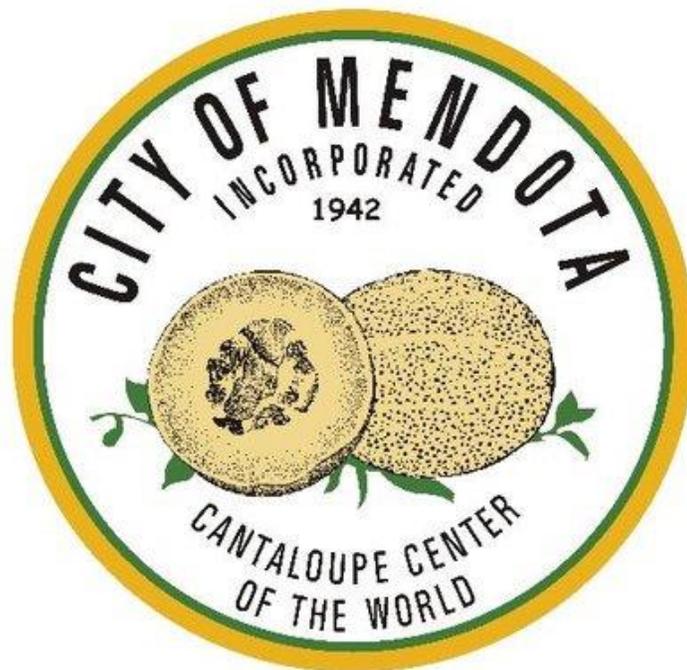


City of Mendota

Rojas Pierce Park Expansion Project

Administrative Draft Initial Study/ Mitigated Negative Declaration

June 2019



Prepared for:
City of Mendota

Prepared by:
Provost & Pritchard Consulting Group
286 W. Cromwell Avenue, Fresno, California 93711



**COPYRIGHT 2019 by PROVOST & PRITCHARD CONSULTING GROUP
ALL RIGHTS RESERVED**

Provost & Pritchard Consulting Group expressly reserves its common law copyright and other applicable property rights to this document. This document is not to be reproduced, changed, or copied in any form or manner whatsoever, nor are they to be assigned to a third party without first obtaining the written permission and consent of Provost & Pritchard Consulting Group. In the event of unauthorized reuse of the information contained herein by a third party, the third party shall hold the firm of Provost & Pritchard Consulting Group harmless, and shall bear the cost of Provost & Pritchard Consulting Group's legal fees associated with defending and enforcing these rights.

Report Prepared on behalf of:

City of Mendota

Contact:

Cristian Gonzalez

643 Quince Street

Mendota, CA 93640

Cristian@cityofmendota.com

(559) 655-4298

Report Prepared by:

Provost & Pritchard Consulting Group

Briza Sholars, Environmental Project Manager, QA/QC

Michael Osborn, Engineering Project Manager

Brooke Fletcher, Biologist

Trevor Stearns, GIS/ Assistant Planner

Jackie Lancaster, Administrative Support

Jeffrey O'Neal, AICP, QA/QC

Contact:

Briza Sholars

(559) 449-2700

bsholars@ppeng.com

Table of Contents

Acronyms and Abbreviations	vi
1 Introduction.....	1-1
1.1 Regulatory Information.....	1-1
1.2 Document Format	1-1
2 Project Description.....	2-1
2.1 Project Background and Objectives.....	2-1
2.1.1 Project Title.....	2-1
2.1.2 Lead Agency Name and Address.....	2-1
2.1.3 Contact Person and Phone Number.....	2-1
2.1.4 Project Location	2-1
2.1.5 Latitude and Longitude	2-1
2.1.6 Description of Project	2-1
2.1.7 Surrounding Land Uses and Setting.....	2-3
2.1.8 Other Public Agencies Whose Approval May Be Required.....	2-3
2.1.9 Consultation with California Native American Tribes.....	2-3
Environmental Factors Potentially Affected.....	2-9
3 Impact Analysis	3-10
3.1 Aesthetics.....	3-10
3.1.1 Environmental Setting.....	3-10
3.1.2 Impact Assessment	3-11
3.2 Agriculture and Forestry Resources	3-12
3.2.1 Environmental Setting.....	3-12
3.2.2 Impact Assessment	3-13
3.3 Air Quality	3-16
3.3.1 Environmental Setting.....	3-16
3.3.2 Methodology	3-16
3.3.3 Impact Assessment	3-20
3.4 Biological Resources	3-23
3.4.1 Environmental Setting.....	3-23
3.4.2 Methodology	3-24
3.4.3 Impact Assessment	3-31
3.5 Cultural Resources	3-35

3.5.1	Environmental Setting.....	3-35
3.5.2	Impact Assessment	3-36
3.6	Energy.....	3-38
3.6.1	Environmental Setting.....	3-38
3.6.2	Impact Assessment	3-38
3.7	Geology and Soils.....	3-40
3.7.1	Environmental Setting.....	3-40
3.7.2	Impact Assessment	3-41
3.8	Greenhouse Gas Emissions	3-44
3.8.1	Environmental Setting.....	3-44
3.8.2	Methodology	3-45
3.8.3	Impact Assessment	3-48
3.9	Hazards and Hazardous Materials.....	3-51
3.9.1	Environmental Setting.....	3-51
3.9.2	Impact Assessment	3-52
3.10	Hydrology and Water Quality	3-54
3.10.1	Environmental Setting.....	3-54
3.10.2	Impact Assessment	3-55
3.11	Land Use and Planning	3-58
3.11.1	Environmental Setting.....	3-58
3.11.2	Impact Assessment	3-59
3.12	Mineral Resources	3-62
3.12.1	Environmental Setting.....	3-62
3.12.2	Impact Assessment	3-62
3.13	Noise	3-64
3.13.1	Environmental Setting.....	3-64
3.13.2	Impact Assessment	3-66
3.14	Population and Housing	3-68
3.14.1	Environmental Setting.....	3-68
3.14.2	Impact Assessment	3-68
3.15	Public Services	3-69
3.15.1	Environmental Setting.....	3-69
3.15.2	Impact Assessment	3-70
3.16	Recreation.....	3-72

3.16.1	Environmental Setting.....	3-72
3.16.2	Impact Assessment	3-73
3.17	Transportation	3-74
3.17.1	Environmental Setting.....	3-74
3.17.2	Impact Assessment	3-75
3.18	Tribal Cultural Resources.....	3-77
3.18.1	Environmental Setting.....	3-77
3.18.2	Impact Assessment	3-77
3.19	Utilities and Service Systems	3-79
3.19.1	Environmental Setting.....	3-79
3.19.2	Impact Assessment	3-80
3.20	Wildfire	3-82
3.20.1	Environmental Setting.....	3-82
3.20.2	Impact Assessment	3-83
3.21	CEQA Mandatory Findings of Significance	3-84
3.21.1	Impact Assessment	3-84
4	Mitigation Monitoring and Reporting Program.....	4-1
5	References	5-1
6	List of Preparers.....	6-1
Appendix A.....		A-1
Air Quality and Greenhouse Gas Emissions Evaluation Report		A-1
Appendix B.....		B-1
Biological Evaluation Report.....		B-1
Appendix C.....		C-1
Cultural Information.....		C-1
Appendix D		D-1
Soils Report		D-1

List of Figures

Figure 2-1. Regional Location Map	2-5
Figure 2-2. Topographic Quadrangle Map	2-6
Figure 2-3. Area of Potential Effect Map	2-7
Figure 2-4. Site Plan.....	2-8
Figure 3-1. Farmland Designation Map	3-15
Figure 3-2. FEMA Flood Map.....	3-57
Figure 3-3. Zoning Map.....	3-60
Figure 3-4. General Plan Land Use Designation Map.....	3-61

List of Tables

Table 3-1. Aesthetics Impacts.....	3-10
Table 3-2. Agriculture and Forestry Resources Impacts	3-12
Table 3-3. Air Quality Impacts	3-16
Table 3-4. Summary of Ambient Air Quality Standards and Attainment Designation.....	3-18
Table 3-5. Unmitigated Short-Term Construction-Generated Emissions of Criteria Air Pollutants	3-20
Table 3-6. Unmitigated Long-Term Operational Emissions.....	3-21
Table 3-7. Biological Resources Impacts	3-23
Table 3-8. List of Special Status Animals with Potential to Occur Onsite and/or in the Vicinity.....	3-25
Table 3-9. List of Special Status Plants with Potential to Occur Onsite and/or in the Vicinity	3-29
Table 3-10. Cultural Resources Impacts	3-35
Table 3-11. Energy Impacts	3-38
Table 3-12. Geology and Soils Impacts.....	3-40
Table 3-13. Greenhouse Gas Emissions Impacts	3-44
Table 3-14. Short-Term Construction-Generated GHG Emissions.....	3-48
Table 3-15. Long-Term Operational GHG Emissions	3-49
Table 3-16. Hazards and Hazardous Materials Impacts.....	3-51
Table 3-17. Hydrology and Water Quality Impacts	3-54
Table 3-18. Land Use and Planning Impacts	3-58
Table 3-19. Mineral Resources Impacts	3-62
Table 3-20. Noise Impacts	3-64
Table 21. Exterior Noise Level Performance Protection Standards	3-65

Table 22. Typical Construction Equipment Noise Levels	3-66
Table 3-23. Population and Housing Impacts	3-68
Table 3-24. Public Services Impacts	3-69
Table 3-25. Recreation Impacts.....	3-72
Table 3-26. Transportation/Traffic Impacts.....	3-74
Table 3-27. Trip Generation	3-75
Table 3-28. Tribal Cultural Resources Impacts.....	3-77
Table 3-29. Utilities and Service Systems Impacts	3-79
Table 3-30. Wildfire Impacts	3-82
Table 3-31. Mandatory Findings of Significance Impacts.....	3-84
Table 4-1. Mitigation Monitoring and Reporting Program.....	4-2

Acronyms and Abbreviations

AB	Assembly Bill
AE-20	Exclusive Agricultural
APE	Area of Potential Effect
APN	Assessor’s Parcel Number
CAA	Clean Air Act
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
Cal/OSHA	California Division of Occupational Safety and Health
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CAAQS	California Ambient Air Quality Standards
CCAA	California Clean Air Act
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CH ₄	Methane
CNDDDB	California Department of Fish and Wildlife Natural Diversity Database
CNPS	California Native Plant Society
CO	Carbon Monoxide
CO _{2e}	Carbon Dioxide Equivalent
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substance Control
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program
GHG	Greenhouse Gas
GIS	Geographic Information System
IPaC	U.S. Fish and Wildlife Service’s Information for Planning and Consultation system
IS	Initial Study
IS/MND	Initial Study/Mitigated Negative Declaration
MBTA	Migratory Bird Treaty Act

MMRP	Mitigation Monitoring & Reporting Program
MND.....	Mitigated Negative Declaration
MRZ.....	Mineral Resource Zones
MT CO ₂ e.....	Metric Tons of Carbon Dioxide Equivalent
NAAQS.....	National Ambient Air Quality Standards
ND	Negative Declaration
NEPA	National Environmental Policy Act
NO ₂	Nitrogen Dioxide
NOX.....	Nitrogen Oxide
NPDES.....	National Pollutant Discharge Elimination System
NRCS.....	Natural Resources Conservation Service
O ₃	Ozone
Pb	Lead
PM _{2.5}	Particulate Matter less than 2.5 microns in diameter
PM ₁₀	Particulate Matter less than 10 microns in diameter
Project.....	Rojas Pierce Park Expansion
ROG.....	Reactive Organic Gases
SJVAB.....	San Joaquin Valley Air Basin
SJVAPCD.....	San Joaquin Valley Air Pollution Control District
SO ₂	Sulfur Dioxide
SR	State Route
SWRCB.....	State Water Resources Control Board
SWPPP.....	Storm Water Pollution Prevention Plan
TAC	Toxic Air Contaminants
TPY	Tons Per Year
USDA	U. S. Department of Agriculture
USFWS	U. S. Fish and Wildlife Service

1 Introduction

Provost & Pritchard Consulting Group (Provost & Pritchard) has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) on behalf of the City of Mendota (City) to address the potential environmental effects of the Rojas Pierce Park Expansion Project (Project or proposed Project). This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 *et seq.* The City of Mendota (City) is the CEQA lead agency for this proposed Project.

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

1.1 Regulatory Information

An Initial Study (IS) is a document prepared by a lead agency to determine whether a project may have a significant effect on the environment. In accordance with California Code of Regulations Title 14 (Chapter 3, Section 15000, *et seq.*)-- also known as the CEQA Guidelines-- Section 15064 (a)(1) states that an environmental impact report (EIR) must be prepared if there is substantial evidence in light of the whole record that the proposed Project under review may have a significant effect on the environment and should be further analyzed to determine mitigation measures or project alternatives that might avoid or reduce project impacts to less than significant levels. A negative declaration (ND) may be prepared instead if the lead agency finds that there is *no* substantial evidence in light of the whole record that the project may have a significant effect on the environment. An ND is a written statement describing the reasons why a proposed Project, not otherwise exempt from CEQA, would not have a significant effect on the environment and, therefore, why it would not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070, a ND or *mitigated* ND shall be prepared for a project subject to CEQA when either:

- a. The IS shows there is no substantial evidence, in light of the whole record before the agency, that the proposed Project may have a significant effect on the environment, or
- b. The IS identified potentially significant effects, but:
 1. Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed MND and IS is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur is prepared, and
 2. There is no substantial evidence, in light of the whole record before the agency, that the proposed Project *as revised* may have a significant effect on the environment.

1.2 Document Format

This IS/MND contains six chapters and four appendices. **Chapter 1, Introduction**, provides an overview of the proposed Project and the CEQA process. **Chapter 2, Project Description**, provides a detailed description of proposed Project components and objectives. **Chapter 3, Impact Analysis**, presents the CEQA checklist and environmental analysis for all impact areas, mandatory findings of significance, and feasible mitigation measures. If the proposed Project does not have the potential to significantly impact a given issue area, the relevant section provides a brief discussion of the reasons why no impacts are expected. If the proposed Project could have a potentially significant impact on a resource, the issue area discussion provides a description of potential impacts, and appropriate mitigation measures and/or permit requirements

that would reduce those impacts to a less than significant level. **Chapter 4, Mitigation Monitoring and Reporting Program** (MMRP), provides the proposed mitigation measures, implementation timelines, and the entity/agency responsible for ensuring implementation. **Chapter 5 is References** and **Chapter 6 is Preparers**.

The CalEEMod Output Files, Biological Evaluation Report, Cultural Resources Information, and NRCS Soil Resource Report are provided as technical **Appendix A, Appendix B, Appendix C** and **Appendix D**, respectively, at the end of this document.

The analyses of environmental impacts in **Chapter 3** are separated into the following categories:

Potentially Significant Impact. This category is applicable if there is substantial evidence that an effect may be significant, and no feasible mitigation measures can be identified to reduce impacts to a less than significant level. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.

Less than Significant with Mitigation Incorporated. This category applies where the incorporation of mitigation measures would reduce an effect from a “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measure(s), and briefly explain how they would reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced).

Less Than Significant Impact. This category is identified when the proposed Project would result in impacts below the threshold of significance, and no mitigation measures are required.

No Impact. This category applies when a project would not create an impact in the specific environmental issue area. “No Impact” answers do not require a detailed explanation if they are adequately supported by the information sources cited by the lead agency, which show that the impact does not apply to the specific project (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).

2 Project Description

2.1 Project Background and Objectives

2.1.1 Project Title

Rojas Pierce Park Expansion Project

2.1.2 Lead Agency Name and Address

City of Mendota
643 Quince Street
Mendota, CA 93640

2.1.3 Contact Person and Phone Number

Lead Agency Contact
Cristian Gonzalez, City Manager
Cristian@cityofmendota.com
(559) 655-4298

CEQA Consultant
Provost & Pritchard Consulting Group
Briza Sholars, Environmental Project Manager
bsholars@ppeng.com
(559) 449-2700

2.1.4 Project Location

The project site is located in western Mendota. Mendota is approximately 35 miles west of Fresno, and eight miles south of Firebaugh in western Fresno County (see **Figure 2-1**). State Routes 180 and 33 intersect approximately ½-mile northeast of the project site. The park is situated in Section 36, Township 13 South, Range 14 East, Mount Diablo Base & Meridian; Assessor's Parcel Number 012-190-55ST and 012-190-56ST.

2.1.5 Latitude and Longitude

The approximate centroid of the Project area is 36°45'21.06" North, 120°23'29.45" West.

2.1.6 Description of Project

2.1.6.1 Project Background and Purpose

Rojas-Pierce Park is located at the intersection of Smoot Avenue and Sorensen Avenue in the City of Mendota. The original park became a memorial for Fresno County soldiers who died in the Vietnam War. The park was upgraded in 1981, but until recently had received no additional improvement since that time.

In 2006, the City of Mendota retained the services of SSA Landscape Architects, Inc. to provide master planning services for the renovation and expansion of the park. Phase I of the project, completed in October

2008, involved the demolition and removal of nearly all onsite facilities within the original 12-acre park site and subsequent construction of new facilities. Amenities included new landscaping, a concert pavilion, a splash park, two jungle-gym play areas, a temporary skate park, three basketball courts, a permanent concession stand, restrooms, and an emergency/maintenance access road. Additionally, a single soccer field was constructed on a small portion of the City property on which the current project proposes to expand. The northern portion of the Sorenson Avenue frontage contains a decorative 3½-foot wall.

The intent of the proposed project is to continue, but not complete, the master-planned facilities as commissioned by the Mendota City Council in 2006, and to provide a high-quality, easily-accessible recreational venue for the residents of Mendota and the surrounding area.

The land is pre-zoned O (Open Space and Recreation) and R-2 (Multiple Family Medium High Density Residential), City of Mendota, zoned AE-20 (Exclusive Agriculture, Fresno County) with a General Plan Designation of Recreational and Medium Density Residential (City of Mendota); Agriculture (Fresno County)

2.1.6.2 Project Description

The 10-acre parcel of land adjacent to the existing park (currently outside the city limits) will receive two additional soccer fields, and a baseball diamond, and covered bleachers and sports field light-emitting diode (LED) lighting. Beyond the outfield of the baseball diamond an open space area will double as a storm water basin. Smoot Avenue will be fully improved to City local street standards (60-foot right-of-way) along the parcel frontage. The eastern half of Amador Street will be improved to City arterial street standards (84-foot right-of-way) extending from the residential development to the north to the Smoot Avenue extension. This will complete the circulation system in the area. An on-street parking lot will be constructed adjacent to Smoot Avenue, providing approximately 80 additional on-street parking spaces including four Americans with Disabilities (ADA) compliant stalls, one of which is van accessible. The development activities also include shade structures, installation of turf and trees, and continuation of the park's interior pedestrian circulation system. Another concession stand and permanent restroom facility will be added which includes two unisex bathrooms, a storage room, and drinking fountain. For the purposes of this CEQA document the area of potential effect (APE) is approximately 15.4 acres.

The park is separated from the adjacent subdivisions by standard residential wood fencing. For the safety of both the facility and patrons of the park, chain link fencing with gates provides a perimeter along street frontages. This fencing is six feet high along most of the perimeter and 12 feet high at the outfield of the baseball fields.

Both within the existing park and the proposed expansion, large- and medium-size trees are oriented along the property lines as an additional buffer between the facility and the residential areas. Trees are also aligned with the existing and proposed walkways that traverse the park. Aside from the existing and proposed athletic fields, a large portion of the turfed area is designated as “unprogrammed grass area,” and is intended for general recreation. Onsite structures are primarily located in the central area of the park, and thus create a minimal visual impact to the adjacent areas.

Vehicular and pedestrian access to the site is available from both Smoot Avenue and Sorensen Avenue. The project will also provide vehicular and pedestrian access from Amador Street.

The portion of the project site that is outside of the city limits is currently an informal soccer field and fallow agricultural field that was a part of farmland retired by Westlands Water District as part of a lawsuit settlement with the United States Department of the Interior, Bureau of Reclamation. On August 12, 2008, the City Council of the City of Mendota adopted Resolution No. 08-32, resulting in the acceptance of a grant deed from Westlands Water District. The property so conveyed through that grant deed comprises the additional park acreage to be developed with this project.

The 10-acre parcel of land adjacent to the existing park currently in the County of Fresno, and within the City's Sphere of Influence is proposed to be annexed to the City of Mendota. APN No. 012-19-55ST.

2.1.6.3 Construction/ Operation and Maintenance

Construction of the Project is anticipated to be completed within approximately eight months, which will include grading, site preparation, and construction of the park facilities. Construction will likely take place September 2019 through April 2020. Construction equipment will likely include a backhoe, grader, front loader, dump truck (or two) sheeps foot and/or a roller, auger, concrete mixer, maybe a crane for the lights and hand tools. Construction will require one super, one foreman, two operators, four laborers/carpenters/masons.

Generally, construction will occur between the hours of 7am and 5pm, Monday through Friday, excluding holidays. Staging areas will be located onsite.

Although construction is not expected to generate hazardous waste, field equipment used during construction has the potential to contain various hazardous materials such as diesel fuel, hydraulic oil, grease, solvents, adhesives, paints, and other petroleum-based products.

2.1.7 Surrounding Land Uses and Setting

The Project is located just outside of the western edge of Mendota's City Limits. The City of Mendota is located in western Fresno county near the confluence of the San Joaquin River and the Fresno Slough. State Route 33 (SR33) and State Route 180 (SR 180) also intersect in Mendota. The Project is approximately 0.25 miles west of SR 33. The Union Pacific Railroad maintains a line parallel to (east of) SR 180 through the City of Mendota.

The Project site is surrounded by vacant/agricultural lands to the south and west, residential development to the north, and Rojas-Pierce Park to the east. A portion of the site is partially developed as an informal soccer field, the remainder is vacant land. The site is zoned AE-20 (Exclusive Ag, 20-acre minimum) by Fresno County and pre-zoned as O (Open Space and Recreation) and R-2 (Multiple Family Medium High Density Residential), **See Figure 3-3. Zoning** and designated as Recreational/Multi-Use and Open Space by the City of Mendota General Plan.

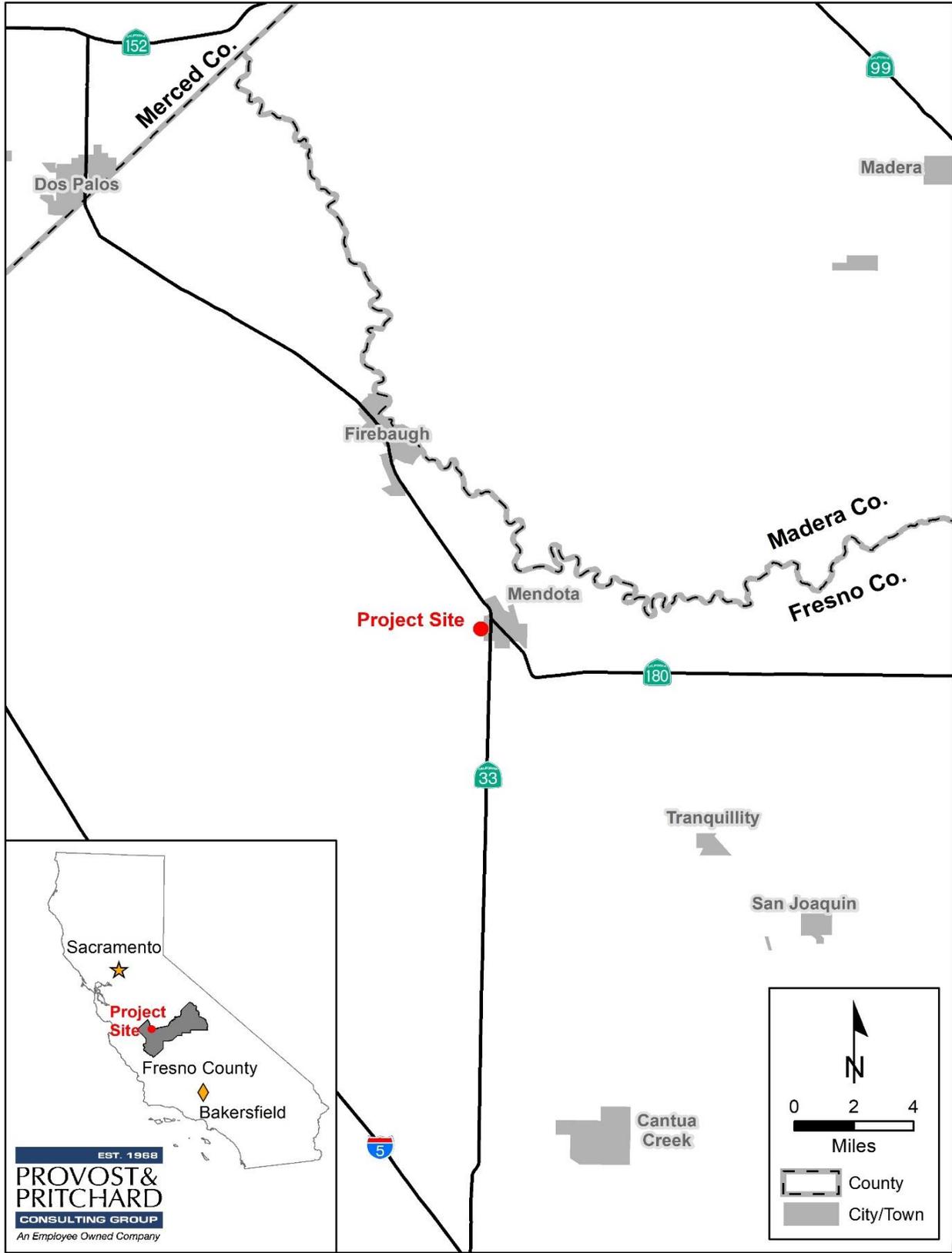
2.1.8 Other Public Agencies Whose Approval May Be Required

- State Water Resources Control Board – NPDES Construction General Permit
- San Joaquin Valley Air Pollution Control District – rules and regulations (Regulation VIII, Rule 9510; Regulation IV, Rule 4702)

2.1.9 Consultation with California Native American Tribes

Assembly Bill 52 (AB 52; codified at Public Resources Code Section 21080.3.1, *et seq.*) requires that a lead agency, within 14 days of determining that it will undertake a project, must notify in writing any California Native American Tribe traditionally and culturally affiliated with the geographic area of the project if that Tribe has previously requested notification about projects in that geographic area. The notice must briefly describe the project and 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 will be made.

