game birds (Section 3800).

3.2.5 BIRDS OF PREY

Birds of prey are protected in California under provisions of California 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 Bald and Golden Eagle Protection Act (16 USC 668), which makes it unlawful to kill birds or their eggs, or take feathers or nests, without a permit issued by the U.S. Secretary of the Interior.

3.2.6 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.

3.2.7 WETLANDS AND OTHER "JURISDICTIONAL WATERS"

The definition of "waters of the United States" (WOTUS) often changes from one presidential administration to the next and can also be affected by the outcomes of court cases involving federal jurisdiction of waters. The current definition (i.e., "Conforming Rule") was adopted under the Biden Administration in early 2023 and was subsequently revised in September 2023 to incorporate the U.S. Supreme Court's May 25, 2023, decision in the case of *Sackett* v. *Environmental Protection Agency*. The Conforming Rule has adopted much of the same WOTUS designations as the pre-2015 rules but has incorporated the most recent science and court case rulings. The extent of jurisdiction has been defined in the CFR but is also subject to interpretation by the federal courts. Jurisdictional waters generally include the following categories:

1) *Traditional Navigable Waters, the territorial seas, or interstate waters (not including interstate wetlands);*
2) *Impoundments of waters of the United States;*
3) *Tributaries of:*
    a. *Traditional Navigable Waters, territorial seas, or interstate waters (not including interstate wetlands); or*
    b. *Impoundments of water of the United States when the tributaries meet the relatively permanent standard.*
4) *Wetlands:*
    a. *Adjacent to Traditional Navigable Waters, the territorial seas, or interstate waters;*
    b. *Adjacent to and with a continuous surface connection to relatively permanent impoundments of waters of the United States*
    c. *Adjacent to and with a continuous surface connection to relatively permanent jurisdictional tributaries.*

5) *Intrastate lakes and ponds not identified in items 1 through 4 of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in items 1 or 3 above.*

Exclusions under the new definition include the following:

1) *Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the CWA;*
2) *Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with United States Environmental Protection Agency;*
3) *Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;*
4) *Artificially irrigated areas that would revert to dry land if the irrigation ceased;*
5) *Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;*
6) *Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;*
7) *Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and*
8) *Swales and erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow.*

The Conforming Rule has incorporated the best available science, relevant supreme court cases, public comment, technical expertise, and experience gained from more than 45 years of implementing the pre-2015 “waters of the United States” framework to inform jurisdictional limits. One significant court case involves the U.S. Supreme Court in its *2001 Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers (SWANCC)* decision. It was determined that channels and wetlands isolated from other jurisdictional waters cannot be considered jurisdictional on the basis of their use, hypothetical or observed, by migratory birds.

Similarly, in its 2006 consolidated *Carabell/Rapanos* decision, the United States Supreme Court ruled that a significant nexus between a wetland and other navigable waters must exist for the wetland itself to be considered a jurisdictional water. The Supreme Court heard *Sackett* v. *United States EPA* in May 2023, to determine governing standards of a significant nexus between waters of the United States and adjacent wetlands. The court decided that adjacent wetlands would be protected under the CWA only if it maintained a continuous surface water connection with a federal water body. This decision has limited protection for networks of wetlands connected to navigable waters through subsurface flow. The final decision was enacted in September 2023.

The USACE regulates the filling or grading of waters of the United States. under the authority of Section 404 of the CWA. The extent of jurisdiction within drainage channels is defined by “ordinary high-water marks” on opposing channel banks. All activities that involve the discharge of dredge or fill material into waters of the United States are subject to the permit requirements of the USACE. Such permits are typically

issued on the condition that the applicant agrees to provide mitigation that results in no net loss of wetland functions or values. No permit can be issued until the RWQCB issues a Section 401 Water Quality Certification (or waiver of such certification) verifying that the proposed activity will meet state water quality standards.

Under the Porter-Cologne Water Quality Control Act of 1969, the SWRCB has regulatory authority to protect the water quality of all surface water and groundwater in California ("waters of the state"). Nine RWQCBs oversee water quality at the local and regional level. 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 WOTUS require a Section 401 Water Quality Certification from the RWQCB as a prerequisite to obtaining certain federal permits, such as a Section 404 CWA permit. Discharges into all Waters of the State, even those that are not also WOTUS, require waste discharge requirements (WDRs), or waivers of WDRs, from the RWQCB. The RWQCB also administers the Construction Storm Water Program and the federal National Pollution Discharge Elimination System (NPDES) program. Projects that disturb one acre or more of soil must obtain a Construction General Permit under the Construction Storm Water Program. A prerequisite for this permit is the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. Projects that discharge wastewater, storm water, or other pollutants into a WOTUS may require an NPDES permit.

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 any material from their bed or bank, or deposits debris within them 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 that certain avoidance and minimization measures will be implemented to protect the habitat values of the lake or drainage in question and the plant, fish, and wildlife species that may be present within these resources.

3.3 POTENTIALLY SIGNIFICANT PROJECT-RELATED IMPACTS AND MITIGATION

Migratory birds and raptors are the only species protected by California Fish and Game Code, CDFW, USFWS, CEQA, or NEPA that have the potential to be impacted by project activities. Corresponding mitigation measures can be found below.

3.3.1 PROJECT RELATED MORTALITY AND/OR NEST ABANDONMENT OF MIGRATORY BIRDS

The project site contains suitable nesting and foraging habitat for a variety of protected bird species, such as migratory birds and raptors. It is anticipated that during the nesting bird season (February 1 to September 15), protected birds could nest on the ground, shrubs, trees, or structures within the project site and forage within the site. Protected birds located within or adjacent to the site during construction have the potential to be injured or killed by project-related activities. In addition to the direct "take" of protected birds within the project site or adjacent areas, these birds nesting in these areas could be disturbed by project-related activities resulting in nest abandonment. Projects that adversely affect the nesting success of protected birds or result in the mortality of these birds would be a violation of state and federal laws and considered a potentially significant impact under CEQA and NEPA.

Implementation of the following measures will reduce potential impacts to protected nesting birds to a less than significant level under CEQA and NEPA and will help guide compliance with state and federal laws protecting these bird species.

Mitigation Measure BIO-1a (*Avoidance*): The project's construction activities will occur, if feasible, between September 16 and January 31 (outside of the nesting bird season) to avoid impacts to nesting birds.

Mitigation Measure BIO-1b (*Pre-construction Surveys*): If activities must occur within nesting bird season (February 1 to September 15), a qualified biologist will conduct a pre-construction survey within five calendar days prior to the start of construction for nesting migratory birds within the site and up to 100 feet outside of the project site and for nesting raptors within and up to 500 feet outside of the project site. All raptor nests would be considered "active" upon the nest-building stage. If no active nests are observed, no further action is required.

Mitigation Measure BIO-1c (*Avoidance Buffers*): On discovery of any active nests near work areas, a qualified biologist will determine appropriate avoidance buffer distances based on applicable CDFW and/or USFWS guidelines, the biology of the species, conditions of the nest(s), and the level of project disturbance. If necessary, avoidance 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.

3.4 SECTION 7 DETERMINATIONS

In addition to the effects analysis performed in Table 2 and Table 3 of this document, Table 4 summarizes project effect determinations for federally-listed species found on the CNDDB list generated on December 27, 2024, and the USFWS IPaC list generated on January 03, 2025 (see Appendix B and Appendix C, respectively), in accordance with Section 7 of the ESA.

Table 4: Section 7 Determinations

Species	Determination	Rationale for Determination
Blunt-nosed leopard lizard (*Gambelia sila*)	No effect	**Habitat absent.** The project site lacked suitable habitat for this species.
California jewelflower (*Caulanthus californicus*)	No effect	**Habitat absent.** The project site lacked suitable habitat for this species.
California tiger salamander *(Ambystoma californiense)*	No effect	**Habitat absent.** Suitable breeding and upland habitats were absent from the project site and surrounding lands.
Fresno kangaroo rat (*Dipodomys nitratoides exilis*)	No effect	**Habitat absent.** The project site lacked suitable habitat for this species. The site has been historically disturbed and developed.
Greene's tuctoria *(Tuctoria greenei)*	No effect	**Habitat absent.** The project site lacked suitable habitat for this species.
Hairy Orcutt grass (*Orcuttia 3-7ilosa*)	No effect	**Habitat absent.** The project site lacked suitable habitat for this species.
Hartweg's golden sunburst (*Pseudobahia bahifolia*)	No effect	**Habitat absent.** The project site lacked suitable habitat and soils for this species.
Least Bell's vireo (*Vireo bellii pusillus*)	No effect	**Out of range and habitats absent.** The project site is outside of current known range and lacked suitable habitat for this species.

Species	Determination	Rationale for Determination
Monarch butterfly (*Danaus plexippus*)	No effect	**Habitat absent.** The project site lacked suitable habitat for this species.
Northwestern pond turtle (*Actinemys marmorata*)	No effect	**Habitat absent.** The project site lacked suitable breeding and upland habitats for this species.
San Joaquin kit fox (*Vulpes macrotis mutica*)	No effect	**Habitat absent.** The project site lacked suitable habitat for this species.
San Joaquin Valley Orcutt grass *(Orcuttia inaequalis)*	No effect	**Habitat absent.** The project site lacked suitable habitat for this species.
Succulent owl's-clover (*Castilleja campestris* var. *succulenta*)	No effect	**Habitat absent.** The project site lacked suitable habitat and soils for this species.
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	No effect	**Out of range and habitats absent.** The project site is outside of the current known range of this species and lacked suitable habitat.
Vernal pool fairy shrimp (*Branchinecta lynchi*)	No effect	**Habitat absent**. Vernal pool habitat was absent within the project site and surrounding lands.
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	No effect	**Out of range.** The project site is outside of current known range and lacked suitable habitat for this species.

3.5 LESS THAN SIGNIFICANT PROJECT-RELATED IMPACTS

3.5.1 PROJECT-RELATED IMPACTS TO SPECIAL STATUS PLANT SPECIES ABSENT FROM, OR UNLIKELY TO OCCUR ON, THE PROJECT SITE

Of the 14 regionally occurring special status plant species, all are considered absent from or unlikely to occur within the project site due to past or ongoing disturbance and/or the absence of suitable habitat.

Since it is unlikely that these species would occur onsite, implementation of the project should have no impact on these 14 special status species through construction mortality, disturbance, or loss of habitat. Mitigation measures are not warranted.

3.5.2 PROJECT-RELATED IMPACTS TO SPECIAL STATUS ANIMAL SPECIES ABSENT FROM, OR UNLIKELY TO OCCUR ON, THE PROJECT SITE

Of the 23 regionally occurring special status animal species, all are considered absent from or unlikely to occur within the project site due to past or ongoing disturbance and/or the absence of suitable habitat.

Since it is unlikely that these species would occur onsite, implementation of the project should have no impact on these 23 special status species through construction mortality, disturbance, or loss of habitat. Mitigation measures are not warranted.

3.5.3 PROJECT-RELATED IMPACTS TO RIPARIAN HABITAT AND NATURAL COMMUNITIES OF SPECIAL CONCERN

Riparian habitat is absent from the project site. There are no CNDDB-designated "natural communities of special concern" recorded within the project site or surrounding lands. Mitigation measures are not warranted.

3.5.4 PROJECT-RELATED IMPACTS TO REGULATED WATERS, WETLANDS, AND WATER QUALITY

Typical wetlands, vernal pools, and other waters were not observed on the project site at the time of the biological survey. The nearest water source is East Branch Victoria Canal which will not be impacted by the project.

Since construction would involve ground disturbance over an area greater than one acre, the project would be required to obtain a Construction General Permit under the Construction Storm Water Program administered by the RWQCB. A prerequisite for this permit is the development of a SWPPP to ensure construction activities do not adversely affect water quality.

3.5.5 PROJECT-RELATED IMPACTS TO WILDLIFE MOVEMENT CORRIDORS AND NATIVE WILDLIFE NURSERY SITES

The project site does not contain features that would be likely to function as wildlife movement corridors or native wildlife nursery sites. Therefore, the project would have no impact on wildlife movement corridors or other native wildlife nursery sites, and no additional mitigation measures are warranted.

3.5.6 PROJECT-RELATED IMPACTS TO CRITICAL HABITAT

Designated critical habitat is absent from the project site and surrounding lands. Therefore, there would be no impact to critical habitat, and mitigation measures are not warranted.

3.5.7 LOCAL POLICIES OR HABITAT CONSERVATION PLANS

The project appears to be consistent with the goals and policies of the Fresno County General Plan. There are no known HCPs or NCCPs in the project vicinity. Mitigation measures are not warranted.

3.5.8 COASTAL ZONE AND COASTAL BARRIERS RESOURCES ACT

The project would not be located within the coastal zone. The project would not impact or be located within or near the Coastal Barrier Resources System or its adjacent wetlands, marshes, estuaries, inlets, and near-shore waters. Mitigation measures are not warranted.

3.5.9 PROJECT-RELATED IMPACT TO ESSENTIAL FISH HABITAT

Essential Fish Habitat (EFH) and Habitat Areas of Particular Concern are absent from the project site and surrounding lands, and consultation with the National Marine Fisheries (NMFS) Service would not be required. Query results of the NMFS EHF Mapper can be found in Appendix E at the end of this document. Mitigation measures are not warranted.

4 REFERENCES

Baldwin, B., Goldman, D. H., Keil, D., Patterson, R., Rosatti, T., & Wilken, D. (2012). *The Jepson Manual; Vascular Plants of California, second edition.* Berkeley: University of California Press. Retrieved January 2024

Calflora. (2024). Retrieved from Calflora: Information on California Plants for Education, Research and Conservation: http://www.calflora.org/

California Department of Conservation Fish and Wildlife. (2024). *California Department of Conservation Fish and Wildlife*. Retrieved December 2024, from https://wildlife.ca.gov/Data/CNDDB

California Department of Fish and Wildlife. (2024). *California Natural Diversity Database*. Retrieved January 2024

California Department of Fish and Wildlife. (2024). *State and federally listed endangered, threatened, and rare plants of California*. Retrieved January 2024, from https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109390&inline

eBird, Cornell Lab of Ornithology. (2024). Retrieved January 2024, from eBird: An online database of bird distribution and abundance: https://ebird.org/

Fresno County Planning Commission. (2000, October 3). Fresno County General Plan Policy Document. Fresno County. Retrieved January 2024, from https://www.co.fresno.ca.us/departments/public-works-planning/divisions-of-public-works-and-planning/development-services-division/planning-and-land-use/general-plan-maps

iNaturalist. (2024). *Observations of Special Status Species*. Retrieved January 2024, from iNaturalist: https://www.inaturalist.org/

Jepson Flora Project (eds.). (2024). Retrieved January 2024, from Jepson eFlora: http://ucjeps.berkeley.edu/eflora/

Natural Resource Conservation Service. (2024). *NRCS Hydric Soils List*. Retrieved January 2024, from https://www.nrcs.usda.gov/publications/Lists%20of%20Hydric%20Soils%20-%20Query%20by%20Soil%20Survey%20Area%20Map%20Unit%20Rating.html

Sibley, D. A. (n.d.). *The Sibley Guide to Birds* (Second ed.). Knopf. Retrieved January 2024

State Water Resources Control Board. (2021, April 6). State Wetland Definition and Procedures for Discharge of Dredged or Fill Material to Waters of the State. Retrieved January 2024

United States Army Corps of Engineers. (1987). *Corps of Engineers Wetlands Delineation Manual.* Department of the Army. Retrieved January 2024

United States Environmental Protection Agency (USEPA). (2024). *Waters GeoViewer*. Retrieved January 2024, from https://www.epa.gov/waterdata/waters-geoviewer

United States Fish and Wildlife Service. (2020). *Special Status Assessment Report for the San Joaquin kit fox.*

United States Fish and Wildlife Service. (2024). *Environmental Conservation Online System (ECOS)*. Retrieved January 2024, from https://ecos.fws.gov/ecp/

United States Fish and Wildlife Service. (2025). *Information on Planning and Consultation (IPaC)*. Retrieved Jan 2025, from https://ecos.fws.gov/ipac/

United States Fish and Wildlife Service. National Wetlands Inventory. (2024). *National Wetlands Inventory*. Retrieved January 2024, from National Wetlands Inventory: https://www.fws.gov/wetlands/data/mapper.html

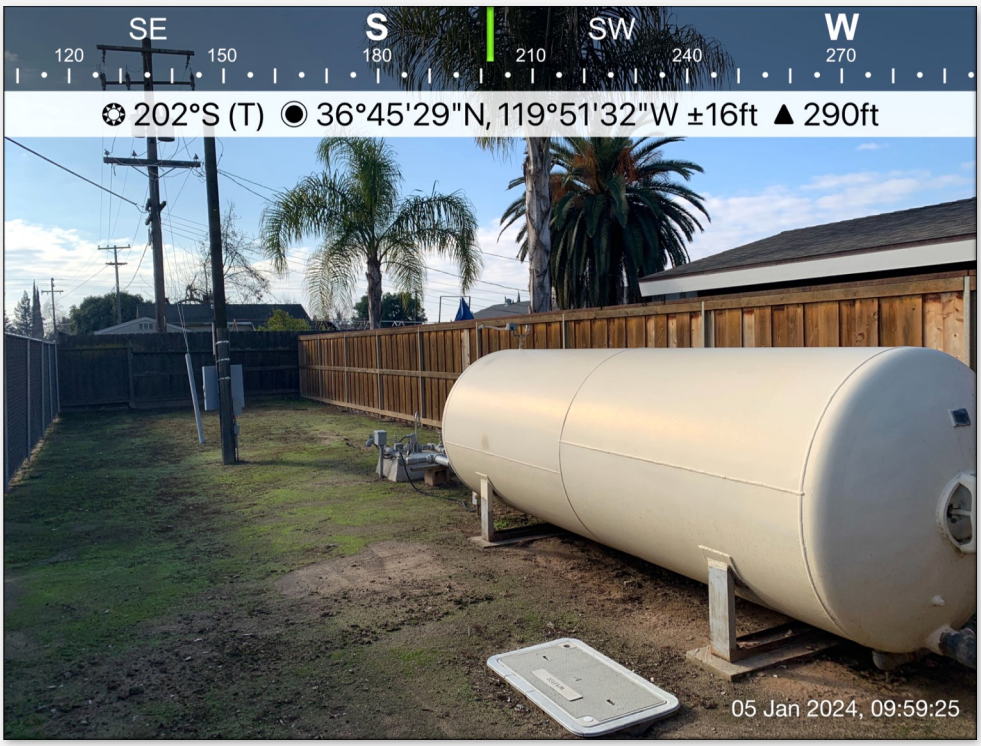
APPENDIX A: REPRESENTATIVE PHOTOS OF THE PROJECT SITE

Photograph 1

Photo of the developed and ruderal habitat along Olive Avenue.

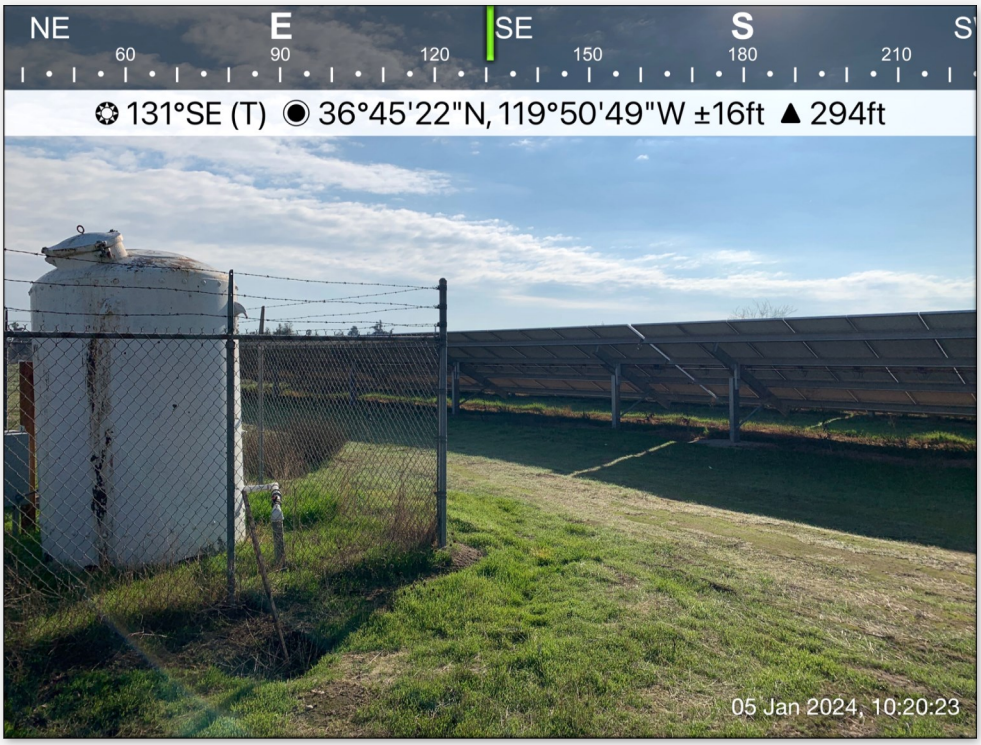
Photograph 2

Photo of the developed habitat along Olive Avenue.



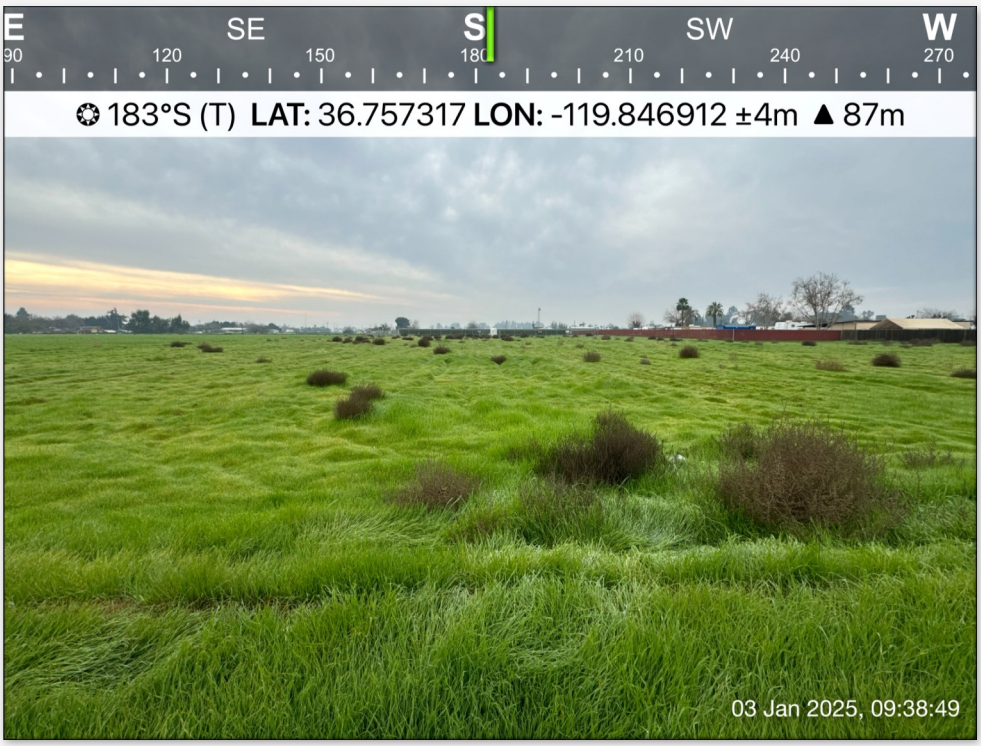
Photograph 3

Overview of the ruderal habitat at the Del Oro well site.



Photograph 4

Overview of the ruderal habitat at the New Horizons well site.



Photograph 5

An overview of the ruderal field on W Olive Ave within the project site.

Photograph 6

Another representative photo of the surrounding area.

Photograph 7

Representative photo of the surrounding area.

APPENDIX B: CNDDB 9-QUAD SPECIES LIST

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Fresno North (3611977) OR Fresno South (3611967) OR Clovis (3611976) OR Friant (3611986) OR Gregg (3611988) OR Herndon (3611978) OR Kearney Park (3611968) OR Lanes Bridge (3611987) OR Malaga (3611966))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Actinemys marmorata northwestern pond turtle	ARAAD02031	Proposed Threatened	None	G2	SNR	SSC
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Ambystoma californiense pop. 1 California tiger salamander - central California DPS	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
Anniella pulchra Northern California legless lizard	ARACC01020	None	None	G3	S2S3	SSC
Antrozous pallidus pallid bat	AMACC10010	None	None	G4	S3	SSC
Ardea alba great egret	ABNGA04040	None	None	G5	S4	
Arizona elegans occidentalis California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
Athene cunicularia burrowing owl	ABNSB10010	None	Candidate Endangered	G4	S2	SSC
Bombus crotchii Crotch's bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
Bombus pensylvanicus American bumble bee	IIHYM24260	None	None	G3G4	S2	
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Branchinecta mesovallensis midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
Calycadenia hooveri Hoover's calycadenia	PDAST1P040	None	None	G2	S2	1B.3
Castilleja campestris var. succulenta succulent owl's-clover	PDSCR0D3Z1	Threatened	Endangered	G4?T2T3	S2S3	1B.2
Caulanthus californicus California jewelflower	PDBRA31010	Endangered	Endangered	G1	S1	1B.1
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T3	S3	
Dipodomys nitratoides exilis Fresno kangaroo rat	AMAFD03151	Endangered	Endangered	G2TH	SH	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Downingia pusilla dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
Efferia antiochi Antioch efferian robberfly	IIDIP07010	None	None	G1G2	S1S2	
Egretta thula snowy egret	ABNGA06030	None	None	G5	S4	
Eremophila alpestris actia California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
Eryngium spinosepalum spiny-sepaled button-celery	PDAPI0Z0Y0	None	None	G2	S2	1B.2
Euderma maculatum spotted bat	AMACC07010	None	None	G4	S3	SSC
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
Gonidea angulata western ridged mussel	IMBIV19010	None	None	G3	S2	
Great Valley Mixed Riparian Forest Great Valley Mixed Riparian Forest	CTT61420CA	None	None	G2	S2.2	
Imperata brevifolia California satintail	PMPOA3D020	None	None	G3	S3	2B.1
Lasiurus cinereus hoary bat	AMACC05032	None	None	G3G4	S4	
Layia munzii Munz's tidy-tips	PDAST5N0B0	None	None	G2	S2	1B.2
Leptosiphon serrulatus Madera leptosiphon	PDPLM09130	None	None	G3	S3	1B.2
Linderiella occidentalis California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Lytta moesta moestan blister beetle	IICOL4C020	None	None	G2	S2	
Lytta molesta molestan blister beetle	IICOL4C030	None	None	G2	S2	
Metapogon hurdi Hurd's metapogon robberfly	IIDIP08010	None	None	G1G2	S1S2	
Mylopharodon conocephalus hardhead	AFCJB25010	None	None	G3	S3	SSC
Nannopterum auritum double-crested cormorant	ABNFD01020	None	None	G5	S4	WL
Navarretia myersii ssp. myersii pincushion navarretia	PDPLM0C0X1	None	None	G2T2	S2	1B.1
Northern Claypan Vernal Pool Northern Claypan Vernal Pool	CTT44120CA	None	None	G1	S1.1	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Northern Hardpan Vernal Pool Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
Nycticorax nycticorax black-crowned night heron	ABNGA11010	None	None	G5	S4	
Orcuttia inaequalis San Joaquin Valley Orcutt grass	PMPOA4G060	Threatened	Endangered	G1	S1	1B.1
Orcuttia pilosa hairy Orcutt grass	PMPOA4G040	Endangered	Endangered	G1	S1	1B.1
Perognathus inornatus San Joaquin pocket mouse	AMAFD01060	None	None	G2G3	S2S3	
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G4	S4	SSC
Pseudobahia bahiifolia Hartweg's golden sunburst	PDAST7P010	Endangered	Endangered	G1	S1	1B.1
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Spea hammondii western spadefoot	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
Sycamore Alluvial Woodland Sycamore Alluvial Woodland	CTT62100CA	None	None	G1	S1.1	
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Tuctoria greenei Greene's tuctoria	PMPOA6N010	Endangered	Rare	G1	S1	1B.1
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S3	
Vulpes macrotis mutica San Joaquin kit fox	AMAJA03041	Endangered	Threatened	G4T2	S3	

Record Count: 54

APPENDIX C: 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: 01/03/2025 23:53:06 UTC
Project Code: 2025-0038014
Project Name: City of Fresno Reg WS Conslidation

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 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 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:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.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/program/migratory-bird-permit/what-we-do.