On August 8, 2016, the City of Mendota (City) received a letter from the Santa Rosa Rancheria Tachi Tribe. City staff initiated consultation in April 4, 2019 for the Rojas Pierce Park Expansion Project pursuant to Public Resources Code Section 21080.3.1 requesting notification of proposed projects. All Tribal correspondence is discussed in further detail in **Sections 3.5** and **3.18** of **Chapter 3** and included as **Appendix C**.



4/9/2019: G:\Mendota_City of-3336\333619004-Rojas Pierce Park Impr\GIS\Map\Regional_Location.mxd

Figure 2-1. Regional Location Map



4/3/2019 : G:\Mendota_City of-3336\333619004-Rojas Pierce Park Impr\GIS\Map\Aerial.mxd

Figure 2-3. Area of Potential Effect Map

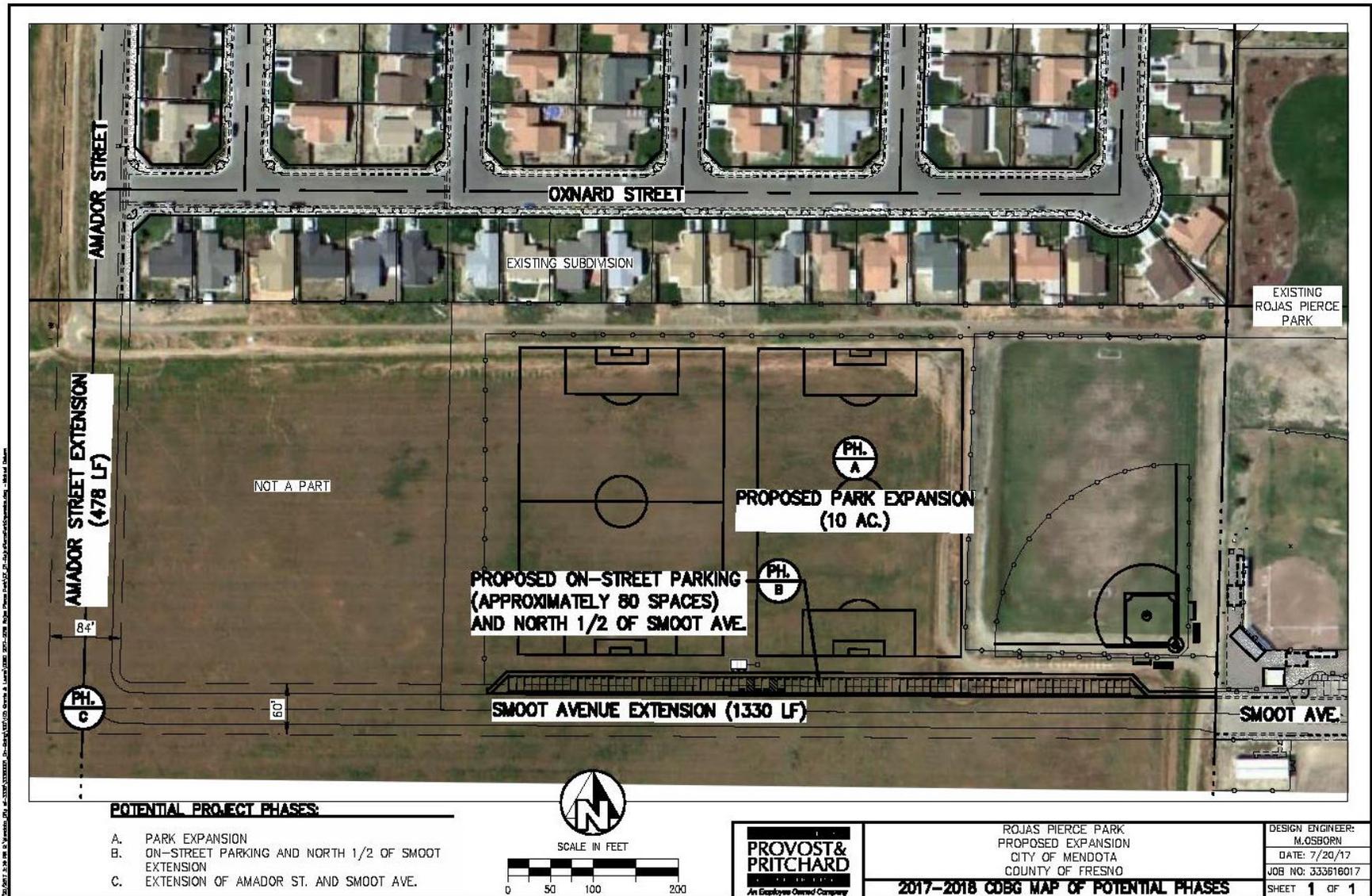


Figure 2-4. Site Plan

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, as indicated by the checklist and subsequent discussion on the following pages.

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

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- 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 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 ENVIRONMENTAL IMPACT REPORT 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.



Signature

6/16/19

Date

Cristian Gonzalez/City Manager

Printed Name/Position

3 Impact Analysis

3.1 Aesthetics

Table 3-1. Aesthetics Impacts

Aesthetics				
Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.1.1 Environmental Setting

The Project is located in the northwestern part of Fresno County in the Central San Joaquin Valley. Lands in the vicinity consist of relatively flat irrigated farmland, single family subdivisions, and a City operated park. The Project is adjacent to the western City limit boundary of Mendota. Agricultural practices in the vicinity consist of row crop and orchard cultivation. In Fresno County, a portion of State Route 180 (SR 180) has been officially identified by Caltrans as a “designated State Scenic Highway;” however, that segment is approximately 52 miles east of the Project. Mendota is located approximately 40 miles west of the foothills of the Sierra Nevada and approximately 18 miles east of the foothills of the Coastal Range. The Coastal Range can be seen on a clear day from the vantage point of the Project site. The majority of the Project site is currently vacant land with a desolate soccer field in the eastern portion of the Project site. The proposed Project is consistent with the aesthetics of the area.

3.1.1.1 Local

City of Mendota General Plan¹: The Mendota General Plan sets forth the following goals and policies that protect the aesthetic character of the City and which have potential relevance to the Project’s CEQA review:

- LU-3.1 *Aesthetics, visual quality and character defining features of the community shall be maintained with development standards for landscaping, setbacks, signs, fencing and other visual characteristics of development.*
- OSC-8.8 *Ensure that land uses do not produce glare, the spillage of light off-site, upward illumination or sky glow.*

¹ City of Mendota General Plan <http://ci.mendota.ca.us/wp-content/uploads/2014/06/City-of-Mendota-General-Plan-Update.pdf> Accessed April 17, 2019.

3.1.2 Impact Assessment

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

a) **Less Than Significant Impact.** The proposed impact areas include the developed soccer field within the park and an expansion of development and facilities into the ruderal vacant lot west of the existing park boundary. There is an existing subdivision to the north and a ruderal-fallow field to the south. To the west, there is a compacted dirt road, beyond which lies an expanse of fallow fields. There is no viewshed of particular importance that would be affected by the proposed project. Permanent features that may result in visible obstructions include lighting and trees; however, the existing view is primarily of idle agricultural land, existing urban features and the existing Rojas Pierce Park.

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

b) **No Impact.** The Scenic Highway Program was created to preserve and protect scenic highway corridors from change which would diminish the aesthetic value of lands adjacent to highways. A highway may be officially designated “scenic” depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view.

There are no trees, rock outcroppings, or historical buildings near a designated state scenic highway that would be substantially damaged by the Project. An approximate 24-mile segment of SR 180 located in southeastern Fresno County and north-central Tulare County is designated as a State Scenic Highway. Project activities would occur approximately 56 miles west and therefore would not adversely affect the scenic qualities of the highway.

I-c) Would the project, 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?

c) **Less Than Significant Impact.** The Project site is surrounded agricultural, residential uses, and recreational uses. The Project is located on a flat parcel which is currently developed with a soccer field and some vacant areas. This project would improve the area by increasing the size and recreational uses of the existing Rojas Pierce Park and by improving the traffic circulation in the area by constructing the street alignment. Impacts would be less than significant.

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

d) **Less Than Significant Impact.** The proposed project would include some lighting improvements. Lighting would be consistent with the lighting in the existing Rojas Pierce Park and would improve safety in the neighborhood. All lights would be hooded and angled downwards. Impacts would be less than significant.

3.2 Agriculture and Forestry Resources

Table 3-2. Agriculture and Forestry Resources Impacts

Agriculture and Forest Resources				
Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.2.1 Environmental Setting

The Project is located in the California’s Central San Joaquin Valley in Fresno County and more specifically adjacent to the City of Mendota. Fresno County is located within California’s agricultural heartland. For crop year 2016-2017, Fresno County ranked third for the top agricultural counties in the State in the estimated value of agricultural production, which is 7.04 billion dollars.²

A wide range of commodities are grown in the county, with major production of milk, poultry, livestock, and other animal commodities, row crops, nuts and fruit tree crops, and vegetables. Rich soil, irrigation water, Mediterranean climate and steady access to local, national and global markets make this possible.

² USDA. California County Agricultural Commissioners’ Reports 2016-2017. https://www.nass.usda.gov/Statistics_by_State/California/Publications/AgComm/2017/2017croptyearcactb00.pdf Accessed March 13, 2019.

3.2.1.1 Local

City of Mendota General Plan³: The Mendota General Plan sets forth the following goals and policies that protect the agricultural resources of the City and which have potential relevance to the Project's CEQA review:

- *OSC-4.3 The City of Mendota will continue to coordinate planning efforts with Fresno county to ensure that a buffer is preserved between urban development in the City and productive agricultural lands in the unincorporated County.*

3.2.2 Impact Assessment

II-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?

a) **Less Than Significant Impact.** The Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data use for analyzing impacts to California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. The Important Farmland maps identify eight land use categories, five of which are agriculture related: prime farmland, farmland of statewide importance, unique farmland, farmland of local importance, and grazing land. The ones onsite or adjacent to the Project site are summarized below⁴:

- *FARMLAND OF LOCAL IMPORTANCE (L): Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.*
- *URBAN AND BUILT-UP LAND (D): Land occupied by structures with a building density of at least 1 unit per 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.*

As demonstrated in **Figure 3-1**, the FMMP for Fresno County designates the site of the Rojas Pierce Park Expansion Project as Farmland of Local importance and Urban and Built-Up Land. The property is currently within the City of Mendota Sphere of Influence and will be annexed from the County as a part of the project. The Project site is zoned as AE-20 by Fresno County, however, it has been pre-zoned with the zoning designation of O (Open Space/Recreation) and R-2 (Multiple Family Medium High Density Residential), **see Figure 3-3. Zoning**. Furthermore, the Project is planned as Recreational and Medium Density Residential by the Mendota General Plan (**Figure 3-4. General Plan Land Use Designation**). The existing Rojas-Pierce Park is zoned as PF (Public Facilities) and designated by the Mendota General Plan as Recreational. Surrounding zone designations and General Plan land use designation are detailed in **Figure 3-4**. Impacts will be less than significant.

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

b) **Less Than Significant Impact.** The Project site is zoned as AE-20 by Fresno County, however, it has been pre-zoned with the zoning designation of O (Open Space/Recreation) and R-2 (Multiple Family Medium High Density Residential), and is planned for annexation to the city. The parcels to be improved are not subject to a Williamson Act contract. Impacts are less than significant.

II-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

³ City of Mendota General Plan <http://ci.mendota.ca.us/wp-content/uploads/2014/06/City-of-Mendota-General-Plan-Update.pdf> Accessed April 17, 2019.

⁴ California Department of Conservation. FMMP – Report and Statistics. <http://www.conservacion.ca.gov/dlrp/fmmp/products/Pages/ReportsStatistics.aspx>. Accessed March 13, 2019.

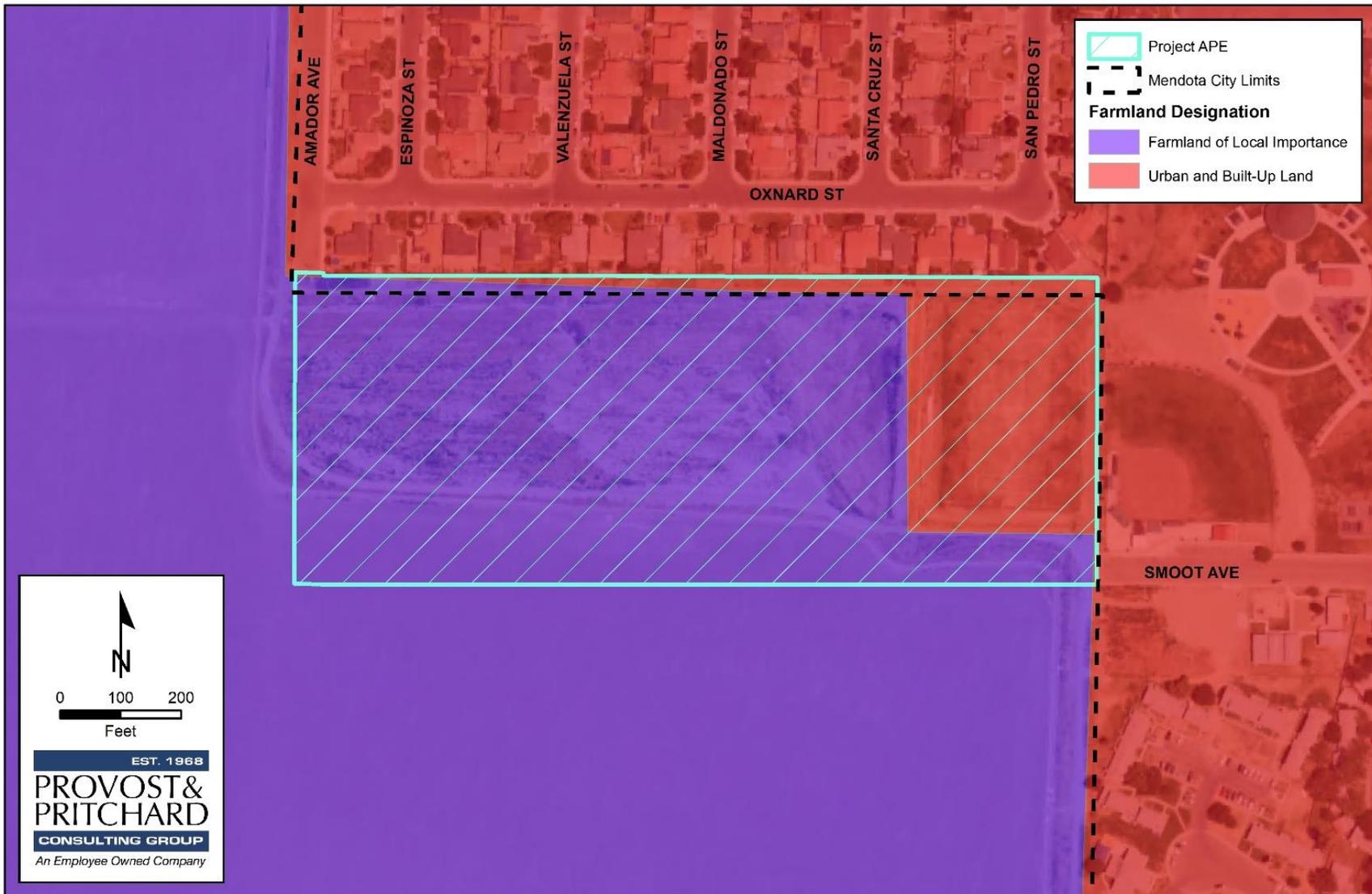
4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

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

c and d) **No Impact.** There are no forest lands or timberlands within the Project site or vicinity. There will be no impact.

II-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?

e) **Less Than Significant Impact.** As discussed above in Impact Assessments II a-d, the Project involves the expansion of an existing park adjacent to the City of Mendota. The Project will not result in land use conversion of farmland or forest land, either directly or indirectly. There will be no impact.



4/9/2019 : G:\Mendota_City of-3336\333619004-Rojas Pierce Park Impr\GIS\Map\Farmland.mxd

Figure 3-1. Farmland Designation Map

3.3 Air Quality

Table 3-3. Air Quality Impacts

Air Quality				
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.3.1 Environmental Setting

The Project lies within the eight-county San Joaquin Valley Air Basin (SJVAB), which is managed by the San Joaquin Valley Air Pollution Control District (SJVAPCD). Air quality in the SJVAB is influenced by a variety of factors, including topography, local and regional meteorology. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) have been established for the following criteria pollutants: carbon monoxide (CO), ozone (O₃), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), particulate matter (PM₁₀ and PM_{2.5}), and lead (Pb). The CAAQS also set standards for sulfates (SO₄), hydrogen sulfide (H₂S), vinyl chloride (C₂H₃Cl) and visibility.

Air quality plans or attainment plans are used to bring the applicable air basin into attainment with all State and Federal ambient air quality standards designed to protect the health and safety of residents within that air basin. Areas are classified under the Federal Clean Air Act as either “attainment”, “nonattainment”, or “extreme nonattainment” areas for each criteria pollutant based on whether the NAAQS have been achieved or not. Attainment relative to the State standards is determined by the California Air Resources Board (CARB). The San Joaquin Valley is designated as a State and Federal nonattainment area for O₃, a State and Federal nonattainment area for PM_{2.5}, a State nonattainment area for PM₁₀, a Federal and State attainment area for CO, SO₂, and NO₂, and a State attainment area for sulfates, vinyl chloride and Pb⁵.

3.3.2 Methodology

An Air Quality and Greenhouse Gas Emissions Evaluation Report (**Appendix A**) was prepared using CalEEMod, Version 2016.3.2 for the proposed Project in April 2019. The sections below detail the methodology of the air quality and greenhouse gas emissions report and its conclusions.

⁵ San Joaquin Valley Air Pollution Control District. Ambient Air Quality Standards and Valley Attainment Status. <http://www.valleyair.org/aqinfo/attainment.htm>.

3.3.2.1 Short-Term Construction-Generated Emissions

Short-term construction emissions associated with the Project were calculated using CalEEMod, Version 2016.3.2. The emissions modeling includes emissions generated by off-road equipment, haul trucks, and worker commute trips. Emissions were quantified based on anticipated construction schedules and construction equipment requirements provided by the Project applicant. All remaining assumptions were based on the default parameters contained in the model. Localized air quality impacts associated with the Project would be minor and were qualitatively assessed. Modeling assumptions and output files are included in [Appendix A](#).

3.3.2.2 Long-Term Operational Emissions

Long-term operational emissions associated with the Project are estimated to be minimal in nature. Maintenance will be provided on an as needed basis by existing City of Mendota staff. Modeling assumptions and output files are included in [Appendix A](#).

3.3.2.3 Thresholds of Significance

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

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

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

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

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

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

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

Exposure to toxic air contaminants (TAC) would be considered significant if the probability of contracting cancer for the Maximally Exposed Individual (i.e., maximum individual risk) would exceed 10 in 1 million or would result in a Hazard Index greater than 1.

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

Table 3-4. Summary of Ambient Air Quality Standards and Attainment Designation

Summary of Ambient Air Quality Standards & Attainment Designation					
Pollutant	Averaging Time	California Standards*		National Standards*	
		Concentration*	Attainment Status	Primary	Attainment Status
Ozone (O ₃)	1-hour	0.09 ppm	Nonattainment/ Severe	–	No Federal Standard
	8-hour	0.070 ppm	Nonattainment	0.075 ppm	Nonattainment (Extreme)**
Particulate Matter (PM ₁₀)	AAM	20 µg/m ³	Nonattainment	–	Attainment
	24-hour	50 µg/m ³		150 µg/m ³	
Fine Particulate Matter (PM _{2.5})	AAM	12 µg/m ³	Nonattainment	12 µg/m ³	Nonattainment
	24-hour	No Standard		35 µg/m ³	
Carbon Monoxide (CO)	1-hour	20 ppm	Attainment/ Unclassified	35 ppm	Attainment/ Unclassified
	8-hour	9 ppm		9 ppm	
	8-hour (Lake Tahoe)	6 ppm		–	
Nitrogen Dioxide (NO ₂)	AAM	0.030 ppm	Attainment	53 ppb	Attainment/ Unclassified
	1-hour	0.18 ppm		100 ppb	
Sulfur Dioxide (SO ₂)	AAM	–	Attainment	--	Attainment/ Unclassified
	24-hour	0.04 ppm		--	
	3-hour	–		0.5 ppm	
	1-hour	0.25 ppm		75 ppb	
Lead (Pb)	30-day Average	1.5 µg/m ³	Attainment	–	No Designation/ Classification
	Calendar Quarter	–		–	
	Rolling 3-Month Average	–		0.15 µg/m ³	
Sulfates (SO ₄)	24-hour	25 µg/m ³	Attainment	No Federal Standards	
Hydrogen Sulfide (H ₂ S)	1-hour	0.03 ppm (42 µg/m ³)	Unclassified		
Vinyl Chloride (C ₂ H ₃ Cl)	24-hour	0.01 ppm (26 µg/m ³)	Attainment		

Summary of Ambient Air Quality Standards & Attainment Designation					
Pollutant	Averaging Time	California Standards*		National Standards*	
		Concentration*	Attainment Status	Primary	Attainment Status
Visibility-Reducing Particle Matter	8-hour	Extinction coefficient: 0.23/km-visibility of 10 miles or more due to particles when the relative humidity is less than 70%.	Unclassified		

* For more information on standards visit: <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>

** No Federal 1-hour standard. Reclassified extreme nonattainment for the Federal 8-hour standard May 5, 2010.

***Secondary Standard

Source: CARB 2015; SJV-APCD 2015

3.3.2.4 Local

City of Mendota General Plan⁶: The Mendota General Plan sets forth the following goals and policies that pertain to air quality of the City and which are not relevance to the Project’s CEQA review:

San Joaquin Valley Air Pollution Control District: The SJVAPCD is the agency primarily responsible for ensuring that NAAQS and CAAQS are not exceeded and that air quality conditions are maintained in the SJVAB, within which the proposed Project is located. Responsibilities of the SJVAPCD include, but are not limited to, preparing plans for the attainment of ambient air quality standards, adopting and enforcing rules and regulations concerning sources of air pollution, issuing permits for stationary sources of air pollution, inspecting stationary sources of air pollution and responding to citizen complaints, monitoring ambient air quality and meteorological conditions, and implementing programs and regulations required by the CAA and the CCAA.

The SJVAPCD Rules and Regulations that are applicable to the proposed Project include, but are not limited to, the following:

Regulation VIII (Fugitive Dust Prohibitions), Regulation VIII (Rules 8011-8081): This regulation is a series of rules designed to reduce particulate emissions generated by human activity, including construction and demolition activities, carryout and trackout, paved and unpaved roads, bulk material handling and storage, unpaved vehicle/traffic areas, open space areas, etc. If a non-residential area is 5.0 or more acres in area, a Dust Control Plan must be submitted as specified in Section 6.3.1 of Rule 8021. Additional requirements may apply, depending on total area of disturbance.

San Joaquin Valley Air Pollution Control District Thresholds of Significance. Projects that produce emissions that exceed the following thresholds shall be considered significant for a project level and/or cumulatively considerable impact to air quality. The following thresholds are defined for purposes of determining cumulative effects as the baseline for “considerable”. Projects located within the SJVAPCD will be subject to the significance thresholds identified in section 3.3.2.3 above.

⁶ City of Mendota General Plan <http://ci.mendota.ca.us/wp-content/uploads/2014/06/City-of-Mendota-General-Plan-Update.pdf> Accessed April 17, 2019.

3.3.3 Impact Assessment

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

a) **No Impact.** As noted in Impact Assessments III-b and III-c below, implementation of the Project would not result in short-term or long-term increases in emissions that would exceed applicable thresholds of significance. Projects that do not exceed the recommended thresholds would not be considered to conflict with or obstruct the implementation of applicable air quality plans.

III-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?

b) **Less Than Significant Impact.**

Short-Term Construction-Generated Emissions

Construction-generated emissions are temporary in duration, lasting approximately eight months for site preparation, grading, and construction of the park facilities. The construction of the Project would result in the temporary generation of emissions associated with site grading and excavation, motor vehicle exhaust associated with construction equipment and worker trips, as well as the movement of construction equipment on unpaved surfaces.

Estimated construction-generated emissions and operational emissions are summarized in **Table 3-5** and **Table 3-6**, respectively.

Table 3-5. Unmitigated Short-Term Construction-Generated Emissions of Criteria Air Pollutants

Short-Term Construction-Generated Emissions of Criteria Air Pollutants					
Source	Annual Emissions (Tons/Year) ⁽¹⁾				
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}
2019	0.1688	1.8382	1.1429	0.5071	0.2339
2020	0.0531	0.3474	0.3478	0.0414	0.0211
Maximum Annual Proposed Project Emissions:	0.1688	1.8382	1.1429	0.5071	0.2339
SJVAPCD Significance Thresholds:	10	10	100	15	15
Exceed SJVAPCD Thresholds?	No	No	No	No	No

1. Emissions were quantified using CalEEMod Output Files Version 2016.3.2. Refer to Appendix A for modeling results and assumptions. Totals may not sum due to rounding.

Table 3-6. Unmitigated Long-Term Operational Emissions

Long-Term Operational Emissions of Criteria Air Pollutants					
Source	Annual Emissions (Tons/Year) ⁽¹⁾				
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}
Maximum Annual Project Emissions:	0.0120	0.0	0.00014	0.0717	0.0176
SJVAPCD Significance Thresholds:	10	10	100	15	15
Exceed SJVAPCD Thresholds?	No	No	No	No	No

1. Emissions were quantified using CalEEMod Output Files Version 2016.3.2. Refer to Appendix A for modeling results and assumptions. Totals may not sum due to rounding.

It is important to note that the proposed Project would be required to comply with SJVAPCD Regulation VIII (Fugitive PM₁₀ Prohibitions). Mandatory compliance with SJVAPCD Regulation VIII would further reduce emissions of fugitive dust from the Project site, and adequately minimize the proposed Project’s potential to adversely affect nearby sensitive receptors to localized PM impacts.

Given that project-generated emissions would not exceed applicable SJVAPCD significance thresholds and the proposed Project would be required to comply with SJVAPCD Regulation VIII, construction-generated emissions of criteria pollutants would be considered less than significant.

Long-Term Operational Emissions

As illustrated in Table 3-6, long-term operational emissions associated with the Project will be minimal and well below the respective thresholds of significance. Maintenance will continue to be provided by existing City of Mendota staff. Therefore, Project-related impacts to air quality would be considered less than significant.

III-c) Expose sensitive receptors to substantial pollutant concentrations?

c) Less Than Significant Impact.

Toxic Air Contaminants

Implementation of the Project would not result in the long-term operation of any major onsite stationary sources of TACs, nor would Project implementation result in a substantial increase in vehicle trips along area roadways, in comparison to existing conditions. However, construction of the Project may result in temporary increases in emissions of diesel-exhaust particulate matter (DPM) associated with the use of off-road diesel equipment. More than 90% of DPM is less than one µm in diameter, and thus is a subset of PM_{2.5}.⁷ Health-related risks associated with diesel-exhaust emissions are primarily associated with long-term exposure and associated risk of contracting cancer. As such, the calculation of cancer risk associated with exposure of to TACs are typically calculated based on a long-term (e.g., 70-year) period of exposure. The use of diesel-powered construction equipment, however, would be temporary and episodic. Construction activities would occur over an approximate eight-month period, which would constitute less than 1 percent of the typical 70-year exposure period. As a result, exposure to construction-generated DPM would not be anticipated to exceed applicable thresholds (i.e. incremental increase in cancer risk of 10 in one million).

The nearest sensitive receptor is an operational elementary school, which is located approximately 0.25 miles from the Project area. Construction of the Project is not anticipated to result in a substantial increase in DPM

⁷ CARB. Inhalable Particulate Matter. <https://www.arb.ca.gov/research/aaqs/common-pollutants/pm/pm.htm> Accessed 30 April 2019.

or other TACs. As indicated in **Table 3-5**, construction of the Project would generate maximum unmitigated annual emissions of approximately 0.2339 tons/year of PM_{2.5}, which includes DPM. Operation of the Project would generate maximum unmitigated annual emissions of approximately 0.0176 tons/year of PM_{2.5}, as illustrated in **Table 3-6**. Both short-term and long-term Project-related emissions will be minimal, and therefore impacts to sensitive receptors would be less than significant.

Naturally Occurring Asbestos

Naturally-occurring asbestos, which was identified by CARB as a TAC in 1986, is located in many parts of California and is commonly associated with ultramafic rock. The Project site is not located near any areas that are likely to contain ultramafic rock⁸. As a result, risk of exposure to asbestos during the construction process would be considered less than significant.

Fugitive Dust

Construction of the Project would include ground-disturbing activities which could result in increased emissions of airborne particulate matter. The Project would be required to comply with SJVAPCD Regulation VIII (Fugitive PM₁₀ Prohibitions). Mandatory compliance with SJVAPCD Regulation VIII would reduce emissions of fugitive dust from the Project site.

The nearest sensitive receptor is an operational elementary school, which is located approximately 0.25 miles from the Project area. Construction of the Project is not anticipated to result in a substantial increase in particulate matter. As indicated in **Table 3-5** and **Table 3-6**, respectively, construction of the Project would generate maximum unmitigated annual emissions of approximately 0.5071 tons/year of PM₁₀, while operation of the Project would generate maximum unmitigated annual emissions of approximately 0.0717 tons/year of PM₁₀, both of which are substantially less than SJVAPCD's threshold of significance of 15 tons/year. Project-related impacts to sensitive receptors would be less than significant.

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

d) Less Than Significant Impact. Implementation of the Project would not result in long-term emissions of odors. However, construction would involve the use of a variety of gasoline- or diesel-powered equipment that would emit exhaust fumes. Exhaust fumes, particularly diesel exhaust, may be considered objectionable by some people. Construction activities would be short-term in nature, lasting approximately eight months. Impacts would be less than significant.

⁸ Van Gosen, B.S. and J.P. Clinkenbeard. 2011. Report Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California – California Geological Survey map Sheet 59. United States Geological Survey.

3.4 Biological Resources

Table 3-7. Biological Resources Impacts

Biological Resources				
Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.4.1 Environmental Setting

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

Like most of California, the San Joaquin Valley experiences a Mediterranean climate. Warm, dry summers are followed by cool, moist winters. Summer temperatures often reach above 90 degrees Fahrenheit, and the humidity is generally low. Winter temperatures are often below 60 degrees Fahrenheit during the day and

rarely exceed 70 degrees. On average, the Central Valley receives approximately 12 inches of precipitation in the form of rainfall yearly, most of which occurs between October and March.

The Project is located within the Mowry Lake-Fresno Slough watershed; Hydrologic Unit Code (HUC): 180300091003⁹, approximately 2.5 miles southwest of the Mendota Pool at the confluence of the San Joaquin River and the Fresno Slough, and 7 miles east of Panoche Creek. The San Joaquin River, Fresno Slough, and Mendota Pool have been levied and much of the surrounding land is now intensively cultivated for agricultural production. Historically, the Mendota area supported large areas of riparian wetlands and important waterfowl habitat. Due to alteration of the aquatic features in the vicinity and the conversion of natural habitat to agricultural lands, the riparian habitat is now limited to the margins of these waterways and to undisturbed areas within ecological reserves, managed wildlife areas, and national wildlife refuges.

There are several managed reserves and wildlife areas in the vicinity of Mendota, most of which are dedicated to the preservation of native habitat for waterfowl and special status species. The CDFW-managed Mendota Wildlife Area lies approximately three miles southeast of the Project and encompasses 11,825 acres of wetland and upland habitats including a portion of the Fresno Slough. The Alkali Sink Ecological Reserve and the Kerman Ecological Reserve are located east-southeast of the Project, at a distance of approximately 6 miles and 10.5 miles, respectively. Little Panoche Reservoir Wildlife Area and the Panoche Hills Ecological Reserve are located west of Interstate 5, approximately 20 miles west of the Project. The southern portion of the San Luis National Wildlife Refuge complex, which encompasses over 26,800 acres of wetlands, riparian forests, native grasslands, and vernal pools lies approximately 20 miles northwest of the Project.

3.4.2 Methodology

A reconnaissance-level field survey of the Project site and surrounding areas was conducted on March 14, 2019 by Provost & Pritchard. Although the park expansion project only includes development of approximately 10-acres of land, the Project's Area of Potential Effect (APE) was expanded to include all potential access routes and staging areas including street improvements, as illustrated on **Figure 2-3**. The surveyed area of approximately 17 acres, included all areas with potential to incur direct or indirect impacts which may be temporary or permanent nature. The survey consisted of walking through the Project area while identifying and noting land uses, biological habitats and communities, and plant and animal species encountered. Furthermore, the site and surrounding areas were assessed for suitable habitats of various wildlife species.

Provost & Pritchard conducted an analysis of potential Project-related impacts to biological resources based on the resources known to exist or with potential to exist within the Project site and surrounding areas. Sources of information used in preparation of this analysis included: the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB); the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system; the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Vascular Plants of California; CalFlora's online database of California native plants; the Jepson Herbarium online database (Jepson eFlora); U.S. Fish and Wildlife Service (USFWS) Environmental Conservation Online System (ECOS); the NatureServe Explorer online database; the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Plants Database; the California Department of Fish and Wildlife (CDFW) California Wildlife Habitat Relationships (CWHHR) database; the California Herps online database; and various manuals, reports, and references related to plants and animals of the San Joaquin Valley region.

The field investigation did not include a wetland delineation or focused surveys for special status species. The field survey conducted included an appropriate level of detail to assess the significance of potential impacts to

⁹ EPA. Waters GeoViewer. <https://www.epa.gov/waterdata/waters-geoviewer> Accessed 30 April 2019.

sensitive biological resources resulting from 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 U.S. Army Corps of Engineers, CDFW, and the Regional Water Quality Control Board.

A thorough search of the CNDDDB for published accounts of special status plant and animal species was conducted for the Firebaugh 7.5-minute quadrangle that contains the Project site in its entirety, and for the 8 surrounding quadrangles: Oxalis, Poso Farm, Firebaugh NE, Broadview Farms, Mendota Dam, Chaney Ranch, Coit 2-5 Ranch, and Tranquillity. An official species list was obtained using the USFWS IPaC system for federally listed species with potential to be affected by the Project. These species, and their potential to occur within the Project area are listed in **Table 3-8** and **Table 3-9** on the following pages.

Table 3-8. List of Special Status Animals with Potential to Occur Onsite and/or in the Vicinity

Species	Status	Habitat	Occurrence on Project Site
American badger <i>(Taxidea taxus)</i>	CSC	Grasslands, savannas, and mountain meadows near timberline are preferred. Most abundant in drier open spaces of shrub and grassland. Burrows in soil.	Absent. Suitable burrows were absent during the biological survey. The disturbed habitats and clay soils onsite are unsuitable for this species. There is a recorded observation of this species within the Alkali Sink Ecological Reserve, approximately 6.5 miles southeast of the Project. The largest recorded home range of a male of this species is 7.64 square miles, therefore, even if this species does inhabit one of the ecological reserves in the vicinity, the chances of an individual passing through the site during dispersal or mating movements is highly unlikely. The Project site is isolated from any patches of remaining suitable habitat, separated by urban and agricultural development. Frequent human disturbance and vehicle traffic along roadways would further preclude this species from reaching the site.
bank swallow (<i>Riparia riparia</i>)	CT	These aerial insectivores nest colonially in burrows constructed along vertical banks and bluffs near waterbodies. This disturbance tolerant species is also known to nest in man-made sites, such as quarries, mounds of gravel or dirt, and road cuts.	Unlikely. Suitable habitat is absent from the Project site and surrounding lands. At most, an individual could pass through the site as a transient or during migration.
blunt-nosed leopard lizard (<i>Gambelia sila</i>)	FE, CE, CFP	Inhabits semi-arid grasslands, alkali flats, low foothills, canyon floors, large washes, and arroyos, usually on sandy, gravelly, or loamy substrate, sometimes on hardpan. Often found where there are abundant rodent burrows in dense vegetation or tall grass. Cannot survive on lands under cultivation. Known to bask on	Unlikely. The disturbed habitats, vegetative cover, and clay soils onsite are unsuitable for this species. The ruderal parcel is disced at least yearly for weed abatement and rodent burrows are absent.

Species	Status	Habitat	Occurrence on Project Site
		kangaroo rat mounds and often seeks shelter at the base of shrubs, in small mammal burrows, or in rock piles. Adults may excavate shallow burrows, but rely on deeper pre-existing rodent burrows for hibernation and reproduction.	
burrowing owl <i>(Athene cunicularia)</i>	CSC	Resides in open, dry annual or perennial grasslands, deserts, and scrublands with low growing vegetation. Nests underground in existing burrows created by burrowing mammals, most often ground squirrels.	Unlikely. Suitable nesting habitat for this species is absent from the Project area and surrounding lands. Foraging habitat is marginal. No ground squirrel individuals or burrows were observed onsite during the biological survey.
California red-legged frog <i>(Rana draytonii)</i>	FT	Inhabits perennial rivers, creeks, and stock ponds with vegetative cover within the Coast Range and northern Sierra foothills.	Absent. The Project area does not provide suitable habitat for this species and is outside of its current known range.
coast horned lizard <i>(Phrynosoma blainvillii)</i>	CSC	Found in grasslands, coniferous forests, woodlands, and chaparral, primarily in open areas with patches of loose, sandy soil and low-lying vegetation in valleys, foothills, and semi-arid mountains. Frequently found near ant hills and along dirt roads in lowlands along sandy washes with scattered shrubs.	Absent. The highly disturbed habitats and vegetative cover of the Project area are unsuitable for this species. There are recorded observations of this species within the Alkali Sink Ecological Reserve, approximately 6.5 miles southeast of the Project.
Delta smelt <i>(Hypomesus transpacificus)</i>	FT, CE	This pelagic and euryhaline species is Endemic to the Sacramento-San Joaquin River Delta, upstream through Contra Costa, Sacramento, San Joaquin, and Solano Counties.	Absent. Suitable perennial aquatic habitat for this species is absent from the Project area and surrounding lands.
Fresno kangaroo rat <i>(Dipodomys nitratooides exilis)</i>	FE, CE	An inhabitant of alkali sink open grassland environments in western Fresno County. Prefers bare, alkaline, clay-based soils subject to seasonal inundation with more friable soil mounds around shrubs and grasses.	Absent. The highly disturbed habitats of the Project area and surrounding lands are unsuitable for this species. There is a recorded observation of this species within the Alkali Sink Ecological Reserve in 1992, approximately 6.5 miles southeast of the Project. The status of this observation has since been updated to “possibly extirpated,” which means the species has been searched for but unobserved for many years.
giant gartersnake <i>(Thamnophis gigas)</i>	FT, CT	Occurs in marshes, sloughs, drainage canals, irrigation ditches, rice fields, and adjacent uplands. Prefers locations with emergent vegetation for cover and open areas for basking. This species uses small mammal burrows adjacent to aquatic habitats for hibernation in the winter and to escape from excessive heat in the summer.	Absent. Habitats required by this species are absent from the Project area and surrounding lands.

Species	Status	Habitat	Occurrence on Project Site
giant kangaroo rat (<i>Dipodomys ingens</i>)	FE, CE	Inhabits annual grassland communities with few or no shrubs and well-drained, sandy-loam soils on gentle slopes.	Absent. The highly disturbed habitats of the Project area and surrounding lands are unsuitable for this species. This species was observed in 1987 approximately 15 miles southwest of the Project. The status of this observation has since been updated to “possibly extirpated,” which means the species has been searched for but unobserved for many years.
longhorn fairy shrimp (<i>Branchinecta longiantenna</i>)	FE	Inhabits clear to turbid vernal pools or seasonally ponded areas.	Unlikely. Traditional vernal pools are absent. Although the clay soils onsite are conducive to seasonal pooling, frequent disturbance, including ground disturbance associated with discing, makes the site unsuitable for this species.
mountain plover (<i>Charadrius montanus</i>)	CSC	Breeds on open plains at moderate elevations. Winters in short-grass plains and fields, plowed or fallow fields, and sandy deserts. Prefers flat, bare ground with burrowing rodents.	Possible. Burrowing rodents were not observed onsite during the biological survey. However, this species is known to winter in fallow fields in the vicinity. Much of the ruderal site consists of fallow field and surrounding uses are fallow fields, which would provide suitable wintering habitat for this species.
Nelson’s antelope squirrel (<i>Ammospermophilus nelsoni</i>)	CT	Found in the western San Joaquin Valley on dry, sparsely vegetated loamy soils. Relies heavily on existing small mammal burrows.	Unlikely. The disturbed habitats, vegetative cover, and clay soils onsite are unsuitable for this species. The ruderal parcel is discd at least yearly for weed abatement and rodent burrows are absent.
northern California legless lizard (<i>Anniella pulchra</i>)	CSC	Found primarily underground, burrowing in loose, sandy soil. Forages in loose soil and leaf litter during the day. Occasionally observed on the surface at dusk and night.	Unlikely. The highly disturbed habitats and clay soils of the Project area are unsuitable for this species. The nearest observation of this species was approximately 5.5 miles north of the Project.
San Joaquin coachwhip (<i>Masticophis flagellum ruddocki</i>)	CSC	Found in open dry habitats with little or no tree cover in valley grassland and saltbush scrub communities in the San Joaquin Valley. Relies on mammal burrows for refuge and oviposition sites.	Absent. Mammal burrows were not observed onsite during the biological survey. The disturbed habitats of the site do not provide suitable habitat for this species. There is a recorded observation of this species within the Alkali Sink Ecological Reserve in 2004, approximately 6.5 miles southeast of the Project.
San Joaquin kit fox (<i>Vulpes macrotis mutica</i>)	FE, CT	Underground dens with multiple entrances in alkali sink, valley grassland, and woodland in valleys and adjacent foothills.	Unlikely. Burrows and suitable refugia are absent. Ground squirrels and rodents or associated sign were not observed, and therefore, foraging habitat is absent. The highly disturbed habitats of the Project area and fragmentation of the surrounding

Species	Status	Habitat	Occurrence on Project Site
			lands are generally unsuitable for this species. The Project is located approximately 20 miles east of the nearest known core population in Ciervo-Panoche Natural Area. Although some populations of San Joaquin Kit Fox in other parts of California have adapted to an urbanized environment, modern kit fox occurrences are locally scarce. At most, this species could conceivably pass through the Project area during dispersal movements, although that would be unlikely considering the Project is separated from the Ciervo-Panoche core population by Interstate 5 and miles of land intensively disturbed by agricultural practices.
Steelhead – Central Valley DPS <i>(Oncorhynchus mykiss irideus pop.11)</i>	FT	This winter-run fish begins migration to fresh water during peak flows during December and February. Spawning season is typically from February to April. After hatching, fry move to deeper, mid-channel habitats in late summer and fall. In general, both juveniles and adults prefer complex habitat boulders, submerged clay and undercut banks, and large woody debris.	Absent. Suitable perennial aquatic habitat for this species is absent from the Project area and surrounding lands.
Swainson’s hawk <i>(Buteo swainsoni)</i>	CT	Nests in large trees in open areas adjacent to grasslands, grain or alfalfa fields, or livestock pastures suitable for supporting rodent populations.	Possible. Swainson’s hawks are not uncommon in this portion of the Central Valley. Nesting habitat is absent onsite and absence of rodents makes the ruderal field marginal, at best, for foraging. Large ornamental trees, associated with landscaping, could provide suitable nesting habitat, although the constant disturbance and presence of humans would likely discourage nesting in the few trees large enough to support a raptor nest in the vicinity. Swainson’s hawks may use fallow fields west of the Project for foraging.
tricolored blackbird <i>(Agelaius tricolor)</i>	CCE, CSC	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 on dairy farm forage fields.	Unlikely. Suitable nesting habitat is absent from the Project area and surrounding lands. Foraging habitat is marginal, at best. The nearest known occurrence of this species was recorded approximately 4.5 miles southeast of the Project area in 1994.

Table 3-9. List of Special Status Plants with Potential to Occur Onsite and/or in the Vicinity

Species	Status	Habitat	Occurrence on Project Site
brittscale (<i>Atriplex depressa</i>)	CNPS 1B	Found in the San Joaquin Valley and Sacramento Valley in alkali or clay soils in shadescale scrub, valley grassland, alkali sink, and riparian communities at elevations below 1050 feet. Equally likely to occur in wetlands and non-wetlands. Blooms June – October.	Absent. The disturbed habitats of the Project site are unsuitable for this species. The nearest observation of this species was recorded approximately 5 miles east of the site in 2008.
California alkali grass (<i>Puccinellia simplex</i>)	CNPS 1B	Found in the San Joaquin Valley and other parts of California in saline flats and mineral springs within valley grassland and wetland-riparian communities at elevations below 3000 feet. Blooms March – May.	Absent. Suitable habitat required by this species is absent from the Project area and surrounding lands. The nearest known occurrence of this species was recorded approximately 13 miles northeast of the Project area in 2011.
heartscale (<i>Atriplex cordulata</i> var. <i>cordulata</i>)	CNPS 1B	Found in the San Joaquin Valley and Sacramento Valley in alkaline flats and sandy soils in chenopod scrub, valley and foothill grassland, meadows and seeps at elevations up to 900 feet. Blooms June – July.	Absent. The disturbed habitats of the Project site are unsuitable for this species. The nearest observation of this species occurred within Mendota Wildlife Area, approximately 3 miles southeast of the Project site in 1996.
lesser saltscale (<i>Atriplex minuscula</i>)	CNPS 1B	Found in the San Joaquin Valley in playas; sandy, alkaline soils in shadescale scrub, valley grassland, and alkali sink communities at elevations below 300 feet. Blooms April – October.	Absent. The disturbed habitats of the Project site are unsuitable for this species. The nearest observation of this species occurred within Alkali Sink Ecological Reserve, approximately 5 miles southeast of the Project site in 2009.
Lost Hills crownscale (<i>Atriplex coronata</i> var. <i>vallicola</i>)	CNPS 1B	Found in the San Joaquin Valley in chenopod scrub, valley and foothill grassland, and vernal pools at elevations below 1400 feet. Typically found in dried ponds on alkaline soils. Blooms April – September.	Absent. The disturbed habitats of the Project site are unsuitable for this species. There are two recorded observations of this species in the vicinity of the Project. One occurrence is a historic collection (1937) from an unknown location in the vicinity of Mendota. The most recent occurrence is from 2008 near Alkali Sink Ecological Reserve, approximately 5 miles east of the Project area.
Munz’s tidy-tips (<i>Layia munzii</i>)	CNPS 1B	Found in the San Joaquin Valley in alkali clay soils at elevations between 160 feet and 2625 feet in shadescale scrub, valley grassland, and riparian communities. Occurs predominantly in wetlands, but occasionally found in non-	Absent. The disturbed habitats of the Project site are unsuitable for this species. The only recent observation of this species was recorded in 2008 near Alkali Sink Ecological Reserve, approximately 5 miles east of the Project.

Species	Status	Habitat	Occurrence on Project Site
		wetlands. Blooms March – April.	
palmate-bracted bird’s beak (Chloropyron palmatum)	FE, CE, CNPS 1B	Found in the San Joaquin Valley and Sacramento Valley in alkaline soils (usually Pescadero silty clay) in chenopod scrub, valley and foothill grassland at elevations below 500 feet. Blooms June – August.	Absent. The disturbed habitats of the Project site are unsuitable for this species. The only recent observation of this species was recorded in 2017 in Alkali Sink Ecological Reserve, approximately 5 miles east of the Project.
Panoche pepper-grass (Lepidium jaredii ssp. album)	CNPS 1B	Found on steep slopes, washes, alluvial-fans, and clay, sometimes alkaline, within Valley and Foothill Grassland communities in western Fresno County at elevations between 600 feet and 2400 feet. Blooms February – June.	Absent. Suitable habitat required by this species is absent from the Project area and surrounding lands. The Project area is also outside of the elevational range of this species. The only recorded observation of this species in the vicinity has been reportedly extirpated by gravel extraction activities.

EXPLANATION OF OCCURRENCE DESIGNATIONS AND STATUS CODES

- Present: Species observed on the site at time of field surveys or during recent past
- Likely: Species not observed on the site, but it may reasonably be expected to occur there on a regular basis
- Possible: Species not observed on the site, but it could occur there from time to time
- Unlikely: Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient
- Absent: Species not observed on the site, and precluded from occurring there due to absence of suitable habitat

STATUS CODES

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

CNPS LISTING

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

3.4.2.1 Local

City of Mendota General Plan Update

The City of Mendota General Plan Update (2005-2025) sets forth the following goals and policies that protect biological resources and which have potential relevance to the Project’s CEQA review:

- *Goal OSC-7: Preservation of important ecological and biological resources, including habitat for flora and fauna.*
- *Policy OSC-7.1: The City shall require a biological resources evaluation for private and public development projects in areas identified to contain or possibly contain listed plant and/ or wildlife species based upon the City’s biological resource mapping provided in the General plan EIR or other technical materials. This evaluation shall be conducted prior to the authorization of any ground disturbance.*
- *Policy OSC-7.5: If habitat for Swainson’s hawk is present, a protocol-level survey shall be conducted in*

accordance with *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee, 2000), to include the following:

- 1) Schedule construction activities to avoid nesting activities. The avian breeding window on average is between February 1 and August 30, which complies with the Migratory Bird Treaty Act and Section 3503.5 of the FGC, therefore construction activities should occur between September and January.
- 2) Conduct all vegetation clearing (including trees, shrubs, and bushes) outside of the nesting season. If clearing of any vegetation and/or construction activities occur during the avian breeding window, then preconstruction surveys for nesting raptors shall be conducted up to 30 days before construction. The qualified biologist shall survey the construction zone and a 100-foot radius surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds.
- 3) If an active nest is located within the 100-foot area surrounding the construction zone and construction must take place during the breeding season, a buffer zone shall be established by the biologist and confirmed by the appropriate resource agency and a qualified biologist shall monitor the nest to determine when the young have fledged and submit bi-weekly reports to City of Mendota planning Department throughout the nesting season. The biological monitor shall have the authority to cease construction if there is any sign of distress to the raptor. Reference to this requirement, the MBTA, and Section 3503.5 of the FGC shall be included in the construction specifications.