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/library/collections/threats-birds.

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/partner/council-conservation-migratory-birds.

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

PROJECT SUMMARY

Project Code: 2025-0038014
Project Name: City of Fresno Reg WS Conslidation
Project Type: Water Supply Pipeline - New Constr - Below Ground
Project Description: The project includes the construction of the following items:

• 8,200 linear feet (LF) of 16-inch water main along Olive Avenue from Blythe Avenue to Marks Avenue
• For the Del Oro System:
o 230 LF of up to 4-inch water main along Knoll Drive from Olive Avenue to the master meter connection point
o New 4-inch master meter at Knoll Drive and Olive Avenue
o New 4-inch Pressure Reducing Valve and Backflow Preventor at Knoll Drive and Olive Avenue
o Destruction of one (1) existing well and one (1) tank, onsite
• For NHMHP:
o New 4-inch master meter and service line at the connection point with the City system
o New 4-inch Pressuring Reducing Valve and Backflow Preventor at the connection point with the City system
o 430 LF of up to 4-inch water main along APN: 449-090-39 from the master meter connection point to the existing water system
o Destruction of three (3) existing wells and one (1) tank, onsite

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@36.75690685,-119.84691903744766,14z

Counties: Fresno County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 10 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 Fisheries[1], 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.

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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 *Dipodomys nitratoides exilis* 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 *Vulpes macrotis mutica* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2873	Endangered

REPTILES

NAME	STATUS
Blunt-nosed Leopard Lizard *Gambelia silus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/625	Endangered
Northwestern Pond Turtle *Actinemys marmorata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

AMPHIBIANS

NAME	STATUS
California Tiger Salamander *Ambystoma californiense* 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
Western Spadefoot *Spea hammondii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5425	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

CRUSTACEANS

NAME	STATUS
Vernal Pool Fairy Shrimp *Branchinecta lynchi* 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

FLOWERING PLANTS

NAME	STATUS
Fleshy Owl's-clover *Castilleja campestris ssp. succulenta*	Threatened
There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8095	
San Joaquin Valley Orcutt Grass *Orcuttia inaequalis*	Threatened
There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5506	

CRITICAL HABITATS

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

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Jenny McCarthy
Address: 1518 Mill Rock Way, Suite 100
City: Bakersfield
State: CA
Zip: 93311
Email jmccarthy@ppeng.com
Phone: 7073842510

APPENDIX D: NRCS WEB SOIL SURVEY REPORT

United States Department of Agriculture

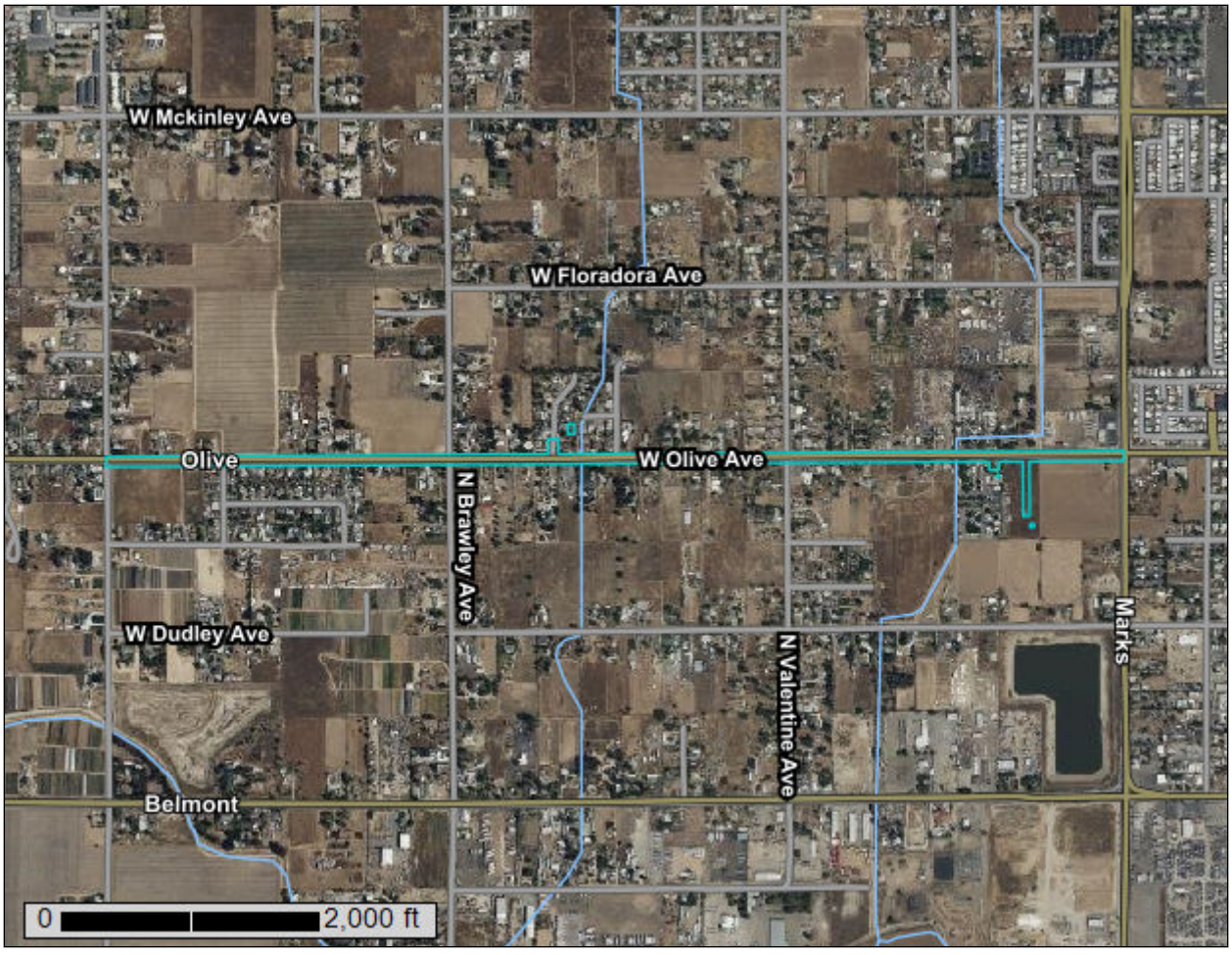
NRCS

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

City of Fresno Reg WS Consolidation



January 3, 2025

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.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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Contents

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.

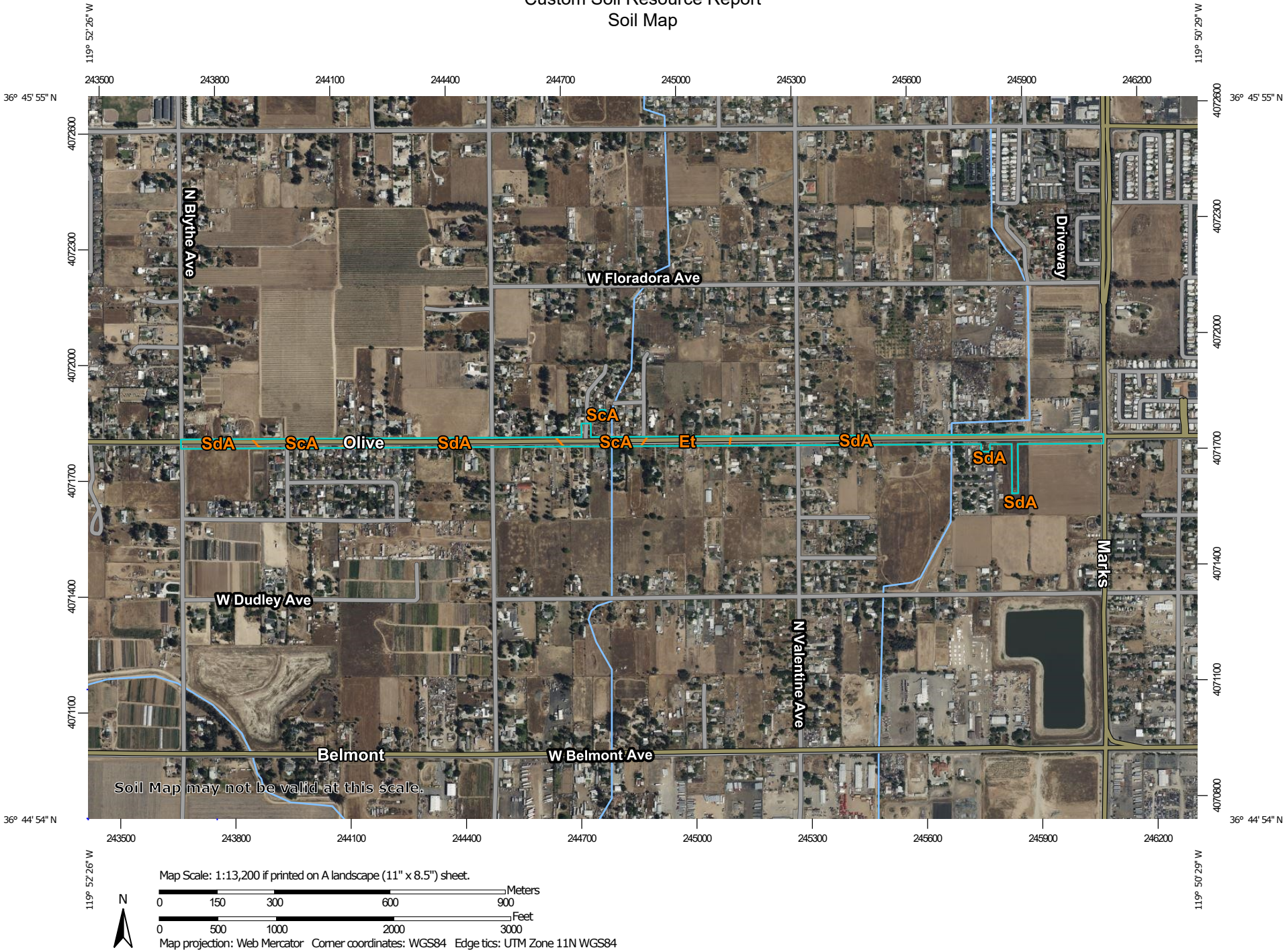
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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



Map Scale: 1:13,200 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 150 300 600 900

Feet: 0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

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 17, Aug 30, 2024

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
Et	Exeter sandy loam, shallow	1.3	8.7%
ScA	San Joaquin sandy loam, 0 to 3 percent slopes, MLRA 17	3.1	19.8%
SdA	San Joaquin sandy loam, shallow, 0 to 3 percent slopes	11.0	71.4%
Totals for Area of Interest		**15.4**	**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

Et—Exeter sandy loam, shallow

Map Unit Setting

National map unit symbol: hl3v
Elevation: 200 to 450 feet
Mean annual precipitation: 9 to 14 inches
Mean annual air temperature: 61 to 64 degrees F
Frost-free period: 225 to 275 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Exeter

Setting

Landform: Stream terraces
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

Ap - 0 to 10 inches: sandy loam
Bt - 10 to 16 inches: sandy loam
Bqm - 16 to 26 inches: cemented

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 12 to 20 inches to duripan
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.01 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: Very low (about 2.2 inches)

Interpretive groups

Land capability classification (irrigated): 4s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: D
Ecological site: R017XY902CA - Duripan Vernal Pools
Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 14 percent
Landform: Stream terraces

Hydric soil rating: No

Unnamed, ponded

Percent of map unit: 1 percent
Landform: Depressions on stream terraces
Hydric soil rating: Yes

ScA—San Joaquin sandy loam, 0 to 3 percent slopes, MLRA 17

Map Unit Setting

National map unit symbol: 2vncw
Elevation: 90 to 520 feet
Mean annual precipitation: 9 to 17 inches
Mean annual air temperature: 62 to 64 degrees F
Frost-free period: 240 to 300 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

San joaquin and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of San Joaquin

Setting

Landform: Terraces, fan remnants
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Interfluve, tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

Ap - 0 to 9 inches: sandy loam
Bt1 - 9 to 15 inches: sandy clay loam
2Bt2 - 15 to 21 inches: clay
2Bkqm - 21 to 37 inches: cemented material
2C - 37 to 79 inches: loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches; 19 to 25 inches to duripan
Drainage class: Moderately well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: About 8 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0

Available water supply, 0 to 60 inches: Very low (about 2.1 inches)

Interpretive groups

Land capability classification (irrigated): 4s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: D
Ecological site: R017XY902CA - Duripan Vernal Pools
Hydric soil rating: No

Minor Components

Snelling

Percent of map unit: 5 percent
Landform: Terraces, fan remnants
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Interfluve, tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Alamo

Percent of map unit: 4 percent
Landform: Terraces, fan remnants
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Interfluve, tread
Microfeatures of landform position: Open depressions, open depressions
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R017XY902CA - Duripan Vernal Pools
Hydric soil rating: No

Unnamed, hydric

Percent of map unit: 1 percent
Landform: Terraces, open depressions on fan remnants
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Interfluve, tread
Microfeatures of landform position: Open depressions
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

SdA—San Joaquin sandy loam, shallow, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: hl91
Elevation: 250 to 500 feet
Mean annual precipitation: 9 to 15 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 250 to 275 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of San Joaquin

Setting

Landform: Erosion remnants on stream terraces
Landform position (two-dimensional): Shoulder, footslope
Landform position (three-dimensional): Side slope, tread
Down-slope shape: Concave, linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

A - 0 to 8 inches: sandy loam
2Bt - 8 to 18 inches: clay
2Bqm - 18 to 30 inches: cemented
2C - 30 to 60 inches: coarse sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches; 12 to 24 inches to duripan
Drainage class: Moderately well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 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: Very low (about 0.9 inches)

Interpretive groups

Land capability classification (irrigated): 4s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: D
Ecological site: R017XE113CA - TERRACE 12-14"
Hydric soil rating: No

Minor Components

Exeter, shallow

Percent of map unit: 14 percent
Landform: Erosion remnants on stream terraces
Hydric soil rating: No

Unnamed, ponded

Percent of map unit: 1 percent
Landform: Depressions on erosion remnants on stream terraces
Hydric soil rating: Yes

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

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=stelprdb1043084

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

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

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

APPENDIX E: NMFS EFH MAPPER

EFH Mapper Report

EFH Data Notice

Essential Fish Habitat (EFH) is defined by textual descriptions contained in the fishery management plans developed by the regional fishery management councils. In most cases mapping data can not fully represent the complexity of the habitats that make up EFH. This report should be used for general interest queries only and should not be interpreted as a definitive evaluation of EFH at this location. A location-specific evaluation of EFH for any official purposes must be performed by a regional expert. Please refer to the following links for the appropriate regional resources.