3.4.3 Impact Assessment

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

a) Less Than Significant Impact with Mitigation Incorporated.

Project-Related Mortality and/or Disturbance of Nesting Raptors, Migratory Birds, and Special Status Birds (Including Swainson's Hawk and Mountain Plover)

A pair of American kestrels were observed foraging over the site, and a red-tailed hawk was observed perched on a light pole, overlooking a fallow field in the vicinity. Portions of the Project site contain marginal foraging habitat for several avian species, including the Swainson's hawk. Although the Project site does not contain any trees, there are a few ornamental trees in the vicinity large enough to house a raptor nest, and smaller avian species may nest within ornamental trees and shrubs in the vicinity. Ground-nesting birds, such as the killdeer could nest on the bare ground, and swallows could nest within buildings or structures in the vicinity.

Swainson's hawks are common in this portion of Fresno County, and there are known nest trees within five miles of the Project site. In the absence of preferred habitat, especially within the Central Valley, Swainson's hawks often nest within eucalyptus trees lining highways, and several raptor species nest within ornamental Mexican fan palms. Although nesting habitat onsite and in the vicinity is not ideal due to the absence of native riparian trees, and foraging habitat is suboptimal, raptors, such as the special status Swainson's hawk could conceivably nest or forage near Project areas. In the event that a Swainson's hawk or other avian species is foraging within the Project site during construction activities, the individual would be expected to fly away from disturbance they encounter, subsequently eliminating the risk of injury or mortality while foraging. Birds nesting within the Project site could be injured or killed by Project activities. Furthermore, construction activities could disturb birds nesting within or adjacent to work areas, resulting in nest abandonment. Project construction activities that adversely affect the nesting success of raptors and

migratory birds or result in the mortality of individual birds constitutes a violation of State and federal laws and is considered a significant impact under CEQA.

Although they do not breed in California, mountain plovers are known to winter in fallow fields of the Central Valley. Since they do not breed in this region, loss of nesting habitat and disruption of reproductive success is not a concern for this Project, although a wintering mountain plover onsite could potentially be injured or killed by construction activities. Then again, avian species are highly mobile and would be expected to simply fly away from a disturbance.

As previously mentioned, due to the developed and ruderal nature of the lands, nesting and foraging habitat for raptors, resident and migratory birds, and special status birds within the Project area is marginal, at best. Habitat of higher foraging and nesting value is regionally abundant. Therefore, the development resulting from implementation of the Project would not be considered a significant loss of foraging or nesting habitat under CEQA or NEPA.

Nesting bird season is generally accepted as February 1 through August 31; however, Swainson's hawk nesting season is generally accepted as March 1 through September 15. For simplicity, these timeframes have been combined.

Implementation of the following measures will reduce potential impacts to nesting raptors, migratory birds, and special status birds, including Swainson's hawk to a less than significant level under CEQA and NEPA, and will ensure compliance with State and federal laws protecting these avian species.

Mitigation. The following measures will be implemented prior to the start of construction:

Mitigation Measure BIO-1a (Avoidance): The Project's construction activities shall occur, if feasible, between September 16 and January 31 (outside of nesting bird season) in an effort 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 shall conduct pre-construction surveys for active nests within 30 days prior to the start of construction. The survey shall include the proposed work area and surrounding lands within 0.5 mile. If no active nests are observed, no further mitigation is required. Raptor nests are considered "active" upon the nest-building stage.

Mitigation Measure BIO-1c (Establish Buffers): On discovery of any active nests near work areas, the biologist shall determine appropriate construction setback distances based on applicable CDFW and/or USFWS guidelines and/or the biology of the species in question. Construction buffers shall be identified with flagging, fencing, or other easily visible means, and shall be maintained until the biologist has determined that the nestlings have fledged.

Implementation of Mitigation Measures **BIO-1a** through **1c** will reduce potential impacts to nesting birds and any other special status avian species to a less than significant level and will ensure compliance with State and federal laws protecting these resources.

Project-Related Impacts to Special Status Bats (Including Western Mastiff Bat and Western Red Bat)

Although roosting and breeding habitat is absent, the ruderal fallow portion of the site could serve as marginal foraging habitat for bats, including the western mastiff bat and western red bat. If a special status bat were foraging onsite, it could be injured or killed by construction activities. Projects that adversely affect the

reproductive success of special status species or result in the mortality of special status species is considered a violation of state and federal laws and are considered a potentially significant impact under CEQA.

Implementation of the following measure will reduce potential impacts to foraging special status bats to a less than significant level under CEQA, and will ensure compliance with State and federal laws protecting this species.

Mitigation. The following measures will be implemented during or prior to the start of construction:

Mitigation Measure BIO-2 (Construction Hours): Construction activities shall be limited to daylight hours to reduce potential impacts to special status bats that could be foraging onsite.

Implementation of Mitigation Measure **BIO-2** will reduce potential impacts to foraging bats to a less than significant level and will ensure compliance with State and federal laws protecting these species.

Project-Related Impacts to Special Status Plant Species

Twelve special status plant species have been documented in the Project vicinity, including brittlescale (*Atriplex depressa*), California alkali grass (*Puccinellia simplex*), heartscale (*Atriplex cordulata* var. *cordulata*), lesser saltscale (*Atriplex miniscula*), Lost Hills crownscale (*Atriplex coronata* var. *vallicola*), Munz's tidy-tips (*Layia munzii*), palmate-bracted bird's beak (*Chloropyron palmatum*), Panoche pepper-grass (*Lepidium jaredii* ssp. *album*), recurved larkspur (*Delphinium recurvatum*), San Joaquín woollythreads (*Monolopia congdonii*), Sanford's arrowhead (*Sagittaria sanfordii*), and subtle orache (*Atriplex subtilis*). None of these species were observed during the biological survey, which was conducted in Spring, during the typical blooming season for many of these species. In fact, the biological survey revealed a heavily disturbed lot of land overgrown with weedy invasive plant species. As explained in **Table 3-9**, all of the aforementioned special status plant species are absent from the Project area due to past and ongoing disturbance and/or the absence of suitable habitat. Therefore, the implementation of the Project will have no effect on individual plants or regional populations of these special status plant species. Mitigation measures are not warranted.

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

Of the 28 regionally occurring special status species, 24 are considered absent or unlikely to occur within the Project area due to past or ongoing disturbance and/or absence of suitable habitat. As explained in **Table 3-8**, the following species were deemed absent from the Project area: American badger (*Taxidea taxus*), California red-legged frog (*Rana draytonii*), coast horned lizard (*Phrynosoma blainvillii*), Delta smelt (*Hypomesus transpacificus*), Fresno kangaroo rat (*Dipodomys nitratooides exilis*), giant gartersnake (*Thamnophis gigas*), giant kangaroo rat (*Dipodomys ingens*), San Joaquin coachwhip (*Masticophis flagellum ruddocki*), Steelhead-Central Valley DPS (*Oncorhynchus mykiss irideus* pop. 11), two-striped gartersnake (*Thamnophis hammondi*), western pond turtle (*Emys marmorata*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), and yellow-headed blackbird (*Xanthocephalus xanthocephalus*), and the following species were deemed unlikely to occur within the Project area: bank swallow (*Riparia riparia*), blunt-nosed leopard lizard (*Gambelia sila*), burrowing owl (*Athene cunicularia*), longhorn fairy shrimp (*Branchinecta longiantenna*), Nelson's antelope squirrel (*Ammospermophilus nelson*), northern California legless lizard (*Anniella pulchra*), San Joaquin kit fox (*Vulpes macrotis mutica*), tricolored blackbird (*Agelaius tricolor*), Tulare grasshopper mouse (*Onychomys torridus tularensis*), vernal pool fairy shrimp (*Branchinecta lynchi*), and western spadefoot (*Spea hammondi*). Therefore, implementation of the Project will have no impact on these 24 special status species through construction mortality, disturbance, or loss of habitat. Mitigation measures are not warranted.

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

IV-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?

b and c) No Impact. The only aquatic feature onsite is a dry, isolated, excavated irrigation ditch with no connection to navigable waters or a natural drainage channel with a bed or bank, and therefore it can be reasonably assumed that jurisdictional waters are absent. A small amount of riparian vegetation is present within the dry excavated irrigation ditch due to lack of recent vegetation maintenance; however, the site is diked and cleared for weed abatement at least once per year and does not provide suitable habitat for wildlife species. The Project does not propose impacts or discharge to any surface waters. Regardless, due to proposed ground disturbance of an area greater than one acre in size, the Project will implement a SWPPP. For all of these reasons, implementation of the Project should have no impact on jurisdictional waters, wetlands, navigable waters, wild and scenic rivers, or other water features, and riparian habitat. Furthermore, the Project will not impact any bodies of water and will not require compliance with the Fish and Wildlife Coordination Act. According to CNDDDB, there are no recorded natural communities of special concern with potential to occur within the Project area or vicinity. Additionally, no natural communities of special concern were observed during the biological survey. Therefore, implementation of the Project will have no impact on riparian habitat, or any other sensitive natural communities nor will the Project impact any State or federally protected wetlands. Mitigation measures are not warranted.

IV-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?

d) Less Than Significant Impact. The Project area does not contain features that would be likely to function as a wildlife movement corridor. Furthermore, the Project is located in a region often disturbed by intensive agricultural cultivation practices and human disturbance which would discourage dispersal and migration. Therefore, implementation of the Project will have no impact on wildlife movement corridors, and mitigation is not warranted.

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

e) No Impact. The Project description is in compliance with the goals and policies set forth in the Fresno County General Plan. Project activities do include the removal of five non-native eucalyptus trees, which are not protected by any local policies or ordinances. There will be no impact.

IV-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?

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

3.5 Cultural Resources

Table 3-10. Cultural Resources Impacts

Cultural Resources				
Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.5.1 Environmental Setting

The Proposed Project site lies within Fresno County, which occupies an archeologically and historically rich part of the San Joaquin Valley.

RECORDS SEARCH

On March 26, 2019, Provost & Pritchard received a records search from the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS), located at California State University, Bakersfield. The records search encompassed the Project APEs as well as a 0.5-mile radius surrounding the various locations. SSJVIC staff examined site record files, maps, and other materials to identify previously recorded resources and prior surveys within the delineated area (**Appendix C, Cultural Information**). Additional sources included the State Office of Historic Preservation (SHPO) Historic Properties Directory, Archaeological Determinations of Eligibility, and the California Inventory of Historic Resources.

NATIVE AMERICAN OUTREACH

In April 2019, Provost & Pritchard contacted the Native American Heritage Commission (NAHC) in Sacramento. Provost & Pritchard provided NAHC a brief description of the project and a map showing its location and requested that the NAHC perform a search of the Sacred Lands File to determine if any Native American resources have been recorded in the immediate study area. Provost & Pritchard also requested NAHC provide a current list of local Native American contacts for the Proposed Project APE. The 13 tribes identified by NAHC were contacted in writing via US mail with a letter dated March 19, 2019 informing them about the Proposed Project. No additional communication has been received.

3.5.1.1 Local

City of Mendota General Plan¹⁰: The Mendota General Plan sets forth the following goals and policies that protect the cultural resources of the City and which are not relevance to the Project's CEQA review:

¹⁰ City of Mendota General Plan <http://ci.mendota.ca.us/wp-content/uploads/2014/06/City-of-Mendota-General-Plan-Update.pdf> Accessed April 17, 2019.

3.5.2 Impact Assessment

V-a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

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

a-b) Less than Significant Impact with Mitigation Incorporated.

A records search from the California Historical Resources Information System (CHRIS) at the Southern San Joaquin Valley Information Center (SSJVIC) dated March 26, 2019 (**Appendix C**) indicated that there are no recorded cultural resources within the project area or within a one-half mile radius. To identify any historic properties, the SSJVIC examined the current inventories of the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), California Historical Landmarks (CHL), California Points of Historical Interest (CPHI), California Inventory of Historic Resources (CIHR), California State Historic Landmarks, and other pertinent historical data available at the SSJVIC. Although the site was previously used for agriculture, it is unknown if cultural resources are present. Therefore, Mitigation Measure CUL-1 has been incorporated into the project.

Provost & Pritchard contacted the Native American Heritage Commission (NAHC) for a Sacred Lands File & Native American Contacts List which was received March 19, 2019. Following receipt of the list, Provost & Pritchard sent letters to the following Tribes via certified mail requesting consultation:

1. *Big Sandy Rancheria of Western Mono Indians, Elizabeth D. Kipp, Chairperson*
2. *Cold Springs Rancheria, Carol Bill, Chairperson*
3. *Dumna Wo-Wab Tribal Government, Robert Ledger SR, Tribal Chairperson*
4. *Dunlap Band of Mono Indians, Benjamin Charley Jr., Tribal Chair*
5. *Dunlap Band of Mono Indians, Dick Charley, Tribal Secretary*
6. *Kings River Choinumni Farm Tribe, Stan Alec*
7. *North Fork Mono Tribe, Ron Goode, Chairperson*
8. *Santa Rosa Indian Community of the Santa Rosa Rancheria, Rueben Barrios Sr., Chairperson*
9. *Table Mountain Rancheria of California, Leanne Walker-Grant, Chairperson*
10. *Table Mountain Rancheria of California, Bob Pennell, Cultural Resources Director*
11. *Traditional Choinumni Tribe, David Alvarez, Chairperson*
12. *Traditional Choinumni Tribe, Rick Osbourne, Cultural Resources*
13. *Wuksache Indian Tribe/ Esbom Valley Band, Kenneth Woodrow, Chairperson*

No written responses were received. All Tribal correspondence is included within **Appendix C** to this initial study. Although it is unlikely that archeological remains will occur during construction or operation of the Proposed Project, CUL-1 is to be considered.

Mitigation Measure CUL-1 (Archaeological Resources)

In the event that archaeological remains are encountered at any time during development or ground-moving activities within the entire project area, all work in the vicinity of the find shall halt until a qualified archaeologist can assess the discovery. The District shall implement all recommendations of the archaeologist necessary to avoid or reduce to a less than significant level potential impacts to cultural resource. Appropriate actions could include a Data Recovery Plan or preservation in place.

V-c) Disturb any human remains, including those interred outside of dedicated cemeteries?

c) Less than Significant Impact with Mitigation Incorporated. No formal cemeteries or other places of human internment are known to exist on the Project site; however, in accordance with Health and Safety Code Section 7050.5 and Public Resource Code Section 5097.98, if human remains are uncovered, Mitigation Measure CUL-2 would be implemented.

Mitigation Measure CUL-2 (Human remains)

If human remains are uncovered, or in any other case when human remains are discovered during construction, the Fresno County Coroner is to be notified to arrange their proper treatment and disposition. If the remains are identified—on the basis of archaeological context, age, cultural associations, or biological traits—as those of a Native American, California Health and Safety Code 7050.5 and Public Resource Code 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 determine the manner in which the remains are treated.

3.6 Energy

Table 3-11. Energy Impacts

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

3.6.1 Environmental Setting

PG&E has sufficient energy supplies to serve the growth that has occurred in Fresno County. Much of the energy consumed in the region is for residential, commercial, and transportation purposes.

Construction equipment and construction worker vehicles operated during Project construction would use fossil fuels. This increased fuel consumption would be temporary and would cease at the end of the construction activity, and it would not have a residual requirement for additional energy input. The marginal increases in fossil fuel use resulting from Project construction are not expected to have appreciable impacts on energy resources. Lighting will be used during the operation of the Project in order to adequately light the soccer and baseball field. Lighting may include stadium lighting and pedestrian light poles.

3.6.1.1 Local

City of Mendota General Plan¹¹: The Mendota General Plan sets forth the following goals and policies that pertain to energy of the City and which are not relevance to the Project’s CEQA review:

3.6.2 Impact Assessment

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

a) **Less Than Significant Impact.** As discussed in **Section 3.3**, the Project will not exceed any air emission thresholds during construction or operation. The Project will comply with construction best management practices and may be required to complete a SWPPP as part of construction and operational permits. Once completed, the Project will be mostly passive in nature and will not use an excessive amount of energy. The expansion of the park will include two additional soccer fields, a baseball diamond, and an open space area, which will be used as a stormwater basin. Additionally, Light-emitting diode (LED) lighting is proposed for the park. When compared to traditional incandescent lighting, LEDs use approximately 25% to 80% less

¹¹ City of Mendota General Plan <http://ci.mendota.ca.us/wp-content/uploads/2014/06/City-of-Mendota-General-Plan-Update.pdf> Accessed April 17, 2019.

energy and has a considerably longer lifespan.¹² The Project will not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation.

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

b) No Impact. The energy used for lighting purposes will be negligible due to the hours of operation. The construction phase will be temporary in nature and will not exceed any thresholds set by the SJVAPCD.

¹² Department of Energy, <https://www.energy.gov/energysaver/save-electricity-and-fuel/lighting-choices-save-you-money/how-energy-efficient-light>
Accessed April 30, 2019.

3.7 Geology and Soils

Table 3-12. Geology and Soils Impacts

Geology and Soils				
Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the most recently adopted Uniform Building Code creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.7.1 Environmental Setting

3.7.1.1 Geology and Soils

The Project is located in northwestern Fresno County, in the central section of California's Great Valley Geomorphic Province, or Central Valley. The Sacramento Valley makes up the northern third and the San Joaquin Valley makes up the southern two-thirds of the geomorphic province. Both valleys are watered by large rivers flowing west from the Sierra Nevada Range, with smaller tributaries flowing east from the Coast

Ranges. Most of the surface of the Great Valley is covered by Quaternary (present day to 1.6 million years ago) alluvium. The sedimentary formations are steeply upturned along the western margin due to the uplifted Sierra Nevada Range.¹³ From the time the Valley first began to form, sediments derived from erosion of igneous and metamorphic rocks and consolidated marine sediments in the surrounding mountains have been transported into the Valley by streams.

3.7.1.2 Faults and Seismicity

The Project site is not located within an Alquist-Priolo Earthquake Fault Zone and no known faults cut through the local soil at the site. The nearest named fault is the O'Neill fault located approximately 20.3 miles away.

3.7.1.3 Liquefaction

The potential for liquefaction, which is the loss of soil strength due to seismic forces, is dependent on soil types and density, depth to groundwater, and the duration and intensity of ground shaking. Although no specific liquefaction hazard areas have been identified in the county, this potential is recognized throughout the San Joaquin Valley where unconsolidated sediments and a high-water table coincide. Liquefaction risk in the project area is low. Using the USDA NRCS soil survey of Fresno County, an analysis of the soils onsite was performed.

3.7.1.4 Soil Subsidence

Subsidence occurs when a large land area settles due to over-saturation or extensive withdrawal of ground water, oil, or natural gas. These areas are typically composed of open-textured soils that become saturated. These areas are high in silt or clay content. The Project site is comprised of calfax clay loam (0-1% slopes). It is moderately well drained with a low risk of subsidence.

3.7.1.5 Dam and Levee Failure

Lake Joallan is located approximately 6,7 miles northwest, and the Project site lies approximately 218 feet from the Pine Flat inundation zone.

3.7.1.6 Local

City of Mendota General Plan¹⁴: The Mendota General Plan sets forth the following goals and policies that pertain to geology and soils of the City and which are not relevance to the Project's CEQA review:

3.7.2 Impact Assessment

VII-a) Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

VII-a-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.

VII-a-ii) Strong seismic ground shaking?

a-i and a-ii) Less Than Significant Impact. There are no known faults near the project area. The project work would occur in an area typically unaffected by seismic activity. Furthermore, no habitable structures

¹³ Harden, D.R. 1998, California Geology, Prentice Hall, 479 pages

¹⁴ City of Mendota General Plan <http://ci.mendota.ca.us/wp-content/uploads/2014/06/City-of-Mendota-General-Plan-Update.pdf> Accessed April 17, 2019.

would be built as a result of the project. Structures built onsite would primarily comprises small, reinforced masonry buildings, and would pose little threat of collapse in the event of strong seismic activity.

VII-a-iii) Seismic-related ground failure, including liquefaction?

a-iii) Less Than Significant Impact. Liquefaction is a process which involves the temporary transformation of soil from a solid state to a fluid form during intense and prolonged groundshaking. Water-saturated areas with shallow depth to groundwater and uniform sands, loose-to-medium in density, are prone to liquefaction. No subsidence-prone soils, oil or gas production or overdraft exists at the project site. Furthermore, soil conditions on the site are not prone to soil instability due to its low shrink-swell behavior. The impact would be less than significant.

VII-a-iv) Landslides?

a-iv) No Impact. As the Project is located on the Valley floor, no major geologic landforms exist on or near the site that could result in a landslide event. The potential landslide impact at this location is minimal as the site is approximately 20 miles from the foothills and the local topography is essentially flat and level. There will be no impact.

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

b) Less Than Significant Impact. The project site will be entirely covered with a combination of hardscape features and landscaping (turf, trees, etc.). It will be graded for positive drainage, and there is little likelihood of erosion or loss of topsoil. If ground disturbance is greater than one acre the project would require a general permit under the Dischargers of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ. Construction will utilize Best Management Practice's detailed in the California Storm Water Best Management Practice Handbook for Construction Activity.¹⁵ Since the Project site has relatively flat terrain with a low potential for soil erosion and would comply with the SWRCB requirements, the impact would be less than significant.

VII-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?

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

c and d) Less Than Significant Impact. Soils onsite consist of Calflax clay loam, saline-sodic, wet 0 to 1 percent slopes (See NRCS Soil Resource Report as part of the Biological Report in **Appendix B**). The Project site and surrounding areas do not contain substantial grade changes. Risk of landslides, lateral spreading, subsidence, liquefaction, and collapse are minimal. The Project does not propose significant alteration of the topography of the site and it does not involve development of structures or facilities that could be affected by expansive soils or expose people to substantial risks to life or property. Furthermore, the Project will be consistent with the California Building Standards Code. Any impacts would be less than significant.

VII-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?

e) No Impact. No septic system is proposed. The site will be connected to the City's wastewater conveyance system. There will be no impact.

¹⁵ California Storm Water Best Management Practice Handbook for Construction Activity, https://www.casqa.org/sites/default/files/BMPHandbooks/BMP_NewDevRedev_Complete.pdf, Accessed February 19, 2019

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

f) Less Than Significant with Mitigation Incorporated. No known paleontological resources have been identified at the Project site. However, if a paleontological resource is found then the construction impacts can make a significant impact unless mitigated properly. The Project will be less than significant with mitigation incorporated.

Mitigation Measure – GEO - 1

Should paleontological resources be encountered on the Project site, all ground disturbing activities in the area shall stop. A qualified paleontologist shall be contacted to assess the discovery. Mitigation may include monitoring, recording the fossil locality, data recovery and analysis, a final report. Public educational outreach may also be appropriate. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to the City of Mendota for review, and (if paleontological materials are recovered) a paleontological repository, such as the University of California Museum of Paleontology.

3.8 Greenhouse Gas Emissions

Table 3-13. Greenhouse Gas Emissions Impacts

Greenhouse Gas Emissions				
Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.8.1 Environmental Setting

The Earth's climate has been warming for the past century. It is believed that this warming trend is related to the release of certain gases into the atmosphere. Greenhouse gases (GHG) absorb infrared energy that would otherwise escape from the Earth. As the infrared energy is absorbed, the air surrounding the Earth is heated. An overall warming trend has been recorded since the late 19th century, with the most rapid warming occurring over the past two decades. The 10 warmest years of the last century all occurred within the last 15 years. It appears that the decade of the 1990s was the warmest in human history (National Oceanic and Atmospheric Administration, 2010). Human activities have been attributed to an increase in the atmospheric abundance of greenhouse gases. The following is a brief description of the most commonly recognized GHGs.

3.8.1.1 Greenhouse Gases

Commonly identified GHG emissions and sources include the following:

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

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

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

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

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

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

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

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

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

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

3.8.1.2 Effects of Climate Change

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

Emissions of GHGs contributing to global climate change are largely attributable to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. About three-quarters of human emissions of CO₂ to the global atmosphere during the past 20 years are due to fossil fuel burning. Atmospheric concentrations of CO₂, CH₄, and N₂O have increased 31 percent, 151 percent, and 17 percent respectively since the year 1750 (CEC 2008). GHG emissions are typically expressed in carbon dioxide-equivalents (CO₂e), based on the GHG's Global Warming Potential (GWP). The GWP is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. For example, one ton of CH₄ has the same contribution to the greenhouse effect as approximately 21 tons of CO₂. Therefore, CH₄ is a much more potent GHG than CO₂.

3.8.2 Methodology

An Air Quality and Greenhouse Gas Emissions Evaluation Report ([Appendix A](#)) was prepared in April 2019. The sections below detail the methodology of the report and its conclusions.

3.8.2.1 Short-Term Construction-Generated Emissions

Short-term construction emissions associated with the Project were calculated using CalEEMod, Version 2016.3.2. Emissions' modeling was assumed to occur over an approximate eight-month period and covering a site area of 15 acres. Remaining assumptions were based on the default parameters contained in the model. Modeling assumptions and output files are included in [Appendix A](#).

3.8.2.2 Long-Term Operational Emissions

Long-term operational emissions associated with the Project are estimated to be minimal in nature. Maintenance will be provided by existing City of Mendota staff. Modeling assumptions and output files are included in [Appendix A](#).

3.8.2.3 Thresholds of Significance

CEQA Guidelines Amendments became effective March 18, 2010. Included in the Amendments are revisions to the Appendix G Initial Study Checklist. In accordance with these Amendments, a project would be considered to have a significant impact to climate change if it would:

- a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or,
- b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

In accordance with SJVAPCD's *CEQA Greenhouse Gas Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects*¹⁶, proposed projects complying with Best Performance Standards (BPS) would be determined to have a less-than-significant impact. Projects not complying with BPS would be considered less than significant if operational GHG emissions would be reduced or mitigated by a minimum of 29 percent, in comparison to business-as-usual (year 2004) conditions. In addition, project-generated emissions complying with an approved plan or mitigation program would also be determined to have a less-than-significant impact.

3.8.2.4 Local

City of Mendota General Plan¹⁷: The Mendota General Plan sets forth the following goals and policies that pertain to greenhouse gases of the City and which are not relevance to the Project's CEQA review:

San Joaquin Valley Air Pollution Control District

SJVAPCD Climate Change Action Plan:

On August 21, 2008, the SJVAPCD Governing Board approved the District's Climate Change Action Plan with the following goals and actions:

Goals:

- Assist local land-use agencies with California Environmental Quality Act (CEQA) issues relative to projects with GHG emissions increases.
- Assist Valley businesses in complying with mandates of AB 32.
- Ensure that climate protection measures do not cause increase in toxic or criteria pollutants that adversely impact public health or environmental justice communities.

Actions:

¹⁶ Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA.

<http://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf>
Accessed 17 April 2019

¹⁷ City of Mendota General Plan <http://ci.mendota.ca.us/wp-content/uploads/2014/06/City-of-Mendota-General-Plan-Update.pdf> Accessed 17 April 2019.

- Authorize the Air Pollution Control Officer to develop GHG significance threshold(s) or other mechanisms to address CEQA projects with GHG emissions increases. Begin the requisite public process, including public workshops, and develop recommendations for Governing Board consideration in the spring of 2009.
- Authorize the Air Pollution Control Officer to develop necessary regulations and instruments for establishment and administration of the San Joaquin Valley Carbon Exchange Bank for voluntary GHG reductions created in the Valley. Begin the requisite public process, including public workshops, and develop recommendations for Governing Board consideration in spring 2009.
- Authorize the Air Pollution Control Officer to enhance the District’s existing criteria pollutant emissions inventory reporting system to allow businesses subject to AB 32 emission reporting requirements to submit simultaneous streamlined reports to the District and the State of California with minimal duplication.
- Authorize the Air Pollution Control Officer to develop and administer voluntary GHG emission reduction agreements to mitigate proposed GHG increases from new projects.
- Direct the Air Pollution Control Officer to support climate protection measures that reduce GHG emissions as well as toxic and criteria pollutants. Oppose measures that result in a significant increase in toxic or criteria pollutant emissions in already impacted area.

SJVAPCD CEQA Greenhouse Gas Guidance: On December 17, 2009, the SJVAPCD Governing Board adopted “Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA” and the policy, “District Policy—Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency.” The SJVAPCD concluded that the existing science is inadequate to support quantification of the impacts that project specific greenhouse gas emissions have on global climatic change. The SJVAPCD found the effects of project-specific emissions to be cumulative, and without mitigation, that their incremental contribution to global climatic change could be considered cumulatively considerable. The SJVAPCD found that this cumulative impact is best addressed by requiring all projects to reduce their greenhouse gas emissions, whether through project design elements or mitigation.

The SJVAPCD’s approach is intended to streamline the process of determining if project-specific greenhouse gas emissions would have a significant effect. Projects exempt from the requirements of CEQA, and projects complying with an approved plan or mitigation program would be determined to have a less than significant cumulative impact. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources and have a certified final CEQA document.

Best performance standards (BPS) to address operational emissions of a project would be established according to performance-based determinations. Projects complying with BPS would not require specific quantification of GHG emissions and would be determined to have a less than significant cumulative impact for GHG emissions. Projects not complying with BPS would require quantification of GHG emissions and demonstration that operational greenhouse gas emissions have been reduced or mitigated by 29 percent, as targeted by CARB’s AB 32 Scoping Plan. Furthermore, quantification of GHG emissions would be required for all projects for which the lead agency has determined that an Environmental Impact Report is required, regardless of whether the project incorporates BPS.

Fresno County General Plan: The Fresno County General Plan does not contain any goals or policies related to greenhouse gas or climate change.

3.8.3 Impact Assessment

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

a) Less Than Significant Impact.

Although the Project is not located in the Bay Area, the Bay Area Air Quality Management District’s thresholds for significance are based on the Statewide AB 32 objectives and will be used to quantify potential impacts related to GHG emissions. For land use development projects, the threshold is compliance with a qualified GHG Reduction Strategy or annual emissions less than 1,100 metric tons per year (MT/yr) of CO₂e. For stationary source projects, such as those requiring a permit from a local air district to operate, the threshold is 10,000 MT/yr of CO₂e. These thresholds are illustrated in Table 3-14 and Table 3-15, below.

Short-Term Construction-Generated Emissions

Estimated construction-generated emissions are summarized in **Table 3-14**. As indicated, construction of the Project would generate maximum annual emissions of approximately 240,4052 metric tons of carbon dioxide equivalent (MTCO₂e). Construction-related production of GHGs would be temporary and last approximately eight months.

Table 3-14. Short-Term Construction-Generated GHG Emissions

Short-Term Construction-Generated GHG Emissions	
Year	Emissions (MT CO ₂ e) ⁽¹⁾
2019	240.4052
2020	73.1941
AB 32 Consistency Threshold for Land-Use Development Projects*	1,100
AB 32 Consistency Threshold for Stationary Source Projects*	10,000
Exceed Threshold?	No

1. Emissions were quantified using the CalEEMod, Version 2016.3.2. Refer to Appendix A for modeling results and assumptions. Totals may not sum due to rounding.

* As published in the Bay Area Air Quality Management District’s CEQA Air Quality Guidelines. Available online at http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en Accessed April 22, 2019.

Long-Term Operational Emissions

Estimated long-term operational emissions are summarized in **Table 3-15**. As indicated, operation of the Project would generate maximum annual emissions of approximately 18.9177 metric tons of carbon dioxide equivalent (MTCO₂e).

Table 3-15. Long-Term Operational GHG Emissions

Long-Term Operational GHG Emissions	
	Emissions (MT CO ₂ e) ⁽¹⁾
Estimated Total Annual Operational CO ₂ e Emissions	18.9177
AB 32 Consistency Threshold for Land-Use Development Projects*	1,100
AB 32 Consistency Threshold for Stationary Source Projects*	10,000
Exceed Threshold?	No

1. Emissions were quantified using the CalEEMod, Version 2016.3.2. Refer to Appendix A for modeling results and assumptions. Totals may not sum due to rounding.

* As published in the Bay Area Air Quality Management District's CEQA Air Quality Guidelines. Available online at http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en April 22, 2019.

Long-term operational emissions associated with the park expansion Project will include the use of an irrigation system and waste generated from those utilizing the facilities. The Project proposes an expansion of the existing Rojas-Pierce park, which is currently maintained by City of Mendota staff. Operations of the additional 10 acres of adjacent open space and recreational facilities will continue to be provided by existing City staff and will not result in a substantial increase of GHG emissions. Furthermore, there is no population growth associated with the Project. Therefore, Project-related emissions of GHGs would be less than significant.

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

b) Less Than Significant Impact. In accordance with SJVAPCD's recommended guidance, project-generated GHG emissions would be considered less than significant if: (1) the Project complies with applicable BPS; (2) operational GHG emissions would be reduced or mitigated by a minimum of 29 percent in comparison to business-as usual (year 2004) conditions; or (3) project-generated emissions would comply with an approved plan or mitigation program.

The SJVAPCD recognizes that the CARB's Cap-and-Trade regulation is an adopted State-wide plan for reducing or mitigating GHG emissions from targeted industries. In June of 2014, the SJVAPCD issued APR-2025. In this policy document, the SJVAPCD concluded that the combustion of fossil fuels including fuels associated with on- and off-road vehicles, are subject to Cap-and-Trade requirements. The SJVAPCD further concluded that through implementation of the Cap-and-Trade regulation, project specific GHG emissions generated by fossil fuel use would be fully mitigated.

As noted above in **Table 3-14** and **Table 3-15**, Project-generated GHG emissions would be attributable to the consumption of fossil fuels associated with the operation of on- and off-road vehicles. As discussed above, the SJVAPCD has determined that project-generated GHG emissions associated with the use of fossil fuels would be fully mitigated through implementation of CARB's Cap-and-Trade regulation and, therefore, would be considered have a less than significant individual and cumulative impact on the environment.

The Cap-and-Trade regulation is a key component in California's AB 32 GHG-reduction goals. On August 21, 2008, the SJVAPCD Governing Board approved the District's Climate Change Action Plan (CCAP). The CCAP includes various recommended measures for the reduction of GHG emissions associated with development projects. However, of the measures recommended, none are applicable to the proposed Project.

As discussed in Impact Assessment VIII-a and illustrated in Table 3-14 and Table 3-15 above, the Project complies with the Bay Area Air Quality Management District's GHG emissions thresholds for significance. For the aforementioned reasons, implementation of the proposed Project is not anticipated to conflict with any applicable plan, policy or regulation for reducing the emissions of GHGs, nor will the Project have a significant impact on the environment. The impact would be considered less than significant.

3.9 Hazards and Hazardous Materials

Table 3-16. Hazards and Hazardous Materials Impacts

Hazards and Hazardous Materials				
Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.9.1 Environmental Setting

3.9.1.1 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 (CalEPA) to develop at least annually an updated Cortese List. The Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List. DTSC's EnviroStor database provides DTSC's component of Cortese List data (DTSC, 2010). In addition to the EnviroStor database, the State Water Resources Control Board (SWRCB) Geotracker database provides information on regulated hazardous waste facilities in California, including underground storage tank (UST) cases and non-UST cleanup programs, including Spills-Leaks-Investigations-Cleanups (SLIC) sites, Department of Defense (DOD) sites, and Land Disposal program. A

search of the DTSC EnviroStor database and the SWRCB Geotracker performed on April 18, 2019 determined that there are no known active hazardous waste generators or hazardous material spill sites within the Project site or immediate surrounding vicinity. Implementation of the Project will not increase the risk hazards or hazardous materials affecting the community.

3.9.1.2 Airports

The Fresno Yosemite International Airport is located approximately 36.5 miles east and William Robert Johnston Municipal Airport is located approximately one mile east of the Project.

3.9.1.3 Emergency Response Plan

The City of Mendota has prepared an Emergency Operations Plan (EOP) in 2006. The objective of the EOP is to incorporate and coordinate all the facilities and personnel of the City into an efficient organization capable of responding to any emergency.

3.9.1.4 Sensitive Receptors

Along the northern boundary of the Project site, is a single-family residential subdivision. There are approximately 20 houses that abut the Project Site. Also, the nearest school (McCabe Junior High School) is located approximately 0.13 miles northeast of the Project.

3.9.1.5 Local

City of Mendota General Plan¹⁸: The Mendota General Plan sets forth the following goals and policies that pertain to hazards and hazardous materials of the City and which may be relevant to the Project's CEQA review:

- *S-5.2 The City shall require any development that uses hazardous materials to meet all applicable County, State or Federal regulations concerning their transportation, use, storage or disposal.*
- *S-5.3 Hazardous materials procedures should be consistent the Fresno County Hazardous Waste Management Plan (HWMP).*
- *S-5.5 The City should storage handling, transport and disposal issues.*

3.9.2 Impact Assessment

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

IX -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?

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

a-c) Less Than Significant Impact. At its nearest point, the Project area is located approximately 0.13 miles northeast of McCabe Junior High School. The Project will not produce or utilize and hazardous substances. The Project will not result in the emission of any hazardous substances. There will be no handling of hazardous or acutely hazardous materials.

Construction of the Project may involve the use of hazardous materials associated with construction equipment, such as diesel fuel, lubricants, hydraulic oil, grease, adhesive, paints, solvents, other petroleum-

¹⁸ City of Mendota General Plan <http://ci.mendota.ca.us/wp-content/uploads/2014/06/City-of-Mendota-General-Plan-Update.pdf> Accessed April 17, 2019.

based products. Any potential accidental hazardous materials spills during construction are the responsibility of the contractor to remediate in accordance with industry best management practices and State and county regulations (Fresno County Hazardous Waste Management Plan).

IX -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?

d) No Impact. The Project does not involve land that is listed as a hazardous materials site pursuant to Government Code Section 65962.5 and is not included on a list compiled by the Department of Toxic Substances Control. A search of the DTSC EnviroStor database and the SWRCB Geotracker performed on April 18, 2019 determined that there are no known active hazardous waste generators or hazardous material spill sites within the Project site or immediate surrounding vicinity. There will be no impact.

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

e) Less Than Significant Impact. The project site is located near to, but outside of, the boundaries of the Mendota Municipal Airport Land Use Plan. The Mendota Municipal Airport, also called the William Robert Johnston Municipal Airport is located approximately one mile east of the Project. There will be no safety hazard as a result of the proximity to the airport.

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

f) No Impact. The Project includes the construction and operation two additional soccer fields, a baseball diamond, and an open space area, which will double as a storm water basin. Construction traffic associated with the Project would be minimal and temporary, lasting approximately eight months. Operational traffic will consist of as-needed maintenance trips, sporting events, seasonal events, or community gatherings. The Project proposes to complete the circulation system in the area by building out Amador Street south connecting to the Smoot Avenue extension, which will run along the frontage of the Project site. The existing Rojas-Pierce Park has an existing emergency maintenance road. The road will allow access to the existing park and proposed expansion. Disturbances to traffic patterns, such as a partial road closures and detours are not to be expected. Therefore, Project-related impacts to emergency evacuation routes or emergency response routes on local roadways would have no impact.

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

g) No Impact. The nearest State Responsibility Area is located approximately 14.5 miles southwest of the Project site. The Project does not include any residential components, nor would it require any employees to be stationed permanently at the site on a daily basis. The project is located in an urbanized area, with permanently idle agricultural land adjacent to the West and Southwest. The agricultural land is considered fallow and has been disked regularly for fire prevention. There is no risk associated with wildland fires. There would be no impact.

3.10 Hydrology and Water Quality

Table 3-17. Hydrology and Water Quality Impacts

Hydrology and Water Quality				
Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.10.1 Environmental Setting

The Project is located within the lower San Joaquin Valley, part of the Great Valley of California. The Valley is bordered by the Sierra Nevada Mountain Ranges to the east, the Coast Ranges to the west, the Klamath Mountains and Cascade Range to the north, and the Transverse Ranges and Mojave Desert to the south. Like most of California, the San Joaquin Valley experiences a Mediterranean climate. Warm, dry summers are followed by cool, moist winters. Summer temperatures often reach above 90 degrees Fahrenheit, and the humidity is generally low. Winter temperatures are often below 60 degrees Fahrenheit during the day and rarely exceed 70 degrees. On average, the Central Valley receives an average of seven inches of precipitation in the form of rainfall yearly, most of which occurs between October and March.

3.10.1.1 Local

City of Mendota General Plan¹⁹: The Mendota General Plan sets forth the following goals and policies that protect hydrology and water quality of the City and which are not relevance to the Project's CEQA review:

- *OSC-9.6 The City shall maintain streets and gutters to prevent the accumulation of debris and litter.*

3.10.2 Impact Assessment

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

a) Less Than Significant Impact. Surface runoff from the development of the park expansion will be accommodated by the stormwater basin that will be located beyond the outfield of the baseball diamond. Any wastewater from the street improvements will be accommodated by the City's sewer system. A Stormwater Pollution Prevention Plan (SWPPP) will be completed prior to construction of the park expansion. Impacts would be less than significant.

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

b) Less Than Significant Impact. The project is not within a water short area of the County. Although the site is currently vacant and will be subject to improvements in its entirety, most of the site will contain turf and other landscaping as opposed to hardscape surfaces. The water table and overall groundwater supply will not be substantially impacted. The City of Mendota water supply wells are located northeast of the city limits. These wells produce approximately 3,100 gallons per minute (GPM) or 4.5 million gallons per day (MGD). Peak summer water usage is approximately 2.8 MGD. The calculated annual water usage for the proposed expansion would be approximately 15,500 gpd average, and 31,000 during the summer months. The City's water supply system will have more than sufficient capacity to serve the project, and the impact is less than significant.

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

- (i) result in substantial erosion or siltation on- or off-site;
- (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or offsite;
- (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
- (iv) impede or redirect flood flows?

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

c-d) Less Than Significant Impact. The site will be graded to allow for positive drainage. However, most of the site will be landscaped, and it is anticipated that the turf and other flora will reduce the possibility of erosion to a less than significant level. The anticipated runoff can be accommodated by the City's storm drainage system. The site is not located within a 100-year floodplain, See **Figure 3-2**. Due to the project site's

¹⁹ City of Mendota General Plan <http://ci.mendota.ca.us/wp-content/uploads/2014/06/City-of-Mendota-General-Plan-Update.pdf> Accessed April 17, 2019.

distance from any significant body of water and the relatively flat and level nature of the site and the surrounding area, there is no danger of inundation by seiche, tsunami, or mudflow.

X -e) Otherwise substantially degrade water quality?

e) No Impact. The City Engineer has determined that the City's storm water system has sufficient capacity to accommodate any runoff from the project. Furthermore, construction activities will require implementation of a SWPPP and compliance with all Cal/OSHA regulations in order to reduce the potential for incidental release of pollutants or hazardous substances into surface water or groundwater. There will be no impact.

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

f) No Impact. The project will have a SWPPP in place prior to the start of construction, and will comply with requirements of the Regional Water Quality Control Board related to the preservation of water quality. The Project will not conflict with or obstruct implementation of any water quality control plan or sustainable groundwater management plan. There will be no impact.



4/9/2019 : G:\Mendota_City of-3336\333619004-Rojas Pierce Park Impr\GIS\Map\FEMA.mxd

Figure 3-2. FEMA Flood Map

3.11 Land Use and Planning

Table 3-18. Land Use and Planning Impacts

Land Use and Planning				
Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.11.1 Environmental Setting

The Project is located near the western boundary of the City of Mendota; it is within the Mendota Sphere of Influence. City of Mendota is within the northwestern portion of Fresno County. The Project site is located approximately 0.25 miles west of State Route 33 and 0.43 miles north of State Route 180. The Project is located between Smoot Avenue and Amador Avenue. The Project site is surrounded by a residential subdivision, fallow agriculture, and the Rojas-Pierce Park.

The Project will be located on approximately 10-acres of land. The parcels the Project is proposed on are Assessor's Parcel Number 012-190-56ST and 012-190-55ST. The Project site is zoned as AE-20 by Fresno County, however, it has been pre-zoned with the zoning designation of O (Open Space/Recreation) and R-2 (Multiple Family Medium High Density Residential), see **Figure 3-3. Zoning**. Furthermore, the Project is planned as Recreational and Medium Density Residential by the Mendota General Plan (**Figure 3-4. General Plan Land Use Designation**). The existing Rojas-Pierce Park is zoned as PF (Public Facilities) and designated by the Mendota General Plan as Recreational. Surrounding zone designations and General Plan land use designation are detailed in **Figure 3-4**.

3.11.1.1 Local

City of Mendota General Plan²⁰: The Mendota General Plan sets forth the following goals and policies that pertain to land use and planning of the City and which are not relevance to the Project's CEQA review:

- *OSC-15 New Development and Redevelopment provides open public spaces for Mendota's residents, particularly downtown.*
- *LU-1 New development and redevelopment that is designed, sited and constructed in a manner that creates an aesthetically pleasing and desirable community in which to live.*
- *LU-1.3 The City shall monitor growth, and promote patterns of development that allow for the efficient and timely extension of infrastructure and services.*
- *LU-1.7 The City's Zoning Code shall be updated to establish a Future Development Overlay designation consistent with the Land Use Diagram with the following land use characteristics:*
 - *Identifies areas adjacent to the City, within the City's SOI, where it is anticipated that the City will grow and extend public services over the next twenty years;*

²⁰ City of Mendota General Plan <http://ci.mendota.ca.us/wp-content/uploads/2014/06/City-of-Mendota-General-Plan-Update.pdf> Accessed April 17, 2019.

- LU-10 *The viability of open space areas within and surrounding Mendota are preserved while promoting planned, sustainable growth.*
- LU-10.1 *The City's Zoning Code shall be updated to establish the following Open Space land use designations consistent with the following land use characteristics:*
 - *Appropriate uses include passive open space, recreational activities local and regional parks, trails, and ancillary commercial uses specifically related to adjoining recreational activities;*
- LU-12.1 *Coordinate land use policies and planning decision with Fresno County, the Local Agency Formation commission (LAFCo), the Council of Fresno County Governments (Fresno COG), and other affected agencies as necessary to ensure cooperative attainment of City land use goals.*

Fresno County General Plan²¹: The Fresno County General Plan sets forth the following goals and policies regarding land use and planning which have potential relevance to the Project's CEQA review.

- LU-G.1 *The County acknowledges that the cities have primary responsibility for planning within their LAFCO-adopted spheres of influence and are responsible for urban development and the provision of urban services within their spheres of influence.*
- LU-G.2 *Fresno County shall work cooperatively with all cities of the county to encourage each city to adopt and maintain its respective plan consistent with the Fresno County General Plan. The County shall adopt complementary planning policies through a cooperative planning process to be determined by the respective legislative bodies.*
- LU-G.7 *Within the spheres of influence and two (2) miles beyond, the County shall promote consultation between the cities and the County at the staff level in the early stages of preparing general plan amendments and other policy changes that may impact growth or the provision of urban services. Staff consultations, particularly concerning community plans, shall provide for meaningful participation in the policy formulation process and shall seek resolution of issues prior to presentation to the decision-making bodies.*

3.11.2 Impact Assessment

XI-a) Would the project physically divide an established community?

a) No Impact. The predominant land uses in the project vicinity are single-family residential, agriculture land, and open space/recreational land. The Project comprises of the expansion of an existing city park. It is located within the City's planned future growth area and is intended to serve residents from Mendota and the surrounding areas. It is adequately served by local public streets and is within walking distance of two schools and hundreds of residences. It will not physically divide the community. There would be no impact.

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

b) Less Than Significant Impact. The project will provide additional public recreational facilities adjacent to a residential housing in a low income community. The Project site is located outside of, but adjacent to, the city limits and will be annexed in the future. It is designated as Agriculture by the Fresno County General Plan, and is within the County's AE-20 zoning district. Furthermore, it has been pre-zoned by the City as O (Open Space/Recreation) and R-2 (Multiple Family Medium High Density Residential). The proposed use is consistent with the City's General Plan land use designation of Recreational and Medium Density Residential. Pursuant to California Government Code §65402(b), the County of Fresno shall receive the opportunity to comment on the conformity of the proposed project with its General Plan. However, under California Government Code §§53090-53091, there is intergovernmental immunity from zoning and general plan requirements. Nonconformance with the County's General Plan and/or zoning does not prevent the City from constructing a public project on land outside the city limits.

²¹ Fresno County General Plan. <https://www.co.fresno.ca.us/home/showdocument?id=18117> Accessed April 17, 2019.



4/19/2019 : G:\Mendota_City of-3336\333619004-Rojas Pierce Park Impr\GIS\Map\Zoning.mxd

Figure 3-3. Zoning Map



4/19/2019 : G:\Mendota_City of-3336\333619004-Rojas Pierce Park Imp\GIS\Map\General_Plan.mxd

Figure 3-4. General Plan Land Use Designation Map

3.12 Mineral Resources

Table 3-19. Mineral Resources Impacts

Mineral Resources				
Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.12.1 Environmental Setting

The Project is located in the northwestern 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 construction or in industrial processes. Currently, aggregate and petroleum are the County’s most significant mineral resources. The Coalinga area, in western Fresno County, has been a valuable region for mineral resources as a top producer of commercial asbestos and home to extensive oil recovery operations.²²

California Department of Conservation’s Division of Oil, Gas, and Geothermal Resources maintains a database of oil wells in the Project area (DOGGR). According to the DOGGR Well Finder there is one plugged and abandoned well within two miles of the Project site (Donco Co. #1). There are no active wells within two miles of the Project site.

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.

3.12.1.1 Local

City of Mendota General Plan²³: The Mendota General Plan sets forth the following goals and policies that protect mineral resources of the City and which have no relevance to the Project’s CEQA review:

3.12.2 Impact Assessment

XII-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?

XII-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?

a) and b) No Impact. The California Surface Mining and Reclamation Act of 1975 (SMARA) was to address protecting the state’s need for a continuing supply of mineral resources, while protecting public an environmental health. SMARA requires that all cities incorporate into their general plans mapped mineral

²² Fresno County General Plan. Background Report. <https://www.co.fresno.ca.us/home/showdocument?id=8398> Accessed April 9, 2019

²³ City of Mendota General Plan <http://ci.mendota.ca.us/wp-content/uploads/2014/06/City-of-Mendota-General-Plan-Update.pdf> Accessed April 17, 2019.

resource designations approved by the State Mining and Geology Board. The State Geologist classifies land in California based on availability of mineral resources. Because available aggregate construction material is limited, five designations have been established for the classification of sand, gravel and crushed rock resources: Scientific Resource, Mineral Resource Zone 1, Mineral Resources Zone 2, and Mineral Resource Zone 3, and Mineral Resource Zone 4.