West Coast Regional Office

Query Results

Degrees, Minutes, Seconds: Latitude = 36º 45' 26" N, Longitude = 120º 8' 9" W
Decimal Degrees: Latitude = 36.757, Longitude = -119.864

The query location intersects with spatial data representing EFH and/or HAPCs for the following species/management units.

EFH

No additional Essential Fish Habitats (EFH) were identified at the report location.

Pacific Salmon EFH

No Pacific Salmon Essential Fish Habitat (EFH) were identified at the report location.

Atlantic Salmon

No Atlantic Salmon were identified at the report location.

HAPCs

No Habitat Areas of Particular Concern (HAPC) were identified at the report location.

EFH Areas Protected from Fishing

No EFH Areas Protected from Fishing (EFHA) were identified at the report location.

Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data.
****For links to all EFH text descriptions see the complete data inventory: open data inventory -->**

Pacific Coastal Pelagic Species,
Jack Mackerel,
Pacific (Chub) Mackerel,
Pacific Sardine,
Northern Anchovy - Central Subpopulation,
Northern Anchovy - Northern Subpopulation,
Pacific Highly Migratory Species,
Bigeye Thresher Shark - North Pacific,
Bluefin Tuna - Pacific,
Dolphinfish (Dorado or Mahimahi) - Pacific,

Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data. ****For links to all EFH text descriptions see the complete data inventory: open data inventory -->**
Pelagic Thresher Shark - North Pacific, Swordfish - North Pacific

Appendix C: Phase I Cultural Resources Assessment

Phase I Cultural Resources Assessment for the City of Fresno Regional Consolidation Group 1 Project, Fresno County, California

Consuelo Y. Sauls

Prepared By

Taylored Archaeology
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Prepared For
Provost & Pritchard Consulting Group
455 W. Fir Ave
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March 2024

USGS Fresno North 7.5' topographic quadrangle
28.3-acre APE; 8,000 linear feet, 100% surveyed
Keywords: Negative findings

MANAGEMENT SUMMARY

Taylored Archaeology conducted a phase I archaeological investigation for the City of Fresno Regional Consolidation Group 1 Project (Project). The Project is located southwest of the City of Fresno (City) in Fresno County, California. The City proposes to install approximately 7,900 linear feet of 16-inch water main within existing roadways in the western portion of the City. The Project additionally proposes to construct 80 linear feet of 8-inch water main, two 4-inch master meters, and destruction of two existing wells and waters tanks along West Olive Avenue between Blythe Avenue and Marks Avenue, collectively referred to as the Area of Potential Effects (APE).

The Project requires compliance with the California Environmental Quality Act with the City as lead agency. The City is seeking funding for the Project from the California State Water Resources Control Board through the State's Safe and Affordable Funding for Equity and Resilience (SAFER) Drinking Water Technical Assistance Program. The SAFER program may receive federal funds and therefore, the Project was additionally assessed for effects to historic properties within the APE under Section 106 of the National Historic Preservation Act.

Taylored Archaeology performed this archaeological investigation under contract with Provost & Pritchard Consulting Group, to assess whether historic resources are present that could be affected by the proposed Project. The cultural resources assessment included: (1) a records search from the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS); (2) a request of the Native American Heritage Commission's (NAHC) Sacred Lands File and nongovernmental tribal outreach; (3) archival research; and (4) an archaeological pedestrian survey of the APE.

As part of the background research for the Project, Taylored Archaeology requested a cultural resource records search from the SSJVIC. The records search reported no cultural resources within the APE. One historical resource was recorded within a 0.5-mile radius of the APE - a segment of the Houghton Canal (P-10-007097). The records search also reported six prior cultural resource studies conducted within the APE and five prior cultural resource studies within a 0.5-mile radius of the APE.

Taylored Archaeology requested a search of the Sacred Lands File (SLF) from the NAHC. Results of the SLF search indicate no known tribal cultural resources within the APE. Native American outreach to local Native American organizations or individuals were contacted to elicit information on tribal resources within the APE or surrounding area. No responses were received as of the date of this report.

Taylored Archaeology completed an archaeological pedestrian survey of the APE on February 24, 2024. The pedestrian survey indicated no cultural resources are present on the ground surface within the APE. Moreover, the terrain throughout the entire APE has been disturbed by previous agriculture activity, rural and modern residences, and commercial development.

A copy of this report will be submitted to the SSJVIC for entry into the CHRIS database.

Taylored Archaeology additionally advises the following:

In the event that previously unidentified archaeological remains are encountered during development or ground-moving activities in the APE, all work should be halted until a qualified archaeologist can identify the discovery and assess its significance. In the event of accidental discovery of unidentified archaeological remains during development or ground-moving activities in the APE, all work shall be halted in the immediate vicinity (within a 100-foot radius) until a qualified archaeologist can identify the discovery and assess its significance.

If human remains are uncovered during construction, the Fresno County Coroner is to be notified to investigate the remains and arrange proper treatment and disposition. If the remains are identified on the basis of archaeological context, age, cultural associations, or biological traits to be those of a Native American, California Health and Safety Code 7050.5 and PRC 5097.98 require that the coroner notify the NAHC within 24 hours of discovery. The NAHC will then identify the Most Likely Descendent who will be afforded an opportunity to make recommendations regarding the treatment and disposition of the remains.

CONTENTS

APPENDICIES

FIGURES

TABLES

1
INTRODUCTION

Taylored Archaeology performed a Phase I Cultural Resources Assessment for the City of Fresno Regional Consolidation Project (Project) in unincorporated Fresno County, California under contract to Provost & Pritchard Consulting Group. As part of development approval process, the City of Porterville as lead agency must comply with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] 21000 [g] mandate that government agencies consider the impacts of a project on the environment, including cultural resources. The Project anticipates potentially receiving federal funding, though the specific agency and funding source has not been identified at this point in time. Therefore, the Project was additionally assessed for effects to historic properties within the Project's Area of Potential Effects (APE) under Section 106 of the National Historic Preservation Act (NHPA).

1.1 PROJECT LOCATION AND DESCRIPTION

The Project is located west of the City of Fresno (City) and State Route 99 and north of State Route 180. The Project APE is located along West Olive Avenue between North Marks Avenue and North Blythe Avenue in Fresno County, California (Figure 1-1). The APE is on the U.S. Geological Survey (USGS) 7.5-minute Fresno North, California, topographic quadrangle in Sections 35 and 36 of Township 13 South, Range 19 East, Mount Diablo Base and Meridian (Figure 1-2).

The Project proposes to 1) construct 7,900 linear feet of a new 16-inch water main along West Olive Avenue from North Marks Avenue and North Blythe Avenue, 2) construct 80 linear feet of a new 8-inch water main along North Knoll Drive from West Olive Avenue to the master meter connection point, 3) construct a new 4-inch master meter at North Knoll Drive and Olive (Del Oro Connection), 5) construct a new 4-inch master meter and service line at the connection point with the City system and the New Horizons Mobile Home Park, and 6) remove two existing water tanks.

The APE for the Project is defined as the area of potential ground disturbance resulting from project activities based upon the project description. The total horizontal APE includes a 50-foot-wide corridor centered on the proposed 7,980 linear feet of new water mains, and also includes approximately 2.6 acres of field adjacent to New Horizons Mobile Home Park. Construction of the water main assumes a trench 5 feet wide and up to 6 feet deep. Therefore, the vertical APE is approximately 6 feet below ground surface.

1.2 REGULATORY SETTING

In this report "cultural resources" are defined as prehistoric or historical archaeological sites as well as historical objects, buildings, or structures. In accordance with 30 Code of Federal

Regulations (CFR) §60.4, "historical" in this report applies to cultural resources which are at least 50 years old. The significance or importance of a cultural resource is dependent upon whether the resource qualifies for inclusion at the local or state level in the California Register of Historical Resources (CRHR), or at the federal level in the National Register of Historic Places (NRHP). Cultural resources that are determined to be eligible for inclusion in the CRHR are called "historical resources" (California Code of Regulations [CCR] 15064.5[a]). Under this statue the determination of eligibility is partially based on the consideration of the criteria of significance as defined in 14 CCR 15064.5(a)(3). Cultural resources eligible for inclusion in the NRHP are deemed "historic properties".

1.2.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT

Pursuant to CEQA, a historical resource is a resource listed in, or determined to be eligible for listing in, the CRHR. Historical resources may include, but are not limited to, "any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically or archaeologically significant" (PRC §5020.1[j]). In addition, a resource included in a local register of historical resources or identified as significant in a local survey conducted in accordance with the state guidelines are also considered historic resources under California Public Resources Code (PRC) Section 5020.1.

CEQA details appropriate measures for the evaluation and protection of cultural resources in §15064.5 of the CEQA Guidelines. According to CEQA guidelines §15064.5 (a)(3), criteria for listing on the CRHR includes the following:

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

According to CEQA guidelines §21074 (a)(1), criteria for tribal cultural resources includes the following:

> *(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:*
> *(A) included or determined to be eligible for inclusion in the California Register of Historical Resources.*
> *(B) included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.*

Protection of cultural resources within California is additionally regulated by PRC §5097.5, which prohibits destruction, defacing, or removal of any historic or prehistoric cultural features on land under the jurisdiction of State or local authorities.

1.2.2 NATIONAL HISTORIC PRESERVATION ACT OF 1966

The National Historic Preservation Act (NHPA) (16 U.S.C. 470 ET SEQ.) was enacted in 1966 and created a national policy of historic preservation. The law established several programs, administered by the Secretary of the Interior, to encourage the achievement of preservation goals at local, state, and federal levels. The NHPA authorized the creation and expansion of the National Register of Historic Places (NRHP), formed the position of State Historic Preservation Officer (SHPO), allowed for the creation of State Review Boards to set up methods for local governments to enact the NHPA at a local level, assisted Native American tribes with preserving their heritage, and established the Advisory Council on Historic Preservation (ACHP).

The NHPA established criteria for determining if a historic property is eligible for inclusion in the NRHP. These criteria are set forth in 36 CFR 60.4 as follows:

> *The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and*
>
> *(a) that are associated with events that have made a significant contribution to the broad patterns of our history; or*
>
> *(b) that are associated with the lives of persons significant in our past; or*
>
> *(c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or*
>
> *(d) that have yielded, or may be likely to yield, information important in prehistory or history.*

1.2.3 SECTION 106 OF NHPA

Section 106 of NHPA states that any federal agency with direct or indirect jurisdiction over federally assisted or proposed federal action will take into account the effect the action will have on any historic property that is on, or eligible to be included in, the NRHP. The NHPA provides the Advisory Council on Historic Preservation and the relevant SHPO the opportunity to provide comments on the federal action in regard to potential impacts to historic properties.

1.3 PROFESSIONAL QUALIFICATIONS

Archaeologist Consuelo Y. Sauls (M.A.), a Registered Professional Archaeologist (RPA 41591505), managed the assessment and compiled this report for the Project. Ms. Sauls also conducted the records search, literature review, requested Sacred Lands File and performed the pedestrian field survey of the APE. Ms. Sauls meets the Secretary of the Interior's Standards for Professional

Qualifications in Archaeology. Statement of Qualifications for key personnel is provided in Appendix A.

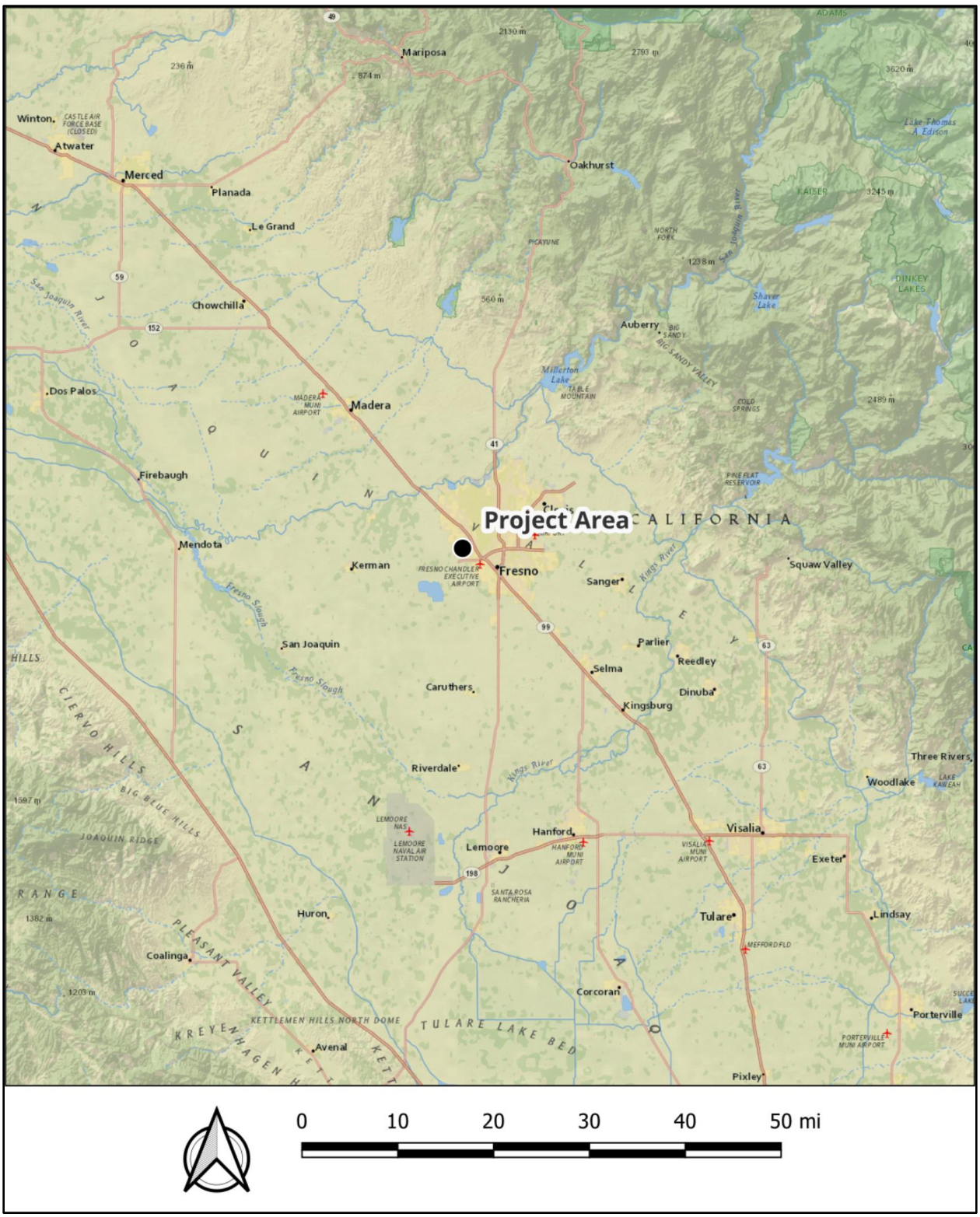

Figure 1-1 Project vicinity in Fresno, California.