According to the Department of Conservation Special Report 158, *Mineral Land Classification: Aggregate Materials in the Fresno Production-Consumption Region Sanger Plate*, the Project is in an undefined area of Fresno County. However, there are no known mineral resources locations near the Project. Mineral Resource Zone 3 (MRZ-3) is an area where the significance of mineral deposits cannot be determined from the available data. However, there are no known sources of mineral resources extraction or recovery operations in the Project vicinity nor any known significant mineral resources onsite.²⁴ Therefore, the Project could be classified in as MRZ-3. Implementation of the Project would not result in the loss of availability of a known mineral resource since no known mineral resources occur in this area. In addition, California's Division of Oil, Gas and Geothermal Resources has no record of active or inactive oil or gas wells or petroleum resources on the Project site or in the vicinity²⁵. Therefore, implementation of the Project would not result in the loss of availability of a known mineral resource since no known mineral resources occur in this area. Furthermore, the Project area has not been designated as a locally important mineral resource recovery site by a general plan, specific plan, or land use plan. There would be no impact.

²⁴ Fresno County General Plan Background Report <https://www.co.fresno.ca.us/home/showdocument?id=8398> Accessed March 25, 2019

²⁵ DOGGR Map of Oil and Gas Wells. <https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-119.80553/36.52896/13> Accessed 18 December 2018.

3.13 Noise

Table 3-20. Noise Impacts

Noise				
Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.13.1 Environmental Setting

There are a variety of sources that produce noise in Mendota including traffic, airport operations, and agricultural operations. Traffic and railroad noise are the most dominant source of ambient noise near the Project site. State Route (SR) 180 runs through Mendota and is the largest source of traffic noise in the area due to the high volumes of traffic. The Mendota Municipal Airport is located approximately one mile east of the project site.

Construction of the Project is anticipated to be completed within approximately eight months, which will include grading, site preparation, and construction of the park facilities. Construction will likely take place September 2019 through April 2020. Construction equipment will likely include a backhoe, grader, front loader, dump truck (or two) sheeps foot and/or a roller, auger, concrete mixer, maybe a crane for the lights and hand tools. Construction will require one super, one foreman, two operators, four laborers/carpenters/masons. Generally, construction will occur between the hours of 7am and 5pm, Monday through Friday, excluding holidays. Staging areas will be located onsite.

3.13.1.1 Local

City of Mendota General Plan²⁶: The Mendota General Plan sets forth the following goals and policies that pertain to noise standards of the City and may have relevance to the Project’s CEQA review:

- *N-1.2 The City shall include noise mitigation measures in the design and use of new development projects when necessary.*
- *N-1.2 The City shall include noise mitigation measures in the design and use of new development projects when necessary*

²⁶ City of Mendota General Plan <http://ci.mendota.ca.us/wp-content/uploads/2014/06/City-of-Mendota-General-Plan-Update.pdf> Accessed April 17, 2019.

- Action N-1.2.1 The city shall require development proposals to conform to the policies of the City’s Noise Element ensuring compatibility with the existing noise environment.
- Action N-1.2.3 Where proposed non-residential land uses are likely to produce noise levels at existing or planned noise-sensitive uses that could exceed the City’s noise standards (**Table 5-5**, below), an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design. Development of procedures that monitor and ensure implementation of noise mitigation measures pursuant to an acoustical analysis shall also be required.
- N-1.8 The City shall implement acceptable restrictions for various noise producing activities throughout the City.
 - Action N-1.8.1 Noise created by construction activities, as shown in **Table 5-8**, shall be limited to the daytime hours of 7:00 a.m. to 7:00 p.m. and prohibited on federal holidays. Construction activities that would result in safety or traffic-related concerns during the daytime hours may be permitted during the more noise-sensitive nighttime hours with approval from the City’s Public Works director.
 - Action N-1.8.2 Construction equipment and equipment staging areas shall be located at the furthest distance possible from adjacent land uses.

Table 21. Exterior Noise Level Performance Protection Standards

Exterior Noise Level Performance Protection Standards for Noise Sensitive Land Uses Affected by Non-Transportation Noise Sources			
Noise Level Descriptor	Daytime (7 a.m to 7 p.m)	Evening (7p.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly – Average (Leq), dBA	55	50	45
Maximum (Lmax), dBA	70	60	55

The noise level specified above shall be lowered by 5 dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses(e.g., caretaker dwellings). The City can impose noise level standards which are more or less restrictive than those specified above based upon determination of existing ambient noise levels. Fixed-noise sources which are typically of concern include, but are not limited to, the following: HVAC Systems, Cooling Towers/Evaporative Condensers, Pump Stations, Lift Stations, Emergency Generators, Boilers, Steam Valves, Steam Turbines, Generators, Fans / Blowers, Air Compressors, Heavy Equipment, Conveyro Systems, Transformers, Pile Drivers, Grinders, Drill Rigs, Gas or Diesel Motors, Welders, Cutting Equipment, Outdoor Speakers.

The exterior noise level standard shall be applied at exterior activity areas. In areas where exterior activity areas are not clearly defined the noise level standard shall be applied at the property line of the receiving land use or at a distance of 100feet from the residence, whichever location is nearest to the residence.. For multi-family dwellings, an onsite common open-space or recreation area maybe designated as the open space area in lieu of individual dwelling balcony or patio areas. If the ambient noise level exceeds the noise standards identified in the above categories, the maximum ambient noise level shall be the noise standard for that category.

Note: For the purposes of the Noise Element, transportation noise sources are defined as traffic on public roadways, railroad line operations, and aircraft in flight. Control of noise from these sources is preempted by Federal and State regulations. Other noise sources are presumed to be subject to local regulations, such as a noise control ordinance. Non-transportation noise sources may include industrial operations, outdoor recreation facilities, HVAC untis, loading docks, etc. a noise control ordinance. Non- transportation noise sources may include industrial operations, outdoor recreation facilities, HVAC units, loading docks, etc.

Table 22. Typical Construction Equipment Noise Levels

Typical Construction Equipment Noise Levels	
Equipment	Typical Noise Levels (dBa Lmax) 50 feet from Source
Backhoe	80
Compactor	82
Dozer	85
Grader	85
Truck	88
Air Compressor	81
Concrete Pump	82
Concrete Vibrator	76
Crane, Mobile	83
Generator	81
Impact Wrench	85
Jack Hammer	88
Paver	89
Pneumatic Tool	85
Pump	76
Roller	74
Saw	76

3.13.2 Impact Assessment

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

a) **Less Than Significant Impact.** The project is an expansion of an existing park which would have athletic field improvements. Expected noise would be cheering of fans during baseball or soccer games. These permanent noise level increases would not be significant or obtrusive. Temporary noise would occur during construction. Typical construction equipment would include scrapers, backhoes, drilling rigs and miscellaneous equipment (i.e. pneumatic tools, generators and portable air compressors). Noise levels generated by the equipment would range from 76 to 88 dBA at a distance of 50 feet from the noise source; at 100 feet, the noise levels would range from 70 to 82 dBA. The City of Mendota does not have a comprehensive noise ordinance. The City's nuisance ordinance only places limitations on the time of day during which excessive noise may be produced. Due to the nature of construction noise and the proximity of the site to existing residential areas, hours of construction shall be limited to 7:00 AM to 7:00 PM on weekdays, and 8:00 AM to 6:00 PM on Saturdays.

XIII-b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

b) Less Than Significant Impact. Any impacts regarding the exposure of persons to or generation of excessive groundbourne vibration or groundbourne noise levels have been discussed in Impact XI-a.

XIII-c) For a project located within the vicinity of a private air strip 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? and,

c) Less Than Significant Impact. The Project is located approximately one mile west of the Mendota Municipal Airport in Mendota however the Project does not involve the development of habitable structures or require the presence of permanent staff onsite. The Fresno Yosemite International Airport is located approximately 36.5 miles east of the Project. Impacts would be less than significant.

3.14 Population and Housing

Table 3-23. Population and Housing Impacts

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

3.14.1 Environmental Setting

The City of Mendota's population was 11,014 at the 2010 U.S. Census. The State Routes 180 and 33 run through the agricultural city. Mendota is located approximately 8.5 miles south-southeast of Firebaugh, at an elevation of 174 feet.

3.14.2 Impact Assessment

XIV-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)?

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

a-b) No Impact. The project will provide a recreational facility for use by current and future residents of the Mendota area. It is intended to implement the master plan adopted by the City in 2006 and to help the City meet its General Plan standards for parkland. The project will be constructed on vacant land adjacent to the existing park. It will not result in the displacement of any housing. The project will not result in the displacement of any people.

3.15 Public Services

Table 3-24. Public Services Impacts

Public Services				
Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.15.1 Environmental Setting

Fire Protection: The Closest fire station is Fresno County Fire District, Station 96, Mendota located approximately 0.6 miles northeast of the project.

Police Protection: The closest law enforcement is the Mendota Police Department located approximately 1.7 miles east of the project. The next closest law enforcement is the Fresno County Sheriff’s office, San Joaquin located approximately 22 miles southeast of the project site.

Schools: The closest school to the Project is the McCabe Elementary School located approximately 0.13 miles east of the project site.

Parks: The closest park is the existing Rojas Pierce Park located directly adjacent to the park expansion project. There is also the Jess Gill Park located approximately 0.13 miles east of the project.

Landfills: The closest landfill to the project site is the American Avenue located approximately 15 miles southwest.

3.15.1.1 Local Regulations

City of Mendota General Plan²⁷: The Mendota General Plan sets forth the following goals and policies that pertain to public services the of the City and which have potential relevance to the Project's CEQA review:

- *OSC-2.1 The City shall maintain a standard of 5.0 acres of developed parkland per 1,000 residents.*
- *OSC-2.3 The City shall reserve and promote open space and recreational areas of varying scales and uses in Mendota. The provision of private and common open space shall be required for multi-family residential development projects.*
- *OSC-15 New Development and Redevelopment provides open public spaces for Mendota's residents, particularly downtown.*

Fresno County General Plan²⁸: The Fresno County General Plan sets forth the following goals and policies regarding public services which have potential relevance to the Project's CEQA review.

- *OS-H.5 The County shall encourage Federal, State, and local agencies currently providing recreation facilities to maintain, at a minimum, and improve, if possible, their current levels of service.*
- *OS-H.14 The County shall encourage the development of recreation facilities in western Fresno County.*
- *LU-G.1 The County acknowledges that the cities have primary responsibility for planning within their LAFCO-adopted spheres of influence and are responsible for urban development and the provision of urban services within their spheres of influence.*
- *LU-G.2 Fresno County shall work cooperatively with all cities of the county to encourage each city to adopt and maintain its respective plan consistent with the Fresno County General Plan. The County shall adopt complementary planning policies through a cooperative planning process to be determined by the respective legislative bodies.*
- *LU-G.7 Within the spheres of influence and two (2) miles beyond, the County shall promote consultation between the cities and the County at the staff level in the early stages of preparing general plan amendments and other policy changes that may impact growth or the provision of urban services. Staff consultations, particularly concerning community plans, shall provide for meaningful participation in the policy formulation process and shall seek resolution of issues prior to presentation to the decision-making bodies.*

3.15.2 Impact Assessment

XV-a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) **No Impact.** The Project would utilize existing services provided by the County of Fresno and City of Mendota. There would be no impact.

Fire Protection – The City of Mendota is located in the Fresno County Fire Protection District (FCFPD). The project site would be served by Station 96, located approximately ½-mile north on McCabe Street. The project would be required to comply with the requirements of the FCFPD regarding access, water mains, fireflow, hydrants, and review of engineering plans. Standard fire suppression conditions are incorporated as part of the project. Increased demands for fire service are funded almost entirely through property taxes. Therefore, impacts to fire protection services are considered less than significant.

²⁷ City of Mendota General Plan <http://ci.mendota.ca.us/wp-content/uploads/2014/06/City-of-Mendota-General-Plan-Update.pdf> Accessed April 17, 2019.

²⁸ Fresno County General Plan. <https://www.co.fresno.ca.us/home/showdocument?id=18117> Accessed April 17, 2019.

Police Protection – The City of Mendota contracts with the Fresno County Sheriff's Department for policing services. The project site would be served by local police located in the City of Mendota. The project includes fencing and security cameras to prevent vandalism, and will be patrolled by City security staff. Therefore, adverse impacts to police protection would be less than significant.

Schools – The project site is within the Mendota Unified School District (MUSD), and is adjacent to McCabe Elementary School. As the project consists of the development of park facilities, and would not result in the creation of additional housing or result in population growth, there would be no impacts to schools.

Parks and other public facilities – The project site is located within the City of Mendota Department of Parks and Recreation service area. The project consists of development of additional park facilities such as two additional soccer fields, a baseball diamond, covered bleachers, sports field LED lighting, a parking facility along Smoot Avenue, shade structures, and an additional concession stand and permanent restroom facility with storage room. There would be no impacts to parks and recreation except a beneficial impact for the expansion.

The project's water and sewer requirements would be served by the City of Mendota. Water usage is approximately 15,500 gpd average, 31,000 in summer. Solid waste is estimated at approximately 1,600 gpd (20 gpd/parking space with 80 parking spaces) and a grinder pump and pressure sewer lateral will take the waste to the City sewer main.

3.16 Recreation

Table 3-25. Recreation Impacts

Recreation				
Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.16.1 Environmental Setting

Fresno County has several regional parks, as well as State and national parks, national forest, wilderness areas, and other resources. Regional recreational facilities within the County include ten developed and three undeveloped park sites, five fishing access areas, and boating facility. The nearest parks to the Project site are located within Mendota. The Rojas-Pierce Park is immediately adjacent to the east and Jess Gill Park is approximately 0.13 miles southeast of the Project.

The Mendota General Plan calculated the amount of park and recreational land based upon the combined total of developed park acreage plus 50 percent of the amount of school sites that have adjoining sports fields. The City currently has 23 acres of existing park and recreational land. Mendota's three primary parks developed for recreational use are: Veteran's Park, Lozano-Lindgren Park, and Rojas-Pierce Park. A buffer along the Fresno Slough provides additional open space. Existing recreational opportunities in Mendota range from traditional active sports such as softball and soccer to passive recreation such as nature observation and simply spending time outdoors. Between these two extremes falls a range of activities enjoyed by many residents, including picnicking in parks, walking and bicycling, and playground activities

3.16.1.1 Local Regulations

City of Mendota General Plan²⁹: The Mendota General Plan sets forth the following goals and policies that pertain to recreational facilities of the City and which have potential relevance to the Project's CEQA review:

- *OSC-2.1 The City shall maintain a standard of 5.0 acres of developed parkland per 1,000 residents.*
- *OSC-2.3 The City shall reserve and promote open space and recreational areas of varying scales and uses in Mendota. The provision of private and common open space shall be required for multi-family residential development projects.*

²⁹ City of Mendota General Plan <http://ci.mendota.ca.us/wp-content/uploads/2014/06/City-of-Mendota-General-Plan-Update.pdf> Accessed April 17, 2019.

Fresno County General Plan³⁰: The Fresno County General Plan sets forth the following goals and policies regarding recreation which have potential relevance to the Project's CEQA review.

- *OS-H.5 The County shall encourage Federal, State, and local agencies currently providing recreation facilities to maintain, at a minimum, and improve, if possible, their current levels of service.*
- *OS-H.14 The County shall encourage the development of recreation facilities in western Fresno County.*

3.16.2 Impact Assessment

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

XVI-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?

a-b) Less Than Significant Impact. The project consists of development of new and expanded park facilities. Phase I of the project, completed in October 2008, involved the demolition and removal of nearly all onsite facilities within the original 12-acre park site and subsequent construction of new facilities. The new 10-acre expansion of land adjacent to the existing park will receive two additional soccer fields, a baseball diamond, sports field LED lighting, a parking facility along Smoot Avenue, shade structures, and an additional concession stand and permanent restroom facility with storage room. The project will provide a high-quality, easily-accessible recreational venue for the residents of Mendota and the surrounding area. The site will be maintained by City public works crews and waste is collected by Mid Valley Disposal.

³⁰ Fresno County General Plan. <https://www.co.fresno.ca.us/home/showdocument?id=18117> Accessed April 17, 2019.

3.17 Transportation

Table 3-26. Transportation/Traffic Impacts

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

3.17.1 Environmental Setting

The City of Mendota is a small rural community in western Fresno County. The City is located west of Fresno and east of I5. SR 180/Oller Street runs east-west and is approximately 2,600 feet north east of the park. SR 33/Derrick Avenue runs north-south and is approximately 1,300 feet east of the park.. Both of these routes provide a transportation corridors for residents of Mendota and farmers in the area

Pedestrian and vehicular access to the park is from Sorensen Avenue and Smoot Avenue. The project will provide additional vehicular and pedestrian access from Amador Street, replacing an unpaved, unofficial dirt access from the west.

3.17.1.1 Local Regulations

City of Mendota General Plan³¹: The Mendota General Plan sets forth the following goals and policies that pertain to transportation facilities of the City and which have potential relevance to the Project's CEQA review:

- C-1.3 Develop a circulation network of local roads, minor collectors, major collectors, minor arterials that will meet projected traffic needs.
- C-2.2 The City shall maintain safe and efficient circulation routes for safety and emergency purposes. Coordinate the City's evacuation routes with state and county government plans.
- C-3.2 Explore opportunities to install bicycle and pedestrian paths that provide connections to surrounding neighborhoods, parks, and open space areas.
- C-3.3 Emphasize use of pedestrian pathways and sidewalks as an integral part of the City's circulation system.
- C-3.4 development to incorporate design features that make walking, cycling, and other forms of non-motorized transportation more convenient and attractive. Facilities for bicycles and pedestrians, including bike racks, should be

³¹ City of Mendota General Plan <http://ci.mendota.ca.us/wp-content/uploads/2014/06/City-of-Mendota-General-Plan-Update.pdf> Accessed April 17, 2019.

provided within new employment areas, shopping destinations, multi-modal transportation facilities, and community facilities.

- C-4.2 Ensure that noise emissions generated by transportation modes do not exceed acceptable noise standards in various land use areas.
- C-8 Provide safe, convenient, and adequate parking for land uses throughout the City.

3.17.2 Impact Assessment

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

XVII-b) Would the project conflict or be inconsistent with CEQA Guidelines section 150643. Subdivision (b)?

a-b) Less Than Significant Impact. The total number of vehicle trips expected to be generated by the expansion are listed in the table below. This is well within the capacity of the local street system adjacent to and surrounding the project site. The number of vehicles trips anticipated as a result of the project will not significantly impact any of the subject roads or highways.

The existing 12-acre park has one baseball diamond and one informal soccer field in addition to a skate park, a seasonal splash park, three full basketball courts, a large pavilion, barbeque pits, two play structures, grassy open space and off-street parking. The project will replace the existing informal soccer field with an additional baseball diamond and add two formal soccer fields to the west of the baseball diamonds along with 80 on-street parking stalls off Smoot Avenue. Based on ITE Trip Generation report (9th Edition), both City Parks and Soccer Complexes have a wide variation in number of trips generated per acres or per field, respectively. The following table provides ranges of trips generated by the existing park and the project's proposed expansion. The fields host local sports teams and events throughout the year; quantifying visitors associated with these potential events would be speculative.

Table 3-27. Trip Generation

Ranges of Trips Based on ITE Variables				
Description	Acres	Soccer Fields	Trips Based on Acres	Trips Based on Soccer Fields
Existing Park	11.9 + 2.5 informal soccer field	1	Weekday: 27 Sunday: 230	Weekday: 71 Saturday: 117
Project's Net Expansion	7.5	1	Weekday: 14 Sunday: 120	Weekday: 71 Saturday: 117
Total:	21.9	2	Weekday: 41 Sunday: 350	Weekday: 143 Saturday: 235

The existing park has approximately 44 off-street parking spaces for visitors on the paved lot at the corner of Smoot Avenue and Sorensen Avenue and an additional 15 on-street parking spaces off Smoot Avenue near the existing baseball diamond. The project will add approximately 80 on-street parking spaces including four ADA complaint spaces off the extension of Smoot Avenue.

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

c) No Impact. Roadway improvements to Smoot and Amador will extend their existing alignment and improve circulation in the project area. There will not be a negative impact.

XVII-d) Result in inadequate emergency access?

d) No Impact. Smoot Avenue will be fully improved to City local street standards (60-foot right-of-way) along the parcel frontage. The eastern half of Amador Street will be improved to City arterial street standards (84-foot right-of-way) extending from the residential development to the north to the Smoot Avenue extension. This will complete the circulation system in the area and improve existing inadequate emergency access to the streets and residences in the project area.

3.18 Tribal Cultural Resources

Table 3-28. Tribal Cultural Resources Impacts

Tribal Cultural Resources				
Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a 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:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.18.1 Environmental Setting

3.18.1.1 Regional Setting

Penutian-speaking Yokuts tribal groups occupied the southern San Joaquin Valley region and much of the nearby Sierra Nevada. For a variety of historical reasons, existing research information emphasizes the central Yokuts tribes who occupied both the valley and particularly the foothills of the Sierra Nevada mountains.

Although population estimates vary and population size was greatly affected by the introduction of Euro-American diseases and social disruption, the Yokuts were one of the largest, most successful groups in Native California. Cook estimates that the Yokuts region contained 27 percent of the aboriginal population in the state at the time of contact; other estimates are even higher. Many Yokut descendants continue to live in Fresno County, either on tribal reservations, or in local towns and communities.

3.18.2 Impact Assessment

XVIII-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:

XVIII-a-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)

XVIII-a-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, the lead agency shall consider the significance of the resource to a California Native American tribe.

a-i-a-ii) Less than Significant Impact with Mitigation Incorporated. The City of Mendota received a formal request for notification from the Santa Rosa Rancheria Tachi Tribe on August 8, 2016, pursuant to AB52. The City sent a letter April 4, 2019 in response and no further communication has been received.

A records search was conducted at the Southern San Joaquin Valley Archaeological Information Center, California State University, Bakersfield on March 26, 2019 and no recorded cultural resources have been recorded within the project area or half mile radius. A record search of the Native American Heritage Commission (NAHC) Sacred Lands File was also conducted on March 19, 2019 which resulted in a declaration that no sacred sites or tribal cultural resources are known to exist within the Project site or in the vicinity.

In addition to the record search of the Sacred Lands File, NAHC provided a list of 13 local Native American Tribal contacts, representing 10 different Native American Tribes who may have knowledge of cultural resources in the vicinity or general interest in the Project. The following 13 Tribal contacts were communicated with in writing via U.S. Mail with a letter dated March 19, 2019 informing them of the Proposed Project.

1. *Big Sandy Rancheria of Western Mono Indians, Auberry, Chairperson*
2. *Cold Springs Rancheria, Tollhouse, Chairperson*
3. *Dumna Wo-Wah Tribal Government, Fresno, Chairperson*
4. *Dunlap Band of Mono Indians, Dunlap, Tribal Chair*
5. *Dunlap Band of Mono Indians, Fresno, Tribal Secretary*
6. *Kings River Choinumni Farm Tribe, Fresno,*
7. *North Fork Mono Tribe, Clovis, Chairperson*
8. *Santa Rosa Rancheria Tachi Yokut Tribe, Lemoore, Chairperson*
9. *Table Mountain Rancheria, Friant, Chairperson*
10. *Table Mountain Rancheria, Friant, Cultural Resources Director*
11. *Traditional Choinumni Tribe, Fresno, Chairperson*
12. *Traditional Choinumni Tribe, Fresno, Cultural Resources*
13. *Wuksache Indian Tribe/Eshom Valley Band, Salinas, Chairperson*

No comments were received in response to the letters. A copy of Tribal correspondence can be found within the Cultural Information (**Appendix C**).

Mitigation Measures CUL-1 and CUL-2, described above in **Section 3.5**, are required in the event cultural materials or human remains are unearthed during grading or construction.

3.19 Utilities and Service Systems

Table 3-29. Utilities and Service Systems Impacts

Utilities and Service Systems				
Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 reductions goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.19.1 Environmental Setting

The Project is located within the Mowry Lake-Fresno Slough watershed; Hydrologic Unit Code (HUC): 180300091003 (EPA, 2019), approximately 2.5 miles southwest of the Mendota Pool at the confluence of the San Joaquin River and the Fresno Slough, and 7 miles east of Panoche Creek. The San Joaquin River, Fresno Slough, and Mendota Pool have been levied and much of the surrounding land is now intensively cultivated for agricultural production. Historically, the Mendota area supported large areas of riparian wetlands and important waterfowl habitat. Due to alteration of the aquatic features in the vicinity and the conversion of natural habitat to agricultural lands, the riparian habitat is now limited to the margins of these waterways and to undisturbed areas within ecological reserves, managed wildlife areas, and national wildlife refuges.

The City of Mendota's Public Utilities Department's mission is to deliver potable water to the residents of Mendota and provide sewer services for the disposal of wastewater. The City of Mendota water supply wells are located northeast of the city limits. These wells produce approximately 3,100 gallons per minute (GPM) or 4.5 million gallons per day (MGD). Peak summer water usage is approximately 2.8 MGD for the City.

The City's primary water supply currently comes from three water wells located northeast of the city on private property. The City's wastewater treatment plant has been in operation since 1974 and is located northeast of the city.

3.19.1.1 Water Supply

Rojas Pierce Park is connected to the City of Mendota's existing water supply system.

3.19.1.2 Wastewater Collection and Treatment

Rojas Pierce Park is connected to the City of Mendota's existing sewer system.

3.19.1.3 Landfills

The City of Mendota is served by the American Avenue Landfill which is located approximately 15 miles southwest of the Project site.

3.19.2 Impact Assessment

XIX-a) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

a) **Less Than Significant Impact.** The proposed park expansion includes the construction of one permanent restroom facility which includes two unisex bathrooms, a storage room, and drinking fountain. Approximately 1,600 gpd (20 gpd/parking space) of wastewater for 80 parking spaces is estimated. A grinder pump will break down solids before pumping to the City sewer main. Impacts would be less than significant.

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

b) **Less Than Significant Impact.** The majority of water will be used for irrigation, with a lesser amount attributed to restroom facilities and the time-metered splash park (which will only operate from May-September). As discussed, the City's water supply system is capable of generating approximately 4.5 million gallons per day (MGD). Peak summer usage is approximately 2.8 MGD. It is estimated that the proposed park expansion will require approximately 15,500 GPD average, 31,000 GPD in summer. Impacts would be less than significant.

XIX -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?

c) **No Impact.** See discussion under XIX-a).

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

d) **Less Than Significant Impact.** The project site will be served by the American Avenue landfill, operated by the County of Fresno, approximately 15 miles southwest, which has sufficient capacity to operate through 2031.

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

e) No Impact. The project will comply with all regulations related to the generation, storage, and disposal of solid waste.

3.20 Wildfire

Table 3-30. Wildfire Impacts

Wildfire				
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrollable spread of wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.20.1 Environmental Setting

The Project is located in Fresno County adjacent to the existing Rojas Pierce Park in the City of Mendota. The Project site is in a flat urbanized area of the Central San Joaquin Valley. The project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. Construction will complete the traffic circulation system in the area by improving Smoot and Amador Avenues. Additionally the expansion of 10 acres to the existing 12 acre park will improve the park's interior pedestrian circulation system and recreational capabilities for the area.

3.20.2 Impact Assessment

XX-a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

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

XX-c) Would the project Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

XX-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?

a-d) No Impact. The Project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. The nearest State Responsibility Area (SRA) is approximately 14.5 miles southwest of the Project site. Additionally, the site is approximately 21 miles from the nearest Very High classification of Fire Hazard Severity Zone (FHSZ). The project will not impair an emergency response plan or exacerbate fire risks. Therefore, further analysis of the Projects potential impacts to wildfire are not warranted. There would be no impacts.

3.21 CEQA Mandatory Findings of Significance

Table 3-31. Mandatory Findings of Significance Impacts

Mandatory Findings of Significance				
Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.21.1 Impact Assessment

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

a) Less Than Significant Impact with Mitigation Incorporated. The analysis conducted in this Initial Study/Mitigated Negative Declaration results in a determination that the Project, with incorporation of mitigation measures, will have a less than significant effect on the environment. The potential for impacts to biological resources and cultural resources from the implementation of the proposed Project will be less than significant with the incorporation of the mitigation measures discussed in **Chapter 4, Mitigation Monitoring and Reporting Program**. Accordingly, the proposed Project will involve no potential for significant impacts through the degradation of the quality of the environment, the reduction in the habitat or population of fish or wildlife, including endangered plants or animals, the elimination of a plant or animal community or example of a major period of California history or prehistory.

XXI -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)?

b) 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 proposed Project would continue the master planned park facilities commissioned by the Mendota City Council in 2006. Phase I of the project, completed in October 2008, involved the demolition and removal of nearly all onsite facilities within the original 12-acre park site and subsequent construction of new facilities.

The new 10-acre expansion to the existing park will receive two additional soccer fields, and a baseball diamond and other park improvements. Smoot Avenue will be fully improved to City local street standards along the parcel frontage. The eastern half of Amador Street will be improved to City arterial street standards extending from the residential development to the north to the Smoot Avenue extension. This will complete the circulation system in the area. On-street parking will be constructed adjacent to Smoot Avenue, providing approximately 80 additional on-street parking spaces. The development activities also include installation of turf and trees, and continuation of the park’s interior pedestrian circulation system.

The park expansion will increase the recreational opportunities for the residents of Mendota and this project’s road improvements will improve traffic circulation and parking in the area. 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 mitigation measures and basic regulatory requirements incorporated into the Project design.

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

c) Less than Significant Impact. The proposed Project would include the expansion of an existing public park. The proposed Project in and of itself would not create a significant hazard to the public or the environment. Implementation of the Project would provide a high-quality, easily-accessible recreational venue for the residents of Mendota and the surrounding area. Construction-related air quality/dust exposure impacts could occur temporarily as a result of project construction. However, implementation of basic regulatory requirements identified in this IS/MND would ensure that impacts are less than significant. Therefore, the proposed Project would not have any direct or indirect adverse impacts on humans. This impact would be less than significant.

4 Mitigation Monitoring and Reporting Program

This Mitigation Monitoring and Reporting Program (MMRP) has been formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) for the City of Mendota Rojas Pierce Park Expansion Project (Project) in the County of Fresno. The MMRP lists mitigation measures recommended in the IS/MND for the Project and identifies monitoring and reporting requirements.

Table 4-1 presents the mitigation measures identified for the proposed Project. Each mitigation measure is numbered with a symbol indicating the topical section to which it pertains, a hyphen, and the impact number. For example, AIR-2 would be the second mitigation measure identified in the Air Quality analysis of the IS/MND.

The first column of **Table 4-1** identifies the mitigation measure. The second column, entitled “When Monitoring is to Occur,” identifies the time the mitigation measure should be initiated. The third column, “Frequency of Monitoring,” identifies the frequency of the monitoring of the mitigation measure. The fourth column, “Agency Responsible for Monitoring,” names the party ultimately responsible for ensuring that the mitigation measure is implemented. The last columns will be used by the City to ensure that individual mitigation measures have been complied with and monitored.

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Monitoring and Reporting Program					
Mitigation Measure/Condition of Approval	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
Biological Resources					
Mitigation Measure BIO-1: Construction Hours					
Construction activities shall be limited to daylight hours to reduce potential impacts to special status bats that could be foraging onsite.	During construction activities	Daily, during construction activities	City of Mendota		
Mitigation Measure BIO-2a: Avoidance of Nesting Bird Season					
The Project's construction activities shall occur, if feasible, between September 16 and January 31 (outside of nesting bird season) in an effort to avoid impacts to nesting birds.	During construction activities	Daily, during construction activities	City of Mendota		
Mitigation Measure BIO-2b: Pre-Construction Nesting Bird Survey					
If activities must occur within nesting bird season (February 1 to September 15), a qualified biologist shall conduct pre-construction surveys for active nests within 30 days prior to the start of construction. The survey shall include the proposed work area and surrounding lands within 0.5 mile. If no active nests are observed, no further mitigation is required. Raptor nests are considered "active" upon the nest-building stage.	Within 30 days prior to the start of work performed from February 1 to September 15	Once	City of Mendota		
Mitigation Measure BIO-2c: Establish Nest Buffers					
On discovery of any active nests near work areas, the biologist shall determine appropriate construction setback distances based on applicable CDFW and/or USFWS guidelines and/or the biology of the species in question. Construction buffers shall be identified with flagging, fencing, or other easily visible means, and shall be maintained until the biologist has determined that the nestlings have fledged.	On discovery of active nests	Once, per nest, or more frequently as determined by biologist	City of Mendota		

Chapter Four: Mitigation Monitoring and Reporting Program
 Rojas Pierce Park Expansion Project

Mitigation Monitoring and Reporting Program					
Mitigation Measure/Condition of Approval	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
Cultural Resources					
Mitigation Measure CUL-1: Archaeological Resources					
In the event that archaeological resources are encountered at any time during development or ground-moving activities within the entire project area, all work in the vicinity of the find shall halt until a qualified archaeologist can assess the discovery. The District shall implement all recommendations of the archaeologist necessary to avoid or reduce to a less than significant level potential impacts to cultural resource. Appropriate actions could include a Data Recovery Plan or preservation in place.	In the event archaeological resources are uncovered	During excavation	City of Mendota		
Mitigation Measure CUL-2: Human Remains					
If human remains are uncovered, or in any other case when human remains are discovered during construction, the Fresno County Coroner is to be notified to arrange proper treatment and disposition. If the remains are identified—on the basis of archaeological context, age, cultural associations, or biological traits—as those of a Native American, California Health and Safety Code 7050.5 and Public Resource Code 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 determine the manner in which the remains are treated.	In the event human remains are uncovered	During excavation	City of Mendota		
Geological Resources					
Mitigation Measure – GEO – 1: Paleontological Resources					
Should paleontological resources be encountered on the Project site, all ground disturbing activities in the area shall stop. A qualified paleontologist shall be contacted to assess the discovery. Mitigation may include monitoring, recording the fossil locality, data recovery and analysis, a final report. Public educational outreach may also be appropriate. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to the City of Mendota for review, and (if paleontological materials are recovered) a paleontological repository, such as the University of California Museum of Paleontology.	In the event paleontological resources are uncovered	During excavation	City of Mendota		

5 References

List of Sources, Agencies and Persons Consulted:

AB-52 Native Americans: California Environmental Quality Act

http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB52

California Department of Resources Recycling and Recovery (CalRecycle) website:

<http://www.calrecycle.ca.gov/>

California Department of Toxic Substances Control website:

<http://www.envirostor.dtsc.ca.gov/public/>

California Department of Conservation's Farmland Mapping and Monitoring Program

<https://maps.conservation.ca.gov/>

California Department of Fish and Wildlife: <https://www.wildlife.ca.gov/Data/CNDDDB>

California Emissions Estimator Model (CalEEMod), version 2013.2.2

California State Water Resources Control Board website: <http://geotracker.waterboards.ca.gov/> and

http://www.swrcb.ca.gov/water_issues/programs/stormwater/construction.shtml

Caltrans <http://www.dot.ca.gov/design/lap/livability/scenic-highways/index.html>

Federal Emergency Management Agency (FEMA), Flood Map Service Center website:

<http://msc.fema.gov/portal>

Google Earth: <https://www.google.com/earth/>

Native American Heritage Commission <http://nahc.ca.gov/>

San Joaquin Valley Air Pollution Control District <http://www.valleyair.org/aqinfo/attainment.htm>

State Water Resources Control Board, GeoTracker <http://geotracker.waterboards.ca.gov/>

U.S. Fish & Wildlife Service National Wetlands Inventor: <https://www.fws.gov/wetlands/>

6 List of Preparers

The following firms, individuals, and agency staff contributed to the preparation of this document:

Provost & Pritchard Consulting Group:
Briza Sholars – Project Manager/Senior Planner
Michael Osborn, Civil Engineer
Jeffrey O’Neal, AICP, QA/QC
Trevor Stearns – GIS/ Assistant Planner
Brooke Fletcher – Biologist
Jackie Lancaster – Administrative Support

Appendix A

Air Quality and Greenhouse Gas Emissions Evaluation Report

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

**City of Mendota- Rojas Pierce Park Expansion Project
Fresno County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	15.00	Acre	15.00	653,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Construction estimated to take 8 months to complete.

Off-road Equipment - Equipment based on project description

Trips and VMT -

Demolition - Estimated 10,000 CY of dirt imported/exported = 13,5000 tons.

Grading - 15 acre APE.

Construction Off-road Equipment Mitigation -

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Parking	150	0
tblAreaCoating	Area_Nonresidential_Exterior	750	0
tblAreaCoating	Area_Nonresidential_Interior	2250	0
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	300.00	25.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	30.00	25.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	10.00	25.00
tblFleetMix	HHD	0.12	0.00
tblFleetMix	LDA	0.48	0.00
tblFleetMix	LDT1	0.03	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	4.9970e-003	0.00
tblFleetMix	MCY	5.2610e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	6.6700e-004	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	OBUS	2.3690e-003	0.00
tblFleetMix	SBUS	1.1150e-003	0.00
tblFleetMix	UBUS	1.6750e-003	0.00
tblGrading	AcresOfGrading	62.50	15.00
tblGrading	AcresOfGrading	12.50	15.00
tblOffRoadEquipment	HorsePower	231.00	226.00
tblOffRoadEquipment	HorsePower	130.00	125.00

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

tblOffRoadEquipment	HorsePower	247.00	255.00
tblOffRoadEquipment	HorsePower	247.00	255.00
tblOffRoadEquipment	HorsePower	187.00	174.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	6.00

2.0 Emissions Summary

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-2-2019	12-1-2019	1.4775	1.4775
2	12-2-2019	3-1-2020	0.7594	0.7594
3	3-2-2020	6-1-2020	0.0295	0.0295
		Highest	1.4775	1.4775

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0120	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0717	0.0000	0.0717	0.0176	0.0000	0.0176	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.2619	0.0000	0.2619	0.0155	0.0000	0.6487
Water						0.0000	0.0000		0.0000	0.0000	0.0000	18.1973	18.1973	8.2000e-004	1.7000e-004	18.2686
Total	0.0120	0.0000	1.4000e-004	0.0000	0.0717	0.0000	0.0717	0.0176	0.0000	0.0176	0.2619	18.1976	18.4595	0.0163	1.7000e-004	18.9177

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0120	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0717	0.0000	0.0717	0.0176	0.0000	0.0176	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.2619	0.0000	0.2619	0.0155	0.0000	0.6487
Water						0.0000	0.0000		0.0000	0.0000	0.0000	18.1973	18.1973	8.2000e-004	1.7000e-004	18.2686
Total	0.0120	0.0000	1.4000e-004	0.0000	0.0717	0.0000	0.0717	0.0176	0.0000	0.0176	0.2619	18.1976	18.4595	0.0163	1.7000e-004	18.9177

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

3.0 Construction Detail

Construction Phase

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/2/2019	10/4/2019	5	25	
2	Site Preparation	Site Preparation	10/7/2019	11/8/2019	5	25	
3	Grading	Grading	11/11/2019	12/13/2019	5	25	
4	Building Construction	Building Construction	12/16/2019	1/17/2020	5	25	
5	Paving	Paving	1/20/2020	2/21/2020	5	25	
6	Architectural Coating	Architectural Coating	2/24/2020	3/27/2020	5	25	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 15

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,250; Non-Residential Outdoor: 750; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Dumpers/Tenders	1	6.00	16	0.38
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	6.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	125	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	8	20.00	0.00	1,335.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	23.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	274.00	107.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	23.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	55.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1444	0.0000	0.1444	0.0219	0.0000	0.0219	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0303	0.2972	0.2942	4.2000e-004		0.0156	0.0156		0.0146	0.0146	0.0000	37.3613	37.3613	0.0101	0.0000	37.6127
Total	0.0303	0.2972	0.2942	4.2000e-004	0.1444	0.0156	0.1600	0.0219	0.0146	0.0365	0.0000	37.3613	37.3613	0.0101	0.0000	37.6127

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.7800e-003	0.2012	0.0268	5.4000e-004	0.0114	7.8000e-004	0.0122	3.1400e-003	7.5000e-004	3.8900e-003	0.0000	51.4370	51.4370	4.5900e-003	0.0000	51.5518
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1800e-003	7.8000e-004	7.7900e-003	2.0000e-005	2.0000e-003	1.0000e-005	2.0100e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.7853	1.7853	5.0000e-005	0.0000	1.7867
Total	6.9600e-003	0.2020	0.0346	5.6000e-004	0.0134	7.9000e-004	0.0142	3.6700e-003	7.6000e-004	4.4300e-003	0.0000	53.2223	53.2223	4.6400e-003	0.0000	53.3385

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0650	0.0000	0.0650	9.8400e-003	0.0000	9.8400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0303	0.2972	0.2942	4.2000e-004		0.0156	0.0156		0.0146	0.0146	0.0000	37.3612	37.3612	0.0101	0.0000	37.6127
Total	0.0303	0.2972	0.2942	4.2000e-004	0.0650	0.0156	0.0806	9.8400e-003	0.0146	0.0244	0.0000	37.3612	37.3612	0.0101	0.0000	37.6127

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.7800e-003	0.2012	0.0268	5.4000e-004	0.0114	7.8000e-004	0.0122	3.1400e-003	7.5000e-004	3.8900e-003	0.0000	51.4370	51.4370	4.5900e-003	0.0000	51.5518
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1800e-003	7.8000e-004	7.7900e-003	2.0000e-005	2.0000e-003	1.0000e-005	2.0100e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.7853	1.7853	5.0000e-005	0.0000	1.7867
Total	6.9600e-003	0.2020	0.0346	5.6000e-004	0.0134	7.9000e-004	0.0142	3.6700e-003	7.6000e-004	4.4300e-003	0.0000	53.2223	53.2223	4.6400e-003	0.0000	53.3385

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2338	0.0000	0.2338	0.1250	0.0000	0.1250	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0550	0.5766	0.2469	4.4000e-004		0.0293	0.0293		0.0270	0.0270	0.0000	39.2261	39.2261	0.0124	0.0000	39.5364
Total	0.0550	0.5766	0.2469	4.4000e-004	0.2338	0.0293	0.2631	0.1250	0.0270	0.1520	0.0000	39.2261	39.2261	0.0124	0.0000	39.5364

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	5.1000e-004	5.0600e-003	1.0000e-005	1.3000e-003	1.0000e-005	1.3100e-003	3.5000e-004	1.0000e-005	3.5000e-004	0.0000	1.1605	1.1605	3.0000e-005	0.0000	1.1613
Total	7.7000e-004	5.1000e-004	5.0600e-003	1.0000e-005	1.3000e-003	1.0000e-005	1.3100e-003	3.5000e-004	1.0000e-005	3.5000e-004	0.0000	1.1605	1.1605	3.0000e-005	0.0000	1.1613

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1052	0.0000	0.1052	0.0563	0.0000	0.0563	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0550	0.5766	0.2469	4.4000e-004		0.0293	0.0293		0.0270	0.0270	0.0000	39.2261	39.2261	0.0124	0.0000	39.5363
Total	0.0550	0.5766	0.2469	4.4000e-004	0.1052	0.0293	0.1345	0.0563	0.0270	0.0832	0.0000	39.2261	39.2261	0.0124	0.0000	39.5363

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	5.1000e-004	5.0600e-003	1.0000e-005	1.3000e-003	1.0000e-005	1.3100e-003	3.5000e-004	1.0000e-005	3.5000e-004	0.0000	1.1605	1.1605	3.0000e-005	0.0000	1.1613
Total	7.7000e-004	5.1000e-004	5.0600e-003	1.0000e-005	1.3000e-003	1.0000e-005	1.3100e-003	3.5000e-004	1.0000e-005	3.5000e-004	0.0000	1.1605	1.1605	3.0000e-005	0.0000	1.1613

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0174	0.0000	0.0174	6.0300e-003	0.0000	6.0300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0510	0.5781	0.4089	7.4000e-004		0.0251	0.0251		0.0233	0.0233	0.0000	66.2671	66.2671	0.0193	0.0000	66.7499
Total	0.0510	0.5781	0.4089	7.4000e-004	0.0174	0.0251	0.0425	6.0300e-003	0.0233	0.0294	0.0000	66.2671	66.2671	0.0193	0.0000	66.7499

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3600e-003	8.9000e-004	8.9600e-003	2.0000e-005	2.3000e-003	2.0000e-005	2.3100e-003	6.1000e-004	1.0000e-005	6.2000e-004	0.0000	2.0531	2.0531	6.0000e-005	0.0000	2.0547
Total	1.3600e-003	8.9000e-004	8.9600e-003	2.0000e-005	2.3000e-003	2.0000e-005	2.3100e-003	6.1000e-004	1.0000e-005	6.2000e-004	0.0000	2.0531	2.0531	6.0000e-005	0.0000	2.0547

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.8100e-003	0.0000	7.8100e-003	2.7100e-003	0.0000	2.7100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0510	0.5781	0.4089	7.4000e-004		0.0251	0.0251		0.0233	0.0233	0.0000	66.2670	66.2670	0.0193	0.0000	66.7499
Total	0.0510	0.5781	0.4089	7.4000e-004	7.8100e-003	0.0251	0.0329	2.7100e-003	0.0233	0.0260	0.0000	66.2670	66.2670	0.0193	0.0000	66.7499

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3600e-003	8.9000e-004	8.9600e-003	2.0000e-005	2.3000e-003	2.0000e-005	2.3100e-003	6.1000e-004	1.0000e-005	6.2000e-004	0.0000	2.0531	2.0531	6.0000e-005	0.0000	2.0547
Total	1.3600e-003	8.9000e-004	8.9600e-003	2.0000e-005	2.3000e-003	2.0000e-005	2.3100e-003	6.1000e-004	1.0000e-005	6.2000e-004	0.0000	2.0531	2.0531	6.0000e-005	0.0000	2.0547

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0107	0.0910	0.0783	1.2000e-004		5.5700e-003	5.5700e-003		5.2800e-003	5.2800e-003	0.0000	10.6250	10.6250	2.3300e-003	0.0000	10.6833
Total	0.0107	0.0910	0.0783	1.2000e-004		5.5700e-003	5.5700e-003		5.2800e-003	5.2800e-003	0.0000	10.6250	10.6250	2.3300e-003	0.0000	10.6833

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9600e-003	0.0868	0.0148	1.8000e-004	4.2500e-003	6.3000e-004	4.8800e-003	1.2300e-003	6.0000e-004	1.8300e-003	0.0000	17.4638	17.4638	2.2200e-003	0.0000	17.5193
Worker	7.7700e-003	5.1100e-003	0.0512	1.3000e-004	0.0131	9.0000e-005	0.0132	3.4900e-003	8.0000e-005	3.5700e-003	0.0000	11.7403	11.7403	3.5000e-004	0.0000	11.7491
Total	0.0107	0.0919	0.0660	3.1000e-004	0.0174	7.2000e-004	0.0181	4.7200e-003	6.8000e-004	5.4000e-003	0.0000	29.2041	29.2041	2.5700e-003	0.0000	29.2684

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0107	0.0910	0.0783	1.2000e-004		5.5700e-003	5.5700e-003		5.2800e-003	5.2800e-003	0.0000	10.6249	10.6249	2.3300e-003	0.0000	10.6833
Total	0.0107	0.0910	0.0783	1.2000e-004		5.5700e-003	5.5700e-003		5.2800e-003	5.2800e-003	0.0000	10.6249	10.6249	2.3300e-003	0.0000	10.6833

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9600e-003	0.0868	0.0148	1.8000e-004	4.2500e-003	6.3000e-004	4.8800e-003	1.2300e-003	6.0000e-004	1.8300e-003	0.0000	17.4638	17.4638	2.2200e-003	0.0000	17.5193
Worker	7.7700e-003	5.1100e-003	0.0512	1.3000e-004	0.0131	9.0000e-005	0.0132	3.4900e-003	8.0000e-005	3.5700e-003	0.0000	11.7403	11.7403	3.5000e-004	0.0000	11.7491
Total	0.0107	0.0919	0.0660	3.1000e-004	0.0174	7.2000e-004	0.0181	4.7200e-003	6.8000e-004	5.4000e-003	0.0000	29.2041	29.2041	2.5700e-003	0.0000	29.2684

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0104	0.0900	0.0834	1.3000e-004		5.2200e-003	5.2200e-003		4.9500e-003	4.9500e-003	0.0000	11.3656	11.3656	2.4800e-003	0.0000	11.4276
Total	0.0104	0.0900	0.0834	1.3000e-004		5.2200e-003	5.2200e-003		4.9500e-003	4.9500e-003	0.0000	11.3656	11.3656	2.4800e-003	0.0000	11.4276

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-003	0.0862	0.0138	2.0000e-004	4.6100e-003	4.6000e-004	5.0700e-003	1.3300e-003	4.4000e-004	1.7700e-003	0.0000	18.7566	18.7566	2.3200e-003	0.0000	18.8146
Worker	7.6900e-003	4.8800e-003	0.0495	1.4000e-004	0.0142	9.0000e-005	0.0143	3.7800e-003	8.0000e-005	3.8700e-003	0.0000	12.3234	12.3234	3.3000e-004	0.0000	12.3317
Total	0.0103	0.0911	0.0633	3.4000e-004	0.0189	5.5000e-004	0.0194	5.1100e-003	5.2000e-004	5.6400e-003	0.0000	31.0801	31.0801	2.6500e-003	0.0000	31.1463

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0104	0.0900	0.0834	1.3000e-004		5.2200e-003	5.2200e-003		4.9500e-003	4.9500e-003	0.0000	11.3655	11.3655	2.4800e-003	0.0000	11.4275
Total	0.0104	0.0900	0.0834	1.3000e-004		5.2200e-003	5.2200e-003		4.9500e-003	4.9500e-003	0.0000	11.3655	11.3655	2.4800e-003	0.0000	11.4275

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-003	0.0862	0.0138	2.0000e-004	4.6100e-003	4.6000e-004	5.0700e-003	1.3300e-003	4.4000e-004	1.7700e-003	0.0000	18.7566	18.7566	2.3200e-003	0.0000	18.8146
Worker	7.6900e-003	4.8800e-003	0.0495	1.4000e-004	0.0142	9.0000e-005	0.0143	3.7800e-003	8.0000e-005	3.8700e-003	0.0000	12.3234	12.3234	3.3000e-004	0.0000	12.3317
Total	0.0103	0.0911	0.0633	3.4000e-004	0.0189	5.5000e-004	0.0194	5.1100e-003	5.2000e-004	5.6400e-003	0.0000	31.0801	31.0801	2.6500e-003	0.0000	31.1463

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0147	0.1427	0.1511	2.4000e-004		7.5600e-003	7.5600e-003		7.0000e-003	7.0000e-003	0.0000	20.5152	20.5152	6.2600e-003	0.0000	20.6716
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0147	0.1427	0.1511	2.4000e-004		7.5600e-003	7.5600e-003		7.0000e-003	7.0000e-003	0.0000	20.5152	20.5152	6.2600e-003	0.0000	20.6716

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2400e-003	7.9000e-004	7.9900e-003	2.0000e-005	2.3000e-003	1.0000e-005	2.3100e-003	6.1000e-004	1.0000e-005	6.2000e-004	0.0000	1.9893	1.9893	5.0000e-005	0.0000	1.9907
Total	1.2400e-003	7.9000e-004	7.9900e-003	2.0000e-005	2.3000e-003	1.0000e-005	2.3100e-003	6.1000e-004	1.0000e-005	6.2000e-004	0.0000	1.9893	1.9893	5.0000e-005	0.0000	1.9907