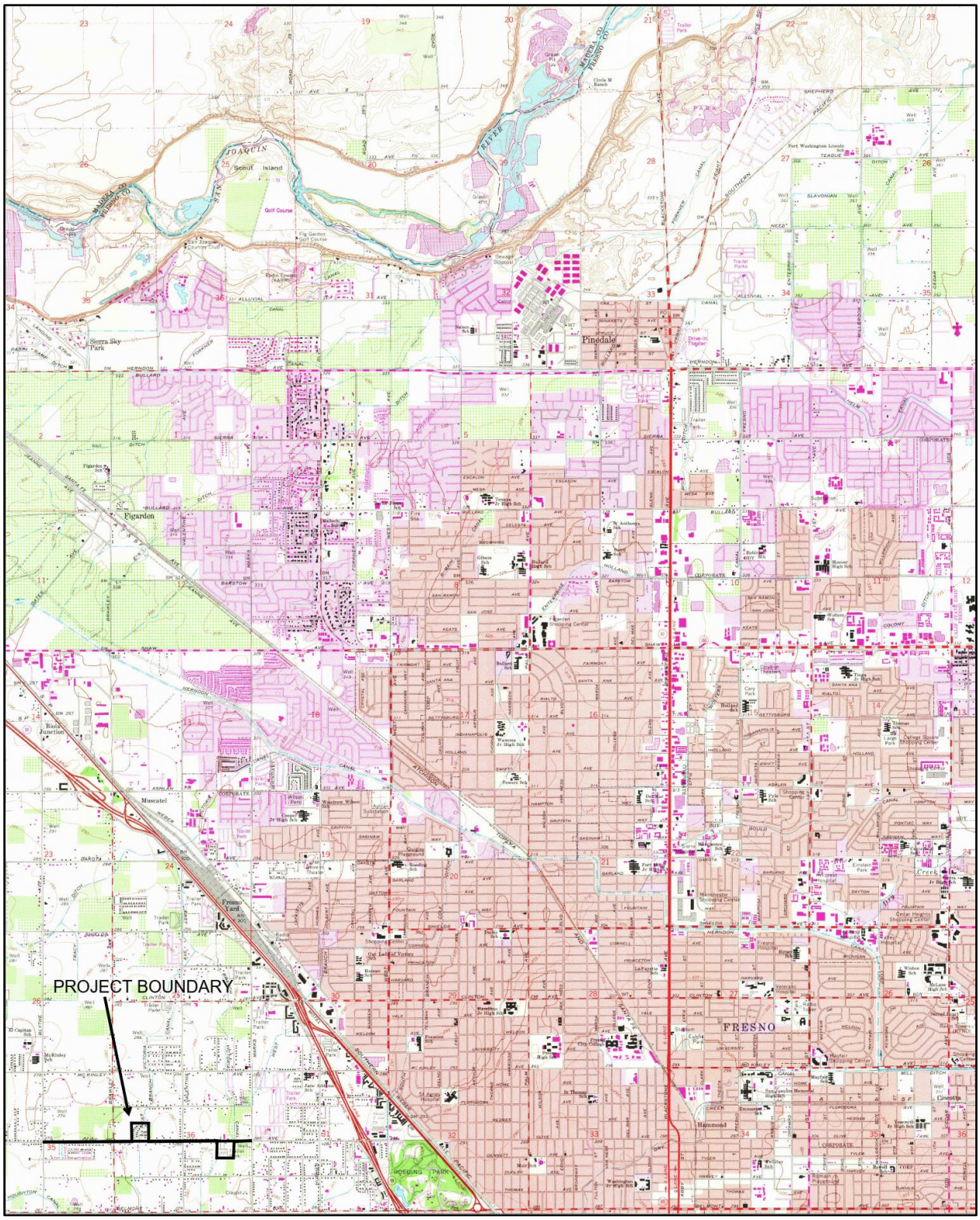

Figure 1-2 Project location on the USGS Fresno North, CA 7.5-minute quadrangle.

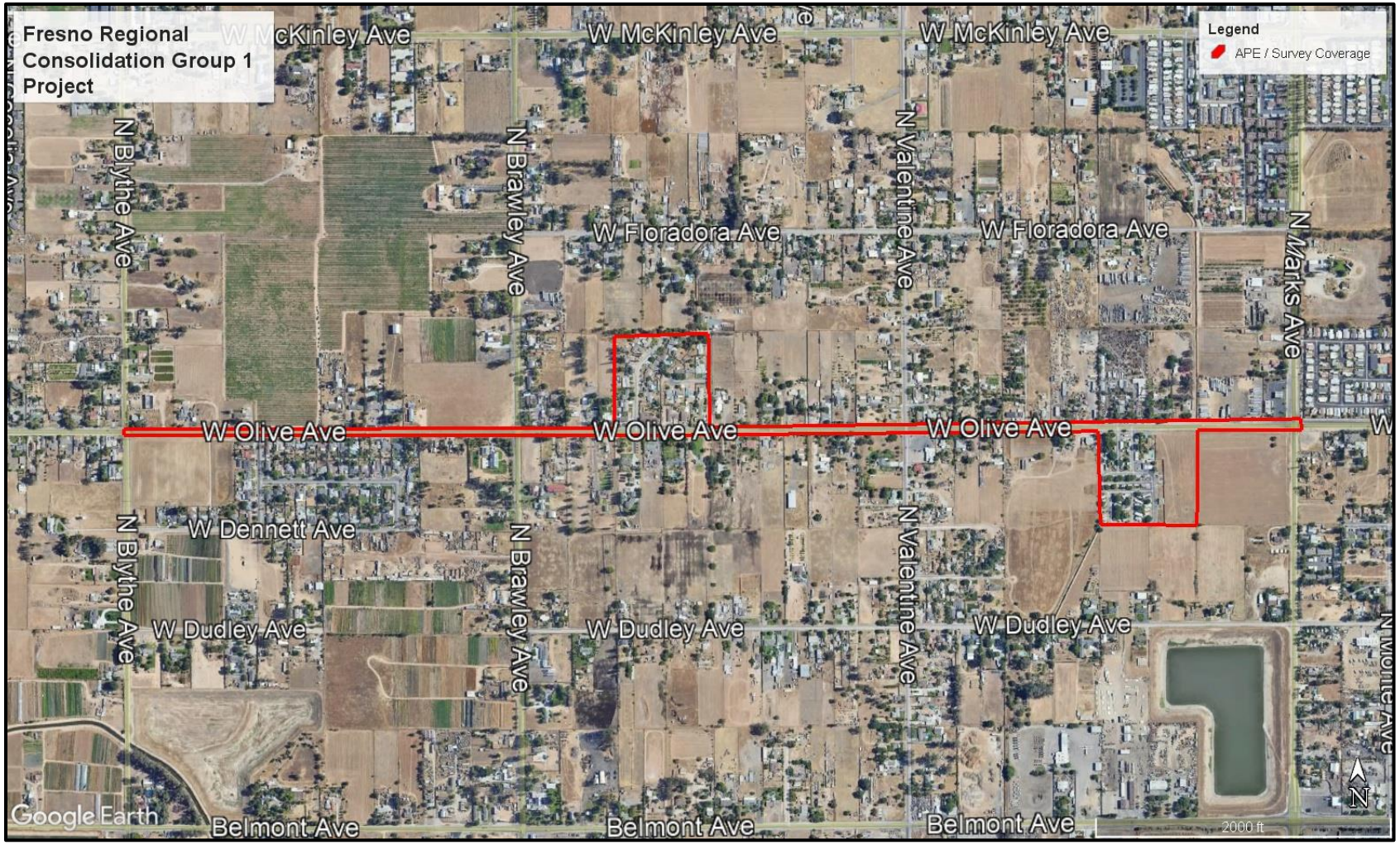

Figure 1-3 Aerial view of the Project location.

1.4 REPORT STRUCTURE

This report documents the results of an archaeological survey report of the proposed Project area. In order to assess potential project impacts to archaeological and historical resources pursuant to CCR §15064.5, the following specific tasks were completed: (1) requesting a records search from the Southern San Joaquin Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS), at California State University, Bakersfield; (2) requesting a Sacred Lands File Search from the Native American Heritage Commission (NAHC); (3) archival research; and (4) conducting an archaeological pedestrian survey.

Taylored Archaeology prepared this report following the California Office of Historic Preservation standards in the 1990 Archaeological Resources Management Report Recommended Contents and Format. Chapter 1 describes the introduction of the Project and its location, and identifies the key personnel involved in this report. Chapter 2 summarizes the Project setting, including the natural, prehistoric, historic, and ethnographic background for the Project area and surrounding area. Chapters 3 details the methods used for cultural records search, archival research, local Native American outreach, and archaeological pedestrian survey. Chapter 4 summarizes the results of the cultural resource investigation. Chapter 5 discusses the Project results and offers management recommendations. Chapter 6 is a bibliography of references cited within this report. The report also contains the following appendices: Qualifications of key personnel (Appendix A), the CHRIS records search results (Appendix B), and the NAHC letter of the SLF results (Appendix C).

2
PROJECT SETTING

2.1 NATURAL ENVIRONMENT

The Project is located within California's Central Valley. Specifically, the site is in the City of Fresno within the central northern portion of Fresno County in the San Joaquin Valley. This valley forms the southern half of the Central Valley of California. The Central Valley dominates the landscape within Central and Northern California, running approximately 450 miles from north to south, and ranging east to west between 40 to 60 miles with an average width of 55 miles (Frayer et al. 1989). The Central Valley is divided into two subunits named after the primary rivers within each area, the Sacramento Valley in the north and the San Joaquin Valley in the south (Madden 2020). Climate within the San Joaquin Valley is classified as a hot Mediterranean climate, with hot and dry summers, and cool damp winters characterized by periods of dense fog known as tule fog (Prothero 2017).

The Project area is located at approximately 290 feet above mean sea level on the flat plains of the southern half of the San Joaquin Valley. The San Joaquin Valley consists of a structural trough created approximately 65 million years ago and is filled with nearly 6 miles of sediment (Bull 1964). The San Joaquin Valley ranges from Stockton and the San Joaquin-Sacramento River Delta in the north to Wheeler Ridge to the south (Zack 2017). It is split by late Pleistocene alluvial fans between the San Joaquin River hydrologic area in the north and the Tulare Lake Drainage Basin in the south (Rosenthal et al 2007). Northern Fresno County is located within the latter of these two hydrologic units. In the eastern portion of the San Joaquin Valley, sediments are primarily deposited from the Sierra Nevada Mountains and consist of highly permeable sands with medium to coarse grains within the broad alluvial fans. These deposits range from the coarsest near the upper parts of the alluvial fan to the east, to the finest nearest the lowest and central portions of the valley (USGS 1999).

The Project site is in central northern Fresno County on the valley floor of the San Joaquin Valley, within the broader plains south of the San Joaquin River. Specifically, the project is located 7 miles southwest of the Lower San Joaquin River with surface hydrology draining to the southwest (Google Earth 2024). Before the appearance of agriculture in the nineteenth century, the general Project location would have been prairie grasslands with scattered oak tree savannas near the foothills, and riparian forests along the various streams and drainages (Preston 1981).

2.2 PREHISTORIC SETTING

Research into San Joaquin Valley prehistory began in the early 1900s with several archaeological investigations (Rosenthal et al. 2007). The Southern San Joaquin Valley is one of the least understood areas within California due to a lack of well-grounded chronologies for large segments of the valley (Rosenthal et al. 2007). This is largely due to the valley floor being filled with thick alluvial deposits, and from human activity largely disturbing much of the valley floor due to a century and a half of agricultural use (Dillon 2002; Siefken 1999). Mound sites may have

occurred as frequently as one every two or three miles along major waterways, however, studying such mound occupation sites is difficult as most surface sites have been destroyed (Schenck and Dawson 1929). Much of the early to middle Holocene archaeological sites may be buried as deep as 10 meters due to millennia of erosion and alluvial deposits from the western Sierras (Moratto 1984).

Mass agricultural development has heavily disturbed and altered the landscape of the Southern San Joaquin Valley, from the draining of marshes and the vanishing of the extensive Tulare Lake, to grading nearly the entire valley for agricultural operations (Garone 2011). These activities have impacted or scattered much of the shallow surface deposits and mounds throughout the valley (Rosenthal et al 2007). Some researchers have suggested that potentially as much as 90 percent of all Central California archaeological sites have been destroyed from these activities (Riddell 2002).

The cultural traits and chronologies summarized below are based upon information discussed in multiple sources, including Bennyhoff and Fredrickson (1973, 1974), Garfinkel (2015), McGuire and Garfinkel (1980), Moratto (1984), and Rosenthal et al. (2007). The most recent comprehensive approach to compiling a chronology of the Southern San Joaquin Valley prehistory is by Garfinkel in 2015, which builds off Rosenthal's 2007 previous work. Both Garfinkel's and Rosenthal's chronologies are calculated in years B.C. In the interest of maintaining cohesiveness with modern anthropological research, the dates of these chronologies have been adapted into years before present (B.P.).

The Paleo-Indian Period (13,500-10,600 cal B.P.) was largely represented by ephemeral lake sites which were characterized by atlatl and spear projectile points. Around 14,000 years ago, California was largely a cooler and wetter place, but with the retreat of continental Pleistocene glaciers, California largely experienced a warming and drying period. Lakes filled with glacial meltwater were located in the valley floor and used by populations of now extinct large game animals. A few prehistoric sites were discovered near the southwestern shore of Tulare Lake (Garfinkel 2015). Foragers appear to have operated in small groups which migrated on a regular basis.

During the Lower Archaic Period (10,500-7450 cal B.P.), climate change created a largely different environment which led to the creation of larger alluvial fans and flood plains. Most of the archaeological records of the prior period were buried by geological processes. During this time, cultural patterns appear to have emerged between the foothill and valley populations of the local people. The foothill sites were often categorized by dense flaked and ground stone assemblages, while the valley sites were instead characterized by a predominance of crescents and stemmed projectile points. Occupation within the area is represented mostly by isolated discoveries and located along the former shoreline of Tulare Lake. Archaeological finds are typically characterized by chipped stone crescents, stemmed points, and other distinctive flakes stone artifacts (Rosenthal et al. 2007). Variations in consumption patterns emerged as well, with the valley sites more marked by consumption of waterfowl, mussels, and freshwater fish, while the foothills sites saw an increase in nuts, seeds, and a more narrowly focused diet than the valley sites.

The Middle Archaic (7450-2500 cal B.P.) saw an increase in semi-permanent villages along river and creek settings, with more permanent sites located along lakes with a more stable supply of water and wildlife. Due to the warmer and drier weather of this period, many lakes within the valley dramatically reduced in size, while some vanished completely (Garone 2011). Cultural patterns during this time saw an increase in stone tools, while a growth in shell beads, ornaments, and obsidian evidence an extensive and ever-growing long-distance trade network. Little is known of cultural patterns in the valley during the Upper Archaic (2500-850 B.P.), but large village structures appeared to be more common around local rivers. An overall reduction of projectile point size suggests changing bow and arrow technologies. Finally, the Emergent Period (850 cal B.P. - Historic Era) was generally marked by an ever-increasing specialization in tools, and the bow and arrow generally replaced the dominance of the dart and atlatl. Cultural traditions ancestral to those recorded during ethnographic research in the early 1900s are identifiable.

2.3 ETHNOGRAPHY

The APE is in the Southern Valley Yokuts ethnographic territory of the San Joaquin Valley. The Yokuts were generally divided into three major groups, the Northern Valley Yokuts, the Southern Valley Yokuts, and the Foothill Yokuts. The Yokuts are a sub-group of the Penutian language that covers much of coastal and central California and Oregon (Callaghan 1958). The Yokuts language contained multiple dialects spoken throughout the region, though many of them were mutually understandable (Merriam 1904).

The Yokuts have been extensively researched and recorded by ethnographers, including Powers (1877), Kroeber (1925), Gifford and Schenck (1926, 1929), Gayton (1930, 1945), Driver (1937), Harrington (1957), Latta (1977), and Wallace (1978). Much of the research from these ethnographers focuses on the central Yokuts tribes due to the northernmost tribes being impacted by Euro-Americans during the California Gold Rush of the mid 1800s, and by the southernmost tribes often being removed and relocated by the Spanish to various Bay Area or coastal missions. The central Yokuts tribes, and especially the western Sierra Nevada foothill tribes, were the most intact at the time of ethnographic study.

Based upon Kroeber's map of Southern and Central Yokuts (1925: Plate 47), the Project area is within the Pitkachi Yokuts territory. The closest village site for this area was *Kohuou*, which was located along the San Joaquin River near the modern-day community of Herndon, approximately 7 miles northwest of the Project site (Kroeber 1925). Primary Yokuts villages were typically located along lakeshores and major stream courses, with scattered secondary or temporary camps and settlements located near gathering areas in the foothills. The Yokuts were known for using controlled burns to actively maintain tule grass marshlands, clover fields, oak savannas for hunting, gathering, and land management practices (Anderson 2005).

Each local tribe was a land-owning group that was organized around a central village and shared common territory and ancestry. Most local tribe populations ranged from 150 to 500 people (Kroeber 1925). These local tribes were often led by a chief, who was often advised by a variety of assistants including the winatum, who served as a messenger and assistant chief (Gayton

1930). Early studies by Kroeber (1925), Gifford and Schenck (1926), and Gayton (1930) concluded that social and political authority within local tribes was derived from male lineage and patriarchy. However, more recent reexaminations (Dick-Bissonnette 1998) argue that this assumption of patriarchal organization was based on male bias by early 20th century researchers, and instead the Yokuts sociopolitical authority was matriarchal in nature and centered around matrilineal use-rights and women's work groups.

Prior to Euro-American contact, there was an abundance of natural resources within the greater Tulare Lake area. Due to these resources, the Yokuts maintained some of the largest populations in North America west of the continental divide (Cook 1955a).

2.4 HISTORIC SETTING

2.4.1 California History

European contact in modern-day California first occurred in 1542 with the arrival of a Spanish expedition led by Juan Rodríguez Cabrillo into the San Diego Bay (Engstrand 1997). Expeditions along the California coast continued throughout the sixteenth century and primarily focused on finding favorable harbors for further expansion and trade across the Pacific. However, rocky shorelines, unfavorable currents, and wind conditions made traveling north from New Spain to the upper California coast a difficult and time-consuming journey (Eifler 2017). The topography of California, with high mountains, large deserts, and few natural harbors lead to European expansion into California only starting in the 1760s. As British and Russian expansion through fur trading encroached on California from the north, Spain established a system of presidios, pueblos, and missions along the California coast to defend its claim, starting with Mission San Diego de Alcalá in 1769 (Engstrand 1997).

2.4.2 Central California History

The San Joaquin Valley did not experience contact with Europeans until the late 1700s (Starr 2007). Life at the California missions was hard and brutal for Native Americans, with many dying of disease, poor conditions, and many fleeing to areas not under direct Spanish control (Jackson and Castillo 1995). The earliest exploration of the San Joaquin Valley by Europeans was likely by the Spaniards when in the fall of 1772 a group known as the Catalonian Volunteers entered the valley through Tejon Pass in search of deserters from the Southern California Missions (Zack 2017). However, the group only made it as far north as Buena Vista Lake in modern day Kern County before turning around due to the extensive swamps. Additional excursions to the valley were for exploration such as those led by Lieutenant Bariel Moraga in 1806, but also to find sites for suitable mission sites and to track down Native Americans fleeing the coastal missions (Cook 1958).

Subsequent expeditions were also sent to pursue outlaws from the coast who would often flee to the valley for safety. One of the subsequent explorations was an expedition in 1814 to 1815 with Sargent Juan Ortega and Father Juan Cabot, who left the Mission San Miguel with a company of approximately 30 Spanish soldiers and explored the San Joaquin Valley (Smith 2004). This

expedition passed through the Kaweah Delta and modern-day Visalia and made a recommendation to establish a mission near modern-day Visalia. However, with European contact also came European disease. Malaria and other new diseases were brought by Europeans, and in 1833 an epidemic of unknown origin traveled throughout the Central Valley. Some estimates place the Native American mortality rate of the epidemic as high as 75 percent (Cook 1955b). Combined with the rapid expansion of Americans into California in 1848 during the Gold Rush, Native American populations within the valley never fully recovered (Eifler 2017).

Initial settlement within the valley by Europeans in the 1830s was largely either by trappers or horse thieves (Clough and Secrest 1984). In fact, horse and other livestock theft was so rampant that ranching operations on the Rancho Laguna de Tache by the Kings River and Rancho del San Joaquin Rancho along the San Joaquin River could not be properly established (Cook 1962). With the end of the Mexican American War and the beginning of the gold rush in 1848, the San Joaquin Valley became more populated with ranchers and prospectors. Most prospectors traveled by sea to San Francisco and used rivers ranging from the Sacramento River to the San Joaquin River to access the California interior (Eifler 2017). Most areas south of the San Joaquin River were less settled simply because those rivers did not connect to the San Francisco Bay area except in wet flood years. By 1850, California became a state and Tulare County was established in 1853.

2.4.3 Local History

In 1870 the Central Pacific Railroad began its diagonal push down the San Joaquin Valley. New towns were surveyed along the corridor, several were planned by the railroad itself, and earlier town sites situated away from the tracks often vanished overnight. In 1872, the railroad reached what is now Fresno. The Contract and Finance Company, a subsidiary of the Central Pacific Railroad, bought 4,480 acres in a desolate area where Dry Creek drained into the plains. Surveyor Edward H. Mix laid out the new town in blocks 320 feet by 400 feet, with 20-foot alleys, lots 25×150 feet fronting on 80-foot wide streets parallel to and on both sides of the tracks (Clough and Secrest 1984). The gridiron plan was filed in 1873 and was remarkably rigid, broken only by the space reserved for a future courthouse and the broad swaths through the center of town for the tracks, depot and yards (Reps 1979).

Fresno's location was uninviting at best, with barren sand plains in all directions. The nearest substantial supplies of water were the San Joaquin River, 10 miles to the north (Reps 1979) and the Kings River further south. Fresno grew slowly but in 1874 it was able to wrestle the county seat away from the former mining town of Millerton (Hoover et al. 1990).

The population of Fresno in 1875 was 600, with a third of the residents Chinese who lived west of the tracks. In 1878, a new resident, R.W. Riggs described the community as not much of a town, a handful of houses in a desert of sand (Reps 1979). Fresno's population was 1,112 in 1880 and 3,464 in 1885. Yet the town remained a collection of buildings on the prairie rather than a full-fledged city. There was no police force, sewer system or truly efficient fire department, and cattle were still roaming the dusty streets that became winter lakes (Clough and Secrest 1984).

The 1880s, however, were prosperous years and the desert was turned into profitable farmland with the introduction of irrigation and agricultural colonies. The model for the system that ultimately served throughout the San Joaquin Valley was the Central California Colony, established in 1875 three miles south of Fresno. The Colony was the “brainchild” of Bernard Marks, a German immigrant who approached William S. Chapman, one of the wealthiest landowners in California, with his vision of 20-acre family-owned farms sharing a secured source of water. Marks saw the potential for farming in the desert-like environment of the San Joaquin Valley if irrigation could be guaranteed (Panter 1994). Six sections of land owned by Chapman and investor William Martin in Township 14 South, Range 20 East were subdivided into 192 20-acre parcels. Three laterals from the Kings River via the Fresno Canal and Irrigation Company were extended into the tracts and water rights were sold to the prospective farmers. Twenty-three miles of roads were laid out and bordered with trees (Panter 1994; Rehert and Patterson 1988). Many of the earliest settlers were former miners as well as Scandinavian immigrants: Danes, Swedes and Norwegians (Rehert and Patterson 1988). By 1903 there were 48 separate colonies or tracts in Fresno County representing approximately 71,080 acres (Panter 1994). These colonies helped to break up the vast estates and initiated what agricultural historian Donald Pisani has termed "the horticultural small-farm phase" of California agriculture (Datel 1999).

Fresno was incorporated in 1885. With incorporation, street grades and town lot numbers were established (Clough and Secrest 1984). In November 1887, 1,100 deeds were filed at the county courthouse and the last of the original railroad lots in Fresno were sold. By 1890 the population of Fresno was over 10,000, and land outside of the original town site was subdivided into streets and lots (Reps 1979). The first streetcars were introduced in 1892, and this greater mobility allowed for the construction of a variety of streetcar suburbs (Bulbulian 2001; Clough and Secrest 1984).

The west side of the Southern Pacific tracks quickly became “Chinatown,” where Chinese, as well as disreputable whites, were forced to settle. In addition to Chinese and Scandinavian farmers, other early ethnic groups in the Fresno area included Germans from Russia, Japanese, and Armenians. The first Armenians arrived in 1881 and eventually settled in an area between the Santa Fe and Southern Pacific tracks appropriately called “Armenian Town” (Bulbulian 2001). African Americans were also present early on and organized an African Methodist Church in 1882 (Clough and Secrest 1984).

The raisin industry developed in the 1870s, after the scorching heat of 1875 dried grapes on the vine and raisins became a major cash crop (Clough and Secrest 1984). The Sun-Maid Raisin Cooperative was founded in 1911 and became one of the most successful in America. Fresno became the principal-packing center for the raisin grape industry with numerous packinghouses in the city. Other crops such as figs and stone fruits helped to diversify the local economy and Fresno became the market town for a large portion of the San Joaquin Valley (Reps 1979).

3
METHODS

3.1 RECORDS SEARCH

On February 9, 2024, Taylored Archaeology requested a cultural resource records search from the SSJVIC of the CHRIS at California State University in Bakersfield, California. The purpose of this request was to identify and review prior cultural resource investigations completed in or near the APE and identify any prehistoric or historical resources that had been previously recorded within the APE and a 0.5-mile radius of the surrounding area. SSJVIC staff researched historical USGS topographic maps, reports of previous cultural resource investigations, archaeological site and survey base maps, cultural resource records (DPR forms) as well as listings of the Historic Properties Directory of the Office of Historic Preservation, General Land Office Maps, Archaeological Determinations of Eligibility, and the California Inventory of Historic Resources (Appendix B).

3.2 ARCHIVAL RESEARCH

Archival research was conducted to investigate the historical background for any potential archaeological deposits, historical deposits or built environment properties that may exist in the APE. Historical maps, historical aerial photographs, historical US Geological Survey (USGS) topographic maps, Google Street View photos, books, scholarly articles, and other records were used to better understand the prehistory and history of the APE and surrounding area. Research data was used to identify potential areas within the APE where archaeological deposits may exist, or historical buildings, structures or objects may exist. The results of this research are presented in Chapter 4.

3.3 NATIVE AMERICAN OUTREACH

Taylored Archaeology sent a request to the NAHC as part of this archaeological survey report for a Sacred Lands File (SLF) search on February 9, 2024. The objective of the SLF search was to identify any known resources, places of spiritual, sacred lands, activity or traditional use or gathering areas present in or near the APE. The NAHC responded via email on February 21, 2024, with a letter including contact information for local Native American tribal representatives who may have knowledge or interest in sharing information about the APE and surrounding area. Each Native American representative listed was sent a nongovernmental outreach letter via email or certified mail to those who may not have an email address and a map notifying them of the Project and asking if they had any knowledge of the Project area or surrounding vicinity. Follow-up communication was performed via email or phone call as appropriate. The SLF results are in Chapter 4.

3.4 ARCHAEOLOGICAL PEDESTRIAN SURVEY

A pedestrian survey was conducted by archaeologist Consuelo Sauls on February 24, 2024, of all exposed ground along the entire length of the APE. Ms. Sauls walked a 4 meter transect on both sides of all roadways in all unpaved areas within the APE. The owners gave access to both well sites and the well sites were surveyed. Ms. Sauls also walked 15 meter transects in the opened field area next to the New Horizons Mobile Home Park. All portions of the APE were accessible and surveyed. The APE was checked for both prehistoric deposits and historical features, structures, and artifacts more than 50 years old that may be present on the ground surface. Ms. Sauls photographed the survey area using an iPhone 11 Pro digital camera.

4
RESULTS

4.1 RECORDS SEARCH

The SSJVIC provided a records search of previously documented cultural resources sites and cultural resources reports in a letter dated February 20, 2024 (Records Search File No. 24-066; Appendix B). According to the Information Center results, no cultural resources were previously recorded within the APE, and one cultural resource (P-10-007097) was recorded within a 0.5-mile radius of the APE (Table 4-1). P-10-007097 is the historic-era Houghton Canal, dated circa 1891. It was recorded by ESA on October 24, 2013. ESA recommended the canal as ineligible for listing in the CRHR under Criterion 1, 2, 3, and 4 (Anderson and Vader 2015). The Houghton Canal is approximately 0.36 miles south of the APE and will not adversely be affected by the project.

The SSJBIC identified six previous cultural resource studies within the APE (Table 4-2). Further review of these studies revealed only a single study (FR-02701) conducted an archaeological field survey. All five other studies were literature reviews. However, the field survey for FR-02701 was neither conducted within the APE, nor within a 0.5-mile radius of the APE.

Five cultural resource studies were identified within a 0.5-mile radius of the APE (Table 4-3). None of these five studies overlap with the APE.

Table 4-1 Previous Recorded Cultural Resources within 0.5-mile radius of the APE

Resource Number	Age Association	Resource Type	Resource Description	Resource Within APE
P-10-007097	Historic	Structure	A segment of Houghton canal	No

Table 4-2 Previous Cultural Resources Studies within the APE

Report Number	Author(s)	Date	Report Title	Study
FR-00357	Michael K. Crist and Dudley M. Varner	1981	Archaeological Overview and Locational Analysis of the Fresno Area-California State University, Fresno	Archaeological Literature Review
FR-00641	Billy J. Peck	1977	The Distribution of Aboriginal Occupational Sites in Fresno County, California- California State University, Fresno	Anthropological Literature Review
FR-01156	Unknown	1968	A Proposal for an Archaeological Element in the Fresno County, General Plan- Committee on	Archaeological Management and Planning

			Sierra Foothills Public Archaeology	
FR-01162	David R. Stuart	1990	A Summary of the Present Archaeological Resources of Fresno County- California Department of Parks and Recreation	Archaeological Literature Review
FR-02380	Brian F. Byrd, Stephen Wee and Julia Costello	2009	Cultural Resources Sensitivity Study and Research Design for the San Joaquin River Restoration Program, Fresno, Madera, Merced, and Stanislaus Counties, California- Far Western Anthropological Research Group, Inc.	Archaeological Literature Review
FR-02701	Alexandra Greenwald	2011	Archaeological Survey Report for the California High Speed Train Fresno to Bakersfield Section-URS Corporation	Archaeological field survey

Table 4-3 Previous Cultural Resources Studies within 0.5-mile radius of the APE

Report Number	Author(s)	Date	Report Title	Study
FR-00106	William Self	1995	Class I Overview: Santa Fe Pacific Pipeline Partners, L.P. Proposed Concord to Colton Pipeline Project- William Self Associates	Literature Review; No survey of project area
FR-02250	Wayne H. Bonner	2005	Cultural Resource Records Search and Site Visits Results for Cingular Telecommunications Facility Candidate FS-504-04 (Marks Olive) 2703 West Dudley Avenue, Fresno, Fresno County California- Michael Brandman Associates	Archaeological field Survey
FR-02501	Jeanne Binning	2008	Historic Property Survey Report for Route 180 Planned Westside Expressway from I-5 to Valentine Ave, Fresno, Fresno County, California – California Department of Transportation	Historic Property Survey Report

Report Number	Author(s)	Date	Report Title	Study
FR-02722	Katherine Anderson and Michael Vader	2015	Recycled Water Distribution System, Southwest Quadrant: Phase I Cultural Resources Study- ESA	Archaeological field survey
FR-02868	Consuelo Sauls	2017	Phase I Archaeological Survey of Agri-Valley Irrigation Property, Fresno County, California- Soar Environmental Consulting	Archaeological field survey

4.2 ARCHIVAL RESEARCH

Taylored Archaeology searched historical USGS topographic maps from 1921 to present, and historical aerial photographs from 1957 to present covering the APE (NETROnline 2024). The 1921 USGS topographic map depicts the APE with Olive Avenue and assorted major cross streets similar to their present-day alignment, and with development largely consisting of scattered rural residential and agricultural structures. By 1955, USGS topographic maps depict rural residential and agricultural structures within the APE increasing by approximately 50 percent, consistent with post-World War II development within California. The New Horizons Mobile Home Park within the APE first appears in 1957 historic aerial photographs, while the Del Oro neighborhood within the APE first appears in 1962 historic aerial photographs. Between 1962 and 1984 many of the empty fields along Olive Avenue transition from agricultural to rural residential use, and by 1984 much of the APE appears similar to present-day.

4.3 NATIVE AMERICAN OUTREACH

The NAHC responded on February 21, 2024, via letter regarding Taylored Archaeology's request. The letter stated a search of the SLF was negative. The NAHC supplied a list of Native American representatives to contact for information or knowledge of cultural resources in the APE and the surrounding area (Appendix C).

The following Native American organizations/individuals were contacted from the list provided by NAHC below:

1. Chairperson Robert Ledger of the Dumna Wo-Wah Tribal Government
2. Chairperson Fred Beihn of North Fork Rancheria of Mono Indians
3. Environmental/Heritage Manager Mary Stalter of North Fork Rancheria of Mono Indians
4. Tribal Compliance Officer Timothy Perez of Northern Valley Yokut/ Ohlone Tribe
5. Tribal Historic Preservation Officer Heather Airey of Picayune Rancheria of the Chukchansi Indians
6. Chairperson Tracey Hopkins of Picayune Rancheria of the Chukchansi Indians
7. Cultural Specialist I Nichole Escalon of Santa Rosa Rancheria Tachi Yokut Tribe
8. THPO Shana Powers of Santa Rosa Rancheria Tachi Yokut Tribe

9. Cultural Specialist II Samantha McCarty of Santa Rosa Rancheria Tachi Yokut Tribe
10. Chairperson Michelle Heredia-Cordova of Table Mountain Rancheria
11. Cultural Resource Director Bob Pennell of Table Mountain Rancheria
12. Chairperson David Alvarez of the Traditional Choinumni Tribe
13. Tribal Archaeologist Joey Garfield of the Tule River Tribe
14. Chairperson Neil Peyron of the Tule River Tribe
15. Environmental Department Kerri Vera of the Tule River Tribe
16. Chairperson Kenneth Woodrow of the Wuksachi Indian Tribe/Eshom Valley Band

The outreach letters were sent to all the Native American representatives on the contact list on February 27, 2024 (Appendix C). The letters included a description of the proposed Project and a topographic map of the location. Follow-up emails were sent on March 7, 2024. As of the date of this report, no responses were received by the Native American representatives, nor was any information shared regarding tribal cultural resources pertaining to the APE.

4.4 ARCHAEOLOGICAL PEDESTRIAN SURVEY RESULTS

On February 24, 2024, Taylored Archaeology conducted an archaeological pedestrian survey of the APE. Areas covered by pavement or thick vegetation were surveyed where the ground surface was visible. During the survey, West Olive Avenue consisted of a paved asphalt two lane road with no sidewalks except for the neighborhood between North Brawley and North Blythe Avenue (Figure 4-1).

At the time of the survey, ground visibility ranged from excellent (100 percent) to none (0 percent) in non-paved areas of the APE (Figures 4-2 and 4-3). Soil consisted of a medium brown sandy loam. The natural topography of the area within the APE was altered by asphalt roads, development, and agricultural activities. The surrounding land uses included commercial and residential development, rural residences, an orchard, and some open fields. The open field lay adjacent to the New Horizons Mobile Home Park on the east side of West Olive Avenue and west of North Marks Avenue.

Ground surface visibility was 65 percent at the Del Oro Water Company well site. This well site contained a well and a tank within a fenced enclosure (Figure 4-4). An impromptu interview with a local resident revealed the tank was approximately 15 years old.

The New Horizons Mobile Home well site, also within a fenced enclosure, lay in a field east of the New Horizons Mobile Home Park. The ground surface visibility was 0 to 10 percent due to tall thick grass and tumbleweeds (Figure 4-5).

No archaeological sites, isolated artifacts, or features were identified within the Project's APE during the survey. While past agricultural and development activities may have potentially destroyed or obscured ground surface evidence of archaeological resources within the APE, intact archaeological resources may potentially exist below the ground surface.

Figure 4-1 Central portion of APE on south side of West Olive Avenue, facing west.

Figure 4-2 Central portion of APE, facing west.

Figure 4-3 Southeastern portion of APE adjacent to a mobile home park, facing south.

Figure 4-4 Del Oro Well site, north central portion of APE.

Figure 4-5 New Horizons Well Site, southeast portion of APE.

5
CONCLUSIONS AND RECOMMENDATION

Taylored Archaeology performed a Phase I Cultural Resources Assessment for the City of Fresno Regional Consolidation Project. The SSJVIC reported six prior cultural resources studies conducted within the APE; however, none of these studies were within the APE and no cultural resources were recorded within the APE.

The SSJVIC also reported five previous cultural resources studies conducted, and one historical resource was identified and recorded, within a 0.5-mile radius of the APE. That resource, P-54-002208, is a segment of the Houghton Canal. The resource will not be adversely affected by the proposed Project.

The NAHC's Sacred Lands File search results were negative and outreach to the Native American representatives resulted in zero responses as of the date of this report. The pedestrian survey results did not identify any prehistoric or historic-period cultural resources within the APE. The absence of cultural material on the ground surface does not, however, preclude the possibility of Project construction unearthing buried archaeological deposits.

Taylored Archaeology additionally recommends the following:

In the event that previously unidentified archaeological remains are encountered during development or ground-moving activities in the APE, all work should be halted until a qualified archaeologist can identify the discovery and assess its significance. In the event of accidental discovery of unidentified archaeological remains during development or ground-moving activities in the APE, all work shall be halted in the immediate vicinity until a qualified archaeologist can identify the discovery and assess its significance.

If human remains are uncovered during construction, the Fresno County Coroner is to be notified to investigate the remains and arrange proper treatment and disposition. If the remains are identified on the basis of archaeological context, age, cultural associations, or biological traits to be those of a Native American, California Health and Safety Code 7050.5 and PRC 5097.98 require that the coroner notify the NAHC within 24 hours of discovery. The NAHC will then identify the Most Likely Descendent who will be afforded an opportunity to make recommendations regarding the treatment and disposition of the remains.

6
REFERENCES

Anderson, Kat M.

2005 *Tending the Wild: Native American Knowledge and the Management of California's Natural Resources.* University of California Press, Berkeley and Los Angeles, California.

Anderson, Katherine and Vader, Michael

2015 *Recycled Water Distribution System Project Phase I Cultural Resources Study.* ESA, Sacramento, California.

Bulbulian, Berge

2001 *The Fresno Armenians: History of a Diaspora Community*. Word Dancer Press, Sanger, California.

Bull, William B.

1964 Geomorphology of Segmented Alluvial Fans in Western Fresno County, California. *Geological Survey Professional Paper 352-E.* United States Government Printing Office, Washington, D.C.

Callaghan, Catherine A.

1958 California Penutian: History and Bibliography. *International Journal of American Linguistics*. 24(3):189-194.

Clough, Charles W. and William B. Secrest, Jr.

1984 *Fresno County The Pioneer Years: From the Beginnings to 1900.* Panorama West Publishing, Fresno, California.

Cook, Sherburne F.

1955a *The Aboriginal Population of the San Joaquin Valley, California.* Anthropological Records 16:31–80. University of California, Berkeley.

1955b *The Epidemic of 1830-1833 In California and Oregon.* University of California Publications in American Archaeology and Ethnology 43(3):303-326. University of California, Berkeley.

1958 The Project Gutenberg eBook, *Colonial Expeditions to the Interior of California Central Valley, 1800-1820*

1962 *Expeditions to the Interior of California*: *Central Valley, 1820-1840*. Anthropological Records 20(5):151-212.

Datel, Robin Elisabeth
1999 "Picturing the Central Valley through Maps" In *Picturing California's Other Landscape: the Great Central Valley*, edited by Heath Schenkey. Heyday Books, Berkeley, California.

Dillon, Brian D.
2002 California Paleo-Indians: Lack of Evidence, or Evidence of a Lack? In *Essays in California Archaeology: A Memorial to Franklin Fenenga,* edited by William J. Wallace and Francis A. Riddell, pp. 110–128. Contributions of the University of California Archaeological Research Facility No. 60. Berkeley.

Dick-Bissonnette, Linda E.
1998 Gender and Authority among the Yokoch, Mono, and Miwok of Central California. *Journal of Anthropological Research* 54(1):49-72.

Driver, Harold E.
1937 Cultural Elements Distribution: VI, Southern Sierra Nevada. *University of California Anthropological Records* 1(2):53–154.

Eifler, Mark A.
2017 *The California Gold Rush: The Stampede that Changed the World.* Routledge Taylor & Francis Group Press, Las Vegas.

Engstrand, Iris H.W.
1997 Seekers of the "Northern Mystery": European Exploration of California and the Pacific. *California History*, 76(2/3):78–110.

Fredrickson, David A.
1973 Early Cultures of the North Coast Ranges, California. Ph.D. dissertation. Department of Anthropology, University of California, Davis.

1974 Cultural Diversity in Early Central California: A View from the North Coast Ranges. *Journal of California Anthropology* 1(1):41-54.

Garfinkel, Alan P.
2015 Archaeological Background and Cultural Sequence for The San Joaquin, Central California. Electronic document, https://www.academia.edu/14721089/ArchaeologicalBackgroundfor theSanJoaquinValleyCentralCalifornia, accessed February 28, 2024. Academia.edu

Garone, Philip
2011 *The Fall and Rise of the Wetlands of California's Great Central Valley.* University of the Press, Berkeley.

Gayton, Anna H.
1930 Yokuts-Mono Chiefs and Shamans. *University of California Publications in American Archaeology and Ethnology* 24(8):361–420.

1945 Yokuts and Western Mono Social Organization. *American Anthropologist* 47(3):409–426.

Gifford, E.W., and W. Egbert Schenck
1926 Archaeology of the Southern San Joaquin Valley, California. *Publications in American Archaeology and Ethnology* 23(1).

1929 Archaeology of the Northern San Joaquin Valley. *Publications in American Archaeology and Ethnology* 25(4).

Harrington, Mark R.
1957 *A Pinto Site at Little Lake, California*. No. 17. Southwest Museum.

Hoover, Mildred Brook, Hero Eugene Rensch, Ethel Grace Rensch, and William N. Abeloe.
1990 *Historic Spots in California*, 4th edition., revised by Douglas E. Kyle. Stanford University Press, Stanford, California.

Jackson, Robert H. and Edward Castillo
1995 *Indians, Franciscans, and Spanish Colonization: The Impacts of the Mission System on California Indians*. University of New Mexico Press, Albuquerque, New Mexico.

Kroeber, Alfred L.
1925 *Handbook of California Indians*. Bureau of American Ethnology Bulletin 78, Washington, D.C. Reprinted 2018, Dover Publications, New York, New York.

Latta, Frank F.
1977 *Handbook of Yokuts Indians*. Reprinted 2014, Bear State Books, Santa Cruz, California.

Madden, Derek.
2020 *The Naturalist's Illustrated Guide to the Sierra Foothills and Central Valley*. Heyday Publishing, Berkley, California.

McGuire, Kelly R. and Alan P. Garfinkel.
1980 Archaeological Investigations in the Southern Sierra Nevada: The Bear Mountain Segment of the Pacific Crest Trail. *Cultural Resources Publications, Archaeology*, unnumbered: xii – 304.

Merriam, Hart C.
1904 Distribution of Indian Tribes in the Southern Sierra and Adjacent Parts of the San Joaquin Valley, California. *Science* 19(494):912-917.

Moratto, Michael J.
1984 *California Archaeology*. Academic Press, New York, NY.

Panter, John.
1994 Central California Colony: 'Marvel of the Desert. *Fresno Past And Present,* 36(2):1-11, Fresno Historical Society.

Powers, Stephen
1877 *Tribes of California.* Washington Press, Washington, D.C.

Preston, William L.
1981 *Vanishing Landscapes: Land and Life in the Tulare Lake Basin.* Olympic Marketing Corp, Hopkins.

Prothero, Donald R.
2017 *California's Amazing Geology.* Taylor and Francis Group.

Rehert, Schyler and William K. Patterson.
1988 M. Theo Kearney: Prince of Fresno. Fresno City and County Historical Society.

Reps, John W.
1979 *Cities of the American West: A History of Frontier Urban Planning.* Princeton University Press, Princeton, New Jersey.

Riddell, Francis A.
2002 *The Status of San Joaquin Valley Archaeological.* In Essays in California Archaeology: A Memorial to Franklin Fenenga edited by William J. Wallace and Francis A. Riddell, pp. 55-61. University of California Archaeological Research Facility, Contribution Number 60. Berkeley, California.

Rosenthal, Jeffrey S., Gregory G. White, and Mark Q. Sutton
2007 The Central Valley: A View from the Catbirds's Seat. In *California Prehistory: Colonization, Cultural, and Complexity,* edited by Terry L. Jones and Kathryn A. Klar. AltaMira Press, Lanham, Maryland.

Schenck, W.E., and E.J. Dawson
1929 Archaeology of the Northern San Joaquin Valley. *University of California Publications in American Archaeology and Ethnology* 25:289-413. University of California, Bakersfield, California.

Siefken, Nelson.
1999 Archaeology of the Redfeldt Mound (CA-KIN-66), Tulare Basin, California. M.A. Thesis, Department of Anthropology, California State University, Bakersfield.

Small, Kathleen Edwards.
1926 *Early History of Tulare County California.* 2001 reprint edition, Bear State Books, Exeter, California.

Smith, Wallace.
2004 *Garden of the Sun: A History of the San Joaquin Valley: 1772-1939.* 2nd ed., revised by William B. Secrest, Jr. Linden Publishing, Fresno, California.

Starr, Kevin.
2007 *California: A History.* Random House Publishing Group, New York, New York.

Wallace, William J.
1978 Southern Valley Yokuts. In *Handbook of North American Indians, Vol. 8, California*. Ed. Robert F. Heizer, pp. 448-461. The Geological Society of American, Inc., Boulder, Colorado

Zack, Richard.
2017 *Quest for Water Tulare Irrigation District its History, People, and Progression.* PartnerPress.org, Carlsbad, California.

APPENDIX A

Personnel Qualifications

Consuelo Sauls, M.A., RPA 41591505
Archaeologist
csaulsarchaeo@gmail.com
559.797.1572

Areas of Expertise

- Cultural Resource Management
- CEQA and Federal regulations
- Prehistoric Archaeology
- Laboratory Management
- Technical Writing
- Phase I Assessments

Years of Experience

- 14

Education

- M.A., Archaeology, University of Durham, 2014
- B.A., Anthropology, California State University, Fresno, 2009

Registrations/Certifications

- Registered Professional Archaeologist 41591505

Professional Affiliations

- Coalition for Diversity in California Archaeology
- Society for American Archaeology
- Society for California Archaeology
- Society of Black Archaeologists

Professional Experience

2019 –Present Principal Investigator, Taylored Archaeology, Fresno, California

2018 – 2019 Staff Archaeologist, Applied EarthWorks, Inc., Fresno, California

2016 – 2018 Principal Investigator, Soar Environmental Consulting, Inc., Fresno, California

2015 Archivist/Database Technician, Development and Conservation Management, Inc., Laguna Beach, California

2013 Laboratory Research Assistant, Durham University Archaeology Department and Archaeology Museum, Durham, England, UK

2011 – 2012 Laboratory Technician, University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia, Pennsylvania

2008 – 2009 Laboratory Technician, California State University, Fresno

2008 Field School, California State University, Fresno

Technical Qualifications

Ms. Sauls meets the Secretary of the Interior's Professional Qualification Standards as an archaeologist. She has conducted pedestrian surveys, supervised Extended Phase I survey, authored technical reports, and completed the Section 106 process with the State Historic Preservation Officer and Tribal Historic Preservation Officer. Her experience includes data recovery excavation at Western Mono sites and processing recovered artifacts in the laboratory as well as conducting archival research about prehistory and ethnography of Central California. Ms. Sauls has authored and contributed to technical and letter reports in compliance with of the National Historical Preservation Act (NHPA) Section 106 and the California Environmental Quality Act (CEQA). She also has supported NHPA tribal consultation and responded to Assembly Bill 52 tribal comments. Ms. Sauls also has an extensive background supervising laboratory processing, cataloging, and conservation of prehistoric and historical archaeological collections. In addition, she worked with the Rock Art Heritage Group in the management, preservation, and presentation of rock art in museums throughout England, including a thorough analysis of the British Museum's rock art collections. At Durham University Archaeology Museum, Ms. Sauls processed the excavated skeletal remains of 30 individuals from the seventeenth century.

APPENDIX B

Records Search Results

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

2/20/2024

Consuelo Sauls
Taylored Archaeology
6083 N. Figarden Drive, Suite 616
Fresno, CA 93722

Re: City of Fresno Regional Consolidation Project
Records Search File No.: 24-066

The Southern San Joaquin Valley Information Center received your record search request for the project area referenced above, located on Fresno North, Fresno South, & Herndon USGS 7.5' quads. The following reflects the results of the records search for the project area and the 0.5 mile radius:

As indicated on the data request form, the locations of resources and reports are provided in the following format: ☒ custom GIS maps ☐ GIS data

Resources within project area:	None
Resources within 0.5 mile radius:	P-10-007097
Reports within project area:	FR-00357, 00641, 01156, 01162, 02380, 02701
Reports within 0.5 mile radius:	FR-00106, 02250, 02501, 02722, 02868

Resource Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Resource Database Printout (details):	☒ enclosed	☐ not requested	☐ nothing listed
Resource Digital Database Records:	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (details):	☒ enclosed	☐ not requested	☐ nothing listed
Report Digital Database Records:	☒ enclosed	☐ not requested	☐ nothing listed
Resource Record Copies:	☒ enclosed	☐ not requested	☐ nothing listed
Report Copies:	☒ enclosed	☐ not requested	☐ nothing listed
OHP Built Environment Resources Directory:	☐ enclosed	☐ not requested	☒ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	☐ not requested	☒ nothing listed
CA Inventory of Historic Resources (1976):	☐ enclosed	☐ not requested	☒ nothing listed

Caltrans Bridge Survey: Not available at SSJVIC; please see https://dot.ca.gov/programs/environmental-analysis/cultural-studies/california-historical-bridges-tunnels

Ethnographic Information: Not available at SSJVIC

Historical Literature: Not available at SSJVIC

Historical Maps: Not available at SSJVIC; please see http://historicalmaps.arcgis.com/usgs/

Local Inventories: Not available at SSJVIC

GLO and/or Rancho Plat Maps: Not available at SSJVIC; please see http://www.glorecords.blm.gov/search/default.aspx#searchTabIndex=0&searchByTypeIndex=1 and/or http://www.oac.cdlib.org/view?docId=hb8489p15p;developer=local;style=oac4;doc.view=items

Shipwreck Inventory: Not available at SSJVIC; please see https://www.slc.ca.gov/shipwrecks/

Soil Survey Maps: Not available at SSJVIC; please see http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation 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. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Celeste M. Thomson
Coordinator

APPENDIX C

Native American Outreach

NATIVE AMERICAN HERITAGE COMMISSION

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

February 21, 2024

Consuelo Sauls
Taylored Archaeology

Via Email to: ***csaulsarchaeo@gmail.com***

Re: City of Fresno Regional Consolidation Project, Fresno County

Dear Mr. Sauls:

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

Native American Outreach Log

City of Fresno Regional Consolidation Project, Fresno County , California

Organization	Name	Position	Address	Phone Number	Email Address	Letter	E-Mail	Summary of Contact
Native American Heritage Commission	Cameron Vela	Culutral Resources Analyst	1550 Harbor Boulevard Suite 100 West Sacramento, California 95691	(916) 373-3710	nahc@nahc.ca.gov		2/21/2024	In a letter dated February 21, 2024, the NAHC stated that the SLF results were negative and suggested to contact the local Native American representatives on the list provided.
Dumna Wo-Wah Tribal Government	Robert Ledger	Chairperson	2191 West Pico Ave. Fresno, CA 93705	(559) 540-6346	ledgerrobert@ymail.com	2/27/2024	3/7/2024	No response.
North Fork Rancheria of Mono Indians	Fred Beihn	Chairperson	P.O. Box 929 North Fork, CA 93643	(559) 877-2461	fbeihn@nfr-nsn.gov	2/27/2024	3/7/2024	No response.
North Fork Rancheria of Mono Indians	Mary Stalter	Environmental/Heritage Manager	P.O. Box 929 North Fork, CA 93643	(559) 877-2461	mstalter@nfr-nsn.gov	2/27/2024	3/7/2024	No response.
Northern Valley Yokut/Ohlone Tribe	Timothy Perez	Tribal Compliance Officer	P.O. Box 717 Linden, CA 95236	(209) 662-2788	huskanam@gmail.com	2/27/2024	3/7/2024	No response.
Picayune Rancheria of the Chukchansi Indians	Heather Airey	Tribal Historic Preservation Officer	P.O. Box 2226 Oakhurst, CA 93644	(559) 795-5986	hairey@chukchansi-nsn.gov	2/27/2024	3/7/2024	No response.
Picayune Rancheria of the Chukchansi Indians	Tracey Hopkins	Chairperson	P.O. Box 2226 Oakhurst, CA 93644	(559) 412-5590	council@chukchansi-nsn.gov	2/27/2024	3/7/2024	No response.
Santa Rosa Rancheria Tachi Yokut Tribe	Nichole Escalon	Cultural Specialist I	P.O. Box 8 Lemoore, CA 93245	(559) 924-1278	nescalone@tachi-yokut-nsn.gov	2/27/2024	3/7/2024	No response.
Santa Rosa Rancheria Tachi Yokut Tribe	Shana Powers	THPO	P.O. Box 8 Lemoore, CA 93245	(559) 423-3900	spowers@tachi-yokut-nsn.gov	2/27/2024	3/7/2024	No response.
Santa Rosa Rancheria Tachi Yokut Tribe	Samantha McCarty	Cultural Specialist II	P.O. Box 8 Lemoore, CA 93245	(559) 633-3440	smccarty@tachi-yokut-nsn.gov	2/27/2024	3/7/2024	No response.
Table Mountain Rancheria	Michelle Heredia-Cordova	Chairperson	P.O. Box 410 Friant, CA 93626	(559) 822-2587	mhcordova@tmr.org	2/27/2024	3/7/2024	No response.
Table Mountain Rancheria	Bob Pennell	Cultural Resource Director	P.O. Box 410 Friant, CA 93626	(559) 325-0351	rpennell@tmr.org	2/27/2024	3/7/2024	No response.
Traditional Choinumni Tribe	David Alvarez	Chairperson	2415 E. Houston Avenue Fresno, CA 93720	(559) 217-0396	davealvarez@sbcglobal.net	2/27/2024	3/7/2024	No response.
Tule River Indian Tribe	Neil Peyron	Chairperson	P.O. Box 589 Porterville, CA 93258	(559) 781-4271	neil.peyron@tulrivertribe-nsn.gov	2/27/2024	3/7/2024	No response.
Tule River Indian Tribe	Kerri Vera	Environmental Department	P.O. Box 589 Porterville, CA 93258	(559) 783-8892	kerri.vera@tulerivertribe-nsn.gov	2/27/2024	3/7/2024	No response.
Tule River Indian Tribe	Joey Garfield	Tribal Archaeologist	P.O. Box 589 Porterville, CA 93258	(559) 783-8932	joey.garfield@tulerivertribe-nsn.gov	2/27/2024	3/7/2024	No response.
Wuksache Indian Tribe/Eshom Valley Band	Kenneth Woodrow	Chairperson	1179 Rock Haven Ct. Salinas, CA 93906	(831) 443-9702	kwood8934@aol.com	2/27/2024	3/7/2024	No response.