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0147	0.1427	0.1511	2.4000e-004		7.5600e-003	7.5600e-003		7.0000e-003	7.0000e-003	0.0000	20.5151	20.5151	6.2600e-003	0.0000	20.6716
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0147	0.1427	0.1511	2.4000e-004		7.5600e-003	7.5600e-003		7.0000e-003	7.0000e-003	0.0000	20.5151	20.5151	6.2600e-003	0.0000	20.6716

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2400e-003	7.9000e-004	7.9900e-003	2.0000e-005	2.3000e-003	1.0000e-005	2.3100e-003	6.1000e-004	1.0000e-005	6.2000e-004	0.0000	1.9893	1.9893	5.0000e-005	0.0000	1.9907
Total	1.2400e-003	7.9000e-004	7.9900e-003	2.0000e-005	2.3000e-003	1.0000e-005	2.3100e-003	6.1000e-004	1.0000e-005	6.2000e-004	0.0000	1.9893	1.9893	5.0000e-005	0.0000	1.9907

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0104					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0300e-003	0.0211	0.0229	4.0000e-005		1.3900e-003	1.3900e-003		1.3900e-003	1.3900e-003	0.0000	3.1916	3.1916	2.5000e-004	0.0000	3.1977
Total	0.0135	0.0211	0.0229	4.0000e-005		1.3900e-003	1.3900e-003		1.3900e-003	1.3900e-003	0.0000	3.1916	3.1916	2.5000e-004	0.0000	3.1977

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9700e-003	1.8800e-003	0.0191	5.0000e-005	5.5000e-003	4.0000e-005	5.5300e-003	1.4600e-003	3.0000e-005	1.4900e-003	0.0000	4.7571	4.7571	1.3000e-004	0.0000	4.7603
Total	2.9700e-003	1.8800e-003	0.0191	5.0000e-005	5.5000e-003	4.0000e-005	5.5300e-003	1.4600e-003	3.0000e-005	1.4900e-003	0.0000	4.7571	4.7571	1.3000e-004	0.0000	4.7603

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0104					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0300e-003	0.0211	0.0229	4.0000e-005		1.3900e-003	1.3900e-003		1.3900e-003	1.3900e-003	0.0000	3.1916	3.1916	2.5000e-004	0.0000	3.1977
Total	0.0135	0.0211	0.0229	4.0000e-005		1.3900e-003	1.3900e-003		1.3900e-003	1.3900e-003	0.0000	3.1916	3.1916	2.5000e-004	0.0000	3.1977

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9700e-003	1.8800e-003	0.0191	5.0000e-005	5.5000e-003	4.0000e-005	5.5300e-003	1.4600e-003	3.0000e-005	1.4900e-003	0.0000	4.7571	4.7571	1.3000e-004	0.0000	4.7603
Total	2.9700e-003	1.8800e-003	0.0191	5.0000e-005	5.5000e-003	4.0000e-005	5.5300e-003	1.4600e-003	3.0000e-005	1.4900e-003	0.0000	4.7571	4.7571	1.3000e-004	0.0000	4.7603

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0717	0.0000	0.0717	0.0176	0.0000	0.0176	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0717	0.0000	0.0717	0.0176	0.0000	0.0176	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	28.35	341.25	251.10	223,885	223,885
Total	28.35	341.25	251.10	223,885	223,885

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000							

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0120	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Unmitigated	0.0120	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0120					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Total	0.0120	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0120					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Total	0.0120	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004

7.0 Water Detail

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	18.1973	8.2000e-004	1.7000e-004	18.2686
Unmitigated	18.1973	8.2000e-004	1.7000e-004	18.2686

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 17.8722	18.1973	8.2000e-004	1.7000e-004	18.2686
Total		18.1973	8.2000e-004	1.7000e-004	18.2686

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 17.8722	18.1973	8.2000e-004	1.7000e-004	18.2686
Total		18.1973	8.2000e-004	1.7000e-004	18.2686

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.2619	0.0155	0.0000	0.6487
Unmitigated	0.2619	0.0155	0.0000	0.6487

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.29	0.2619	0.0155	0.0000	0.6487
Total		0.2619	0.0155	0.0000	0.6487

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.29	0.2619	0.0155	0.0000	0.6487
Total		0.2619	0.0155	0.0000	0.6487

9.0 Operational Offroad

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

City of Mendota- Rojas Pierce Park Expansion Project - Fresno County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Appendix B

Biological Evaluation Report

City of Mendota: Rojas-Pierce Park Expansion Project

Biological Evaluation



Prepared by:
Brooke Fletcher, Wildlife Biologist



April 2019

Table of Contents

1	Introduction.....	1-1
1.1	Project Description	1-1
1.2	Report Objectives.....	1-1
1.3	Study Methodology	1-2
2	Existing Conditions.....	2-1
2.1	Regional Setting.....	2-1
2.2	Project Site.....	2-1
2.3	Biological Communities.....	2-2
2.3.1	Developed.....	2-2
2.3.2	Ruderal.....	2-2
2.4	Soils.....	2-3
2.5	Natural Communities of Special Concern.....	2-4
2.6	Designated Critical Habitat.....	2-4
2.7	Wildlife Movement Corridors	2-4
2.8	Special Status Plants and Animals.....	2-4
3	Impacts and Mitigation.....	3-1
3.1	Significance Criteria.....	3-1
3.2	Relevant Goals, Policies, and Laws	3-3
3.2.1	City of Mendota General Plan Update.....	3-3
3.2.2	Threatened and Endangered Species.....	3-3
3.2.3	Designated Critical Habitat	3-4
3.2.4	Migratory Birds.....	3-4
3.2.5	Birds of Prey	3-4
3.2.6	Nesting Birds	3-4
3.2.7	Wetlands and other “Jurisdictional Waters”.....	3-4
3.3	Potentially Significant Project-Related Impacts and Mitigation.....	3-6
3.3.1	Project-Related Mortality and/or Disturbance of Nesting Raptors, Migratory Birds, and Special Status Birds (Including Swainson’s Hawk and Mountain Plover).....	3-6
3.3.2	Project-Related Impacts to Special Status Bats (Including Western Mastiff Bat and Western Red Bat)	3-7
3.4	Less Than Significant Project-Related Impacts	3-7
3.4.1	Project-Related Impacts to Special Status Plant Species	3-7
3.4.2	Project-Related Impacts to Special Status Animal Species Absent From, or Unlikely to Occur on, the Project Site	3-8
3.4.3	Project-Related Impacts to Jurisdictional Waters, Wetlands, Navigable Waters, Wild and Scenic Rivers, or other Water Features, and Riparian Habitat	3-9
3.4.4	Project-Related Impacts to Wildlife Movement Corridors	3-9

3.4.5	Project-Related Impacts to Critical Habitat.....	3-9
3.4.6	Local Policies or Habitat Conservation Plans	3-9
3.4.7	Coastal Zone and Coastal Barriers Resources Act	3-9
3.4.8	Project-Related Impact to Essential Fish Habitat	3-9
3.5	Section 7 Determination.....	3-9
4	References.....	4-1

APPENDICES

Appendix A. Selected Photographs of the Project Site.....	A-1
Appendix B. CNDDDB Query Results	B-1
Appendix C. USFWS Species List	C-1
Appendix D. NOAA EFH Mapping Query Results	D-1
Appendix E. Soils Report.....	E-1

LIST OF FIGURES

Figure 1. Regional Location Map.....	1-3
Figure 2. Topographic Quadrangle Map.....	1-4
Figure 3. Area of Potential Effect (APE)	1-5
Figure 4. Site Plan.....	1-6

LIST OF TABLES

Table 1. List of Special Status Animals with Potential to Occur Onsite and/or in the Vicinity	2-6
Table 2. List of Special Status Plants with Potential to Occur Onsite and/or in the Vicinity	2-12
Table 3. Section 7 Determinations.....	3-10

1 Introduction

Rojas-Pierce Memorial Park is located at the northeast intersection of Smoot and Sorensen Avenue's alignment in Fresno County. The City of Mendota proposes a westward expansion of the recreational facilities into the ruderal vacant lot west of the existing park boundaries. The proposed impact area is surrounded by urban development to the north and east, fallow field to the west, and ruderal-fallow field to the south.

The following technical report, prepared by Provost & Pritchard Consulting Group, in compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), includes a description of the biological resources present or with potential to occur within the Project site and surrounding areas and evaluates potential Project-related impacts to those resources.

1.1 Project Description

The City of Mendota approved a plan for significant improvements to Rojas-Pierce Park facilities in 2006. Phase I of the improvement project, which was completed in 2008, included the demolition and removal of nearly all onsite facilities and the development of new landscaping, a concert pavilion, a splash park, two jungle-gym play areas, a temporary skate park, three basketball courts, a permanent concession stand, restrooms, and an emergency/maintenance access road. Additionally, a single soccer field was constructed on a small portion of the City property on which the current project proposes to expand. The intent of the proposed project is to continue, but not complete, the master-planned facilities as commissioned by the Mendota City Council in 2006, and to provide a high-quality, easily-accessible recreational venue for the residents of Mendota and the surrounding area.

As illustrated in **Figure 4**, the ruderal parcel of land west of the existing park will receive two additional soccer fields and a baseball diamond. Beyond the outfield of the baseball diamond an open space area will double as a storm water basin. Smoot and Amador Avenues will be extended to provide improved traffic circulation and on-street parking. Additional development activities include installation of turf and trees, continuation of pedestrian access routes, and the construction of a permanent restroom facility.

1.2 Report Objectives

Construction activities such as those proposed by City of Mendota for the Rojas-Pierce Park Expansion Project could potentially damage biological resources or modify habitats that are crucial for sensitive plant and wildlife species. In cases such as these, development may be regulated by state or federal agencies, subject to provisions of California Environmental Quality Act (CEQA), and/or National Environmental Policy Act (NEPA), and/or addressed by local regulatory agencies.

This report addresses issues related to the following:

- 1) The presence of sensitive biological resources onsite, or with the potential to occur onsite.
- 2) The federal, state, and local regulations regarding these resources.
- 3) 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:

- 1) Summarize all site-specific information related to existing biological resources.
- 2) Make reasonable inferences about the biological resources that could occur onsite based on habitat suitability and the proximity of the site to a species' known range.

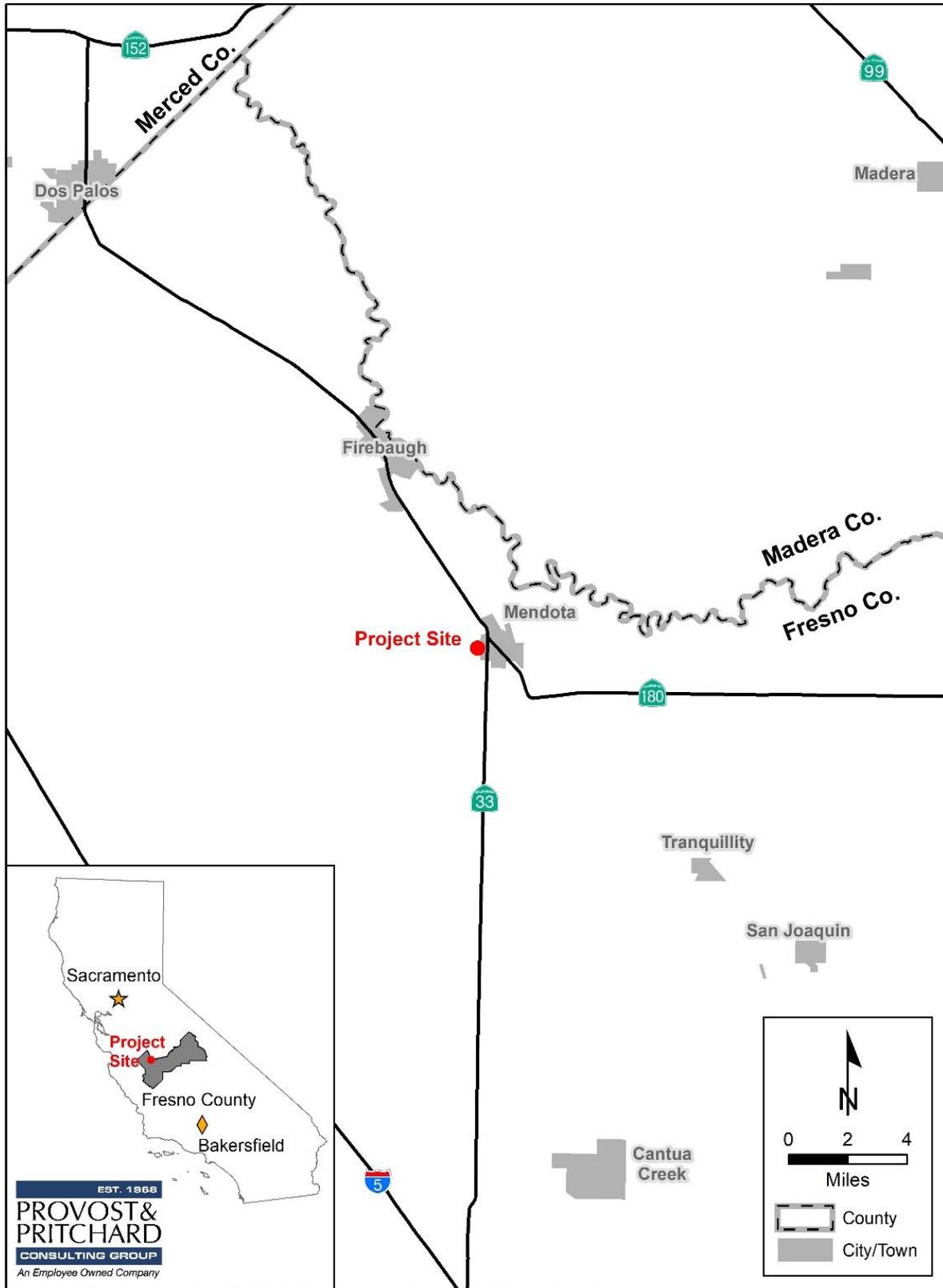
- 3) Summarize all state and federal natural resource protection laws that may be relevant to the Project.
- 4) Identify and discuss Project impacts to biological resources likely to occur onsite within the context of CEQA or state or federal laws.
- 5) Identify and publish a set of avoidance and mitigation measures that would reduce impacts to a less-than-significant level (as identified by CEQA) and are generally consistent with recommendations of the resource agencies for affected biological resources.

1.3 Study Methodology

A reconnaissance-level field survey of the Project site and surrounding areas was conducted on March 14, 2019 by Provost & Pritchard. Although the park expansion project only includes development of approximately 10-acres of land (**Figure 3**), the Project's Area of Potential Effect (APE) was expanded to include all potential access routes and staging areas including street improvements, as illustrated on **Figure 4**. The surveyed area of approximately 17 acres, included all areas with potential to incur direct or indirect impacts which may be temporary or permanent nature. The survey consisted of walking through the Project area while identifying and noting land uses, biological habitats and communities, and plant and animal species encountered. Furthermore, the site and surrounding areas were assessed for suitable habitats of various wildlife species.

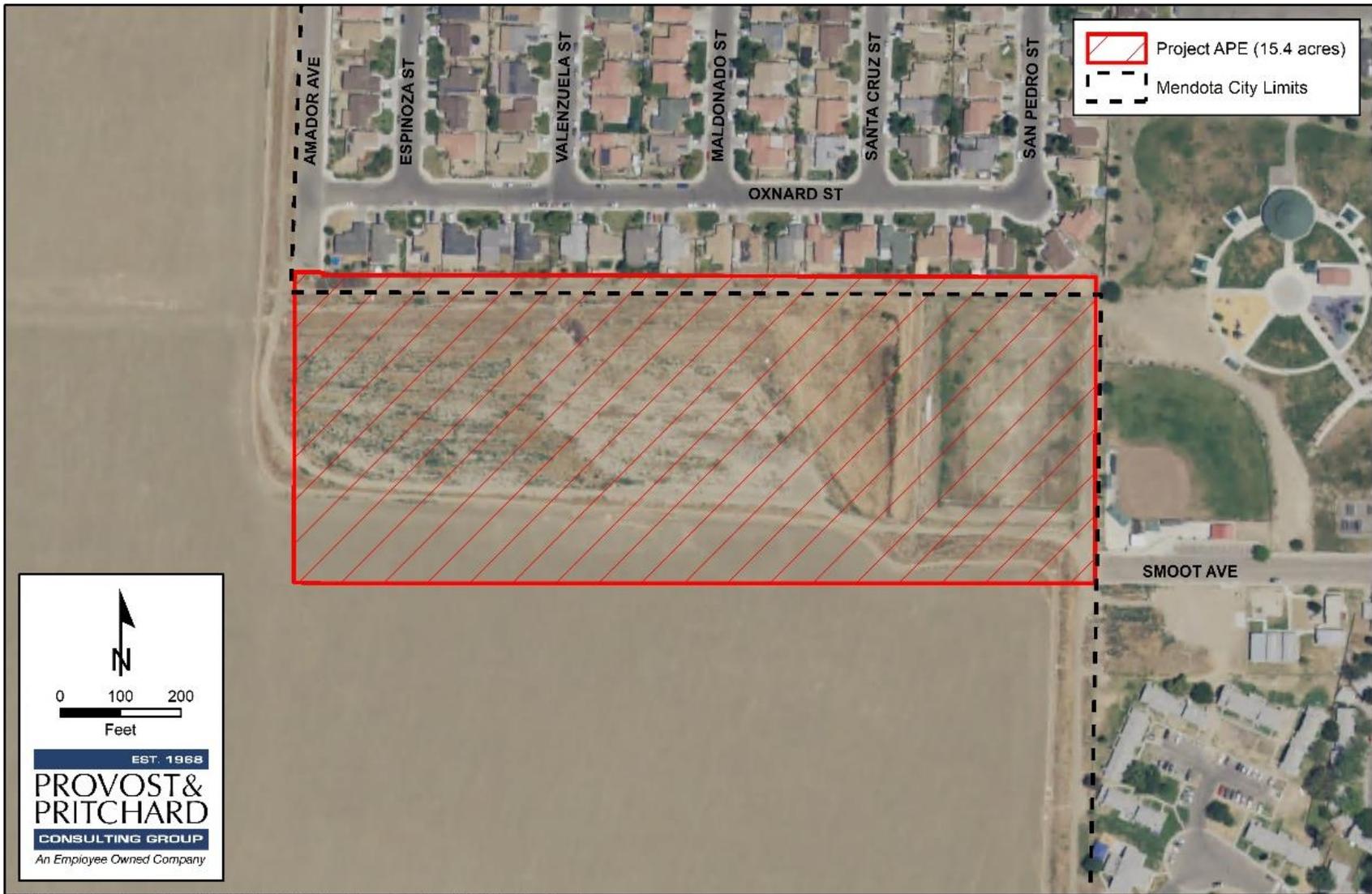
Provost & Pritchard conducted an analysis of potential Project-related impacts to biological resources based on the resources known to exist or with potential to exist within the Project site and surrounding areas. Sources of information used in preparation of this analysis included: the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB); the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system; the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Vascular Plants of California; CalFlora's online database of California native plants; the Jepson Herbarium online database (Jepson eFlora); U.S. Fish and Wildlife Service (USFWS) Environmental Conservation Online System (ECOS); the NatureServe Explorer online database; the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Plants Database; the California Department of Fish and Wildlife (CDFW) California Wildlife Habitat Relationships (CWHR) database; the California Herps online database; and various manuals, reports, and references related to plants and animals of the San Joaquin Valley region.

The field investigation did not include a wetland delineation or focused surveys for special status species. The field survey conducted included an appropriate level of detail to assess the significance of potential impacts to sensitive biological resources resulting from 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 U.S. Army Corps of Engineers (USACE), CDFW, and the Regional Water Quality Control Board (RWQCB).



4/9/2019: G:\Mendota_City of-3336\333619004-Rojas Pierce Park Impr\GIS\Map\Regional_Location.mxd

Figure 1. Regional Location Map



4/9/2019 : G:\Mendota_City of-3336\333619004-Rojas Pierce Park Impr\GIS\Map\Aerial.mxd

Figure 3. Area of Potential Effect (APE)

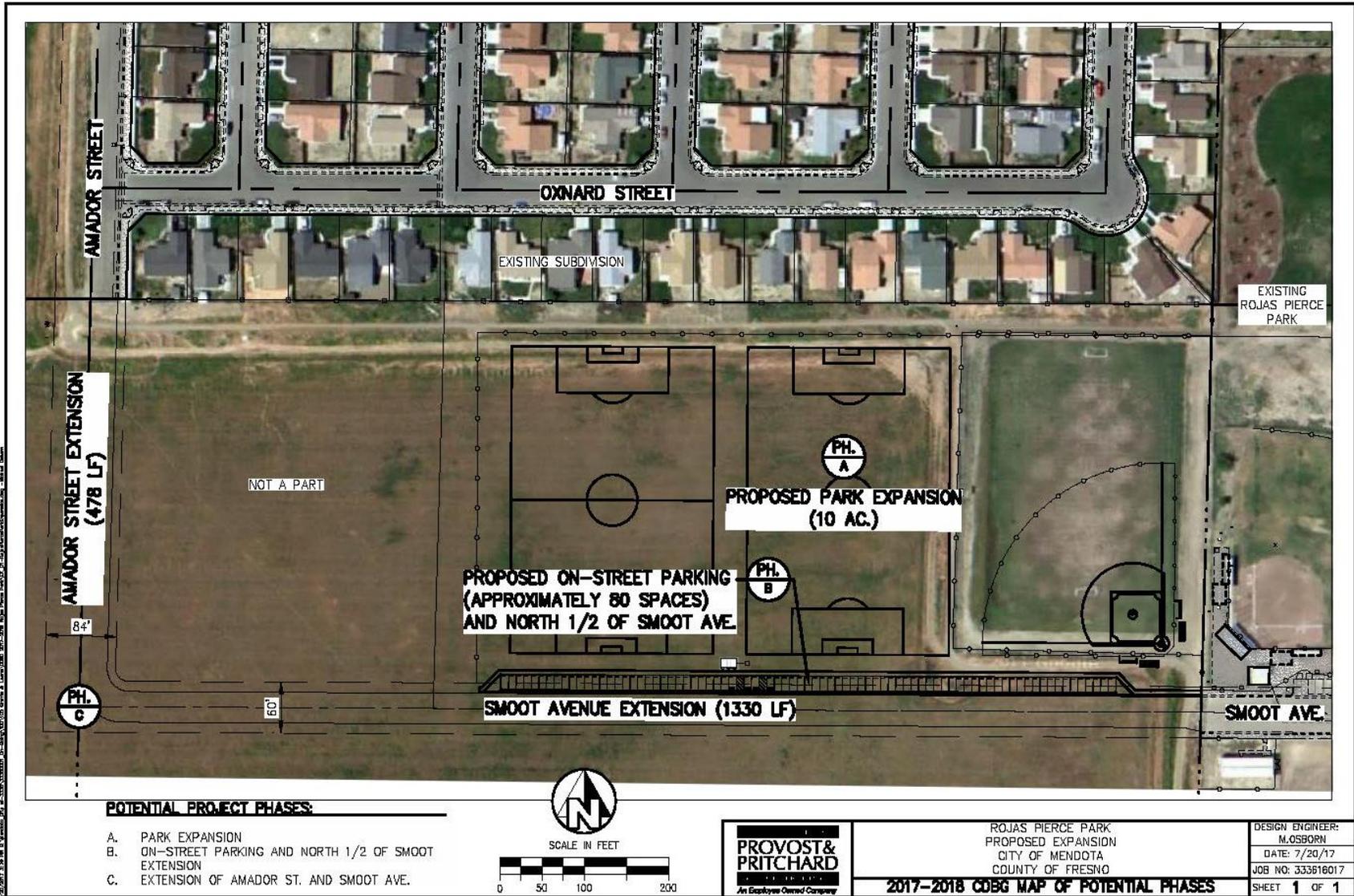


Figure 4. Site Plan

2 Existing Conditions

2.1 Regional Setting

The Project site is located in Fresno County within the lower San Joaquin Valley, part of the Great Valley of California (See **Figure 1**). The Valley is bordered by the Sierra Nevada Mountain Ranges to the east, the Coast Ranges to the west, the Klamath Mountains and Cascade Range to the north, and the Transverse Ranges and Mojave Desert to the south.

Like most of California, the San Joaquin Valley experiences a Mediterranean climate. Warm, dry summers are followed by cool, moist winters. Summer temperatures often reach above 90 degrees Fahrenheit, and the humidity is generally low. Winter temperatures are often below 60 degrees Fahrenheit during the day and rarely exceed 70 degrees. On average, the Central Valley receives approximately 12 inches of precipitation in the form of rainfall yearly, most of which occurs between October and March.

The Project is located within the Mowry Lake-Fresno Slough watershed; Hydrologic Unit Code (HUC): 180300091003 (EPA, 2019), approximately 2.5 miles southwest of the Mendota Pool at the confluence of the San Joaquin River and the Fresno Slough, and 7 miles east of Panoche Creek. The San Joaquin River, Fresno Slough, and Mendota Pool have been levied and much of the surrounding land is now intensively cultivated for agricultural production. Historically, the Mendota area supported large areas of riparian wetlands and important waterfowl habitat. Due to alteration of the aquatic features in the vicinity and the conversion of natural habitat to agricultural lands, the riparian habitat is now limited to the margins of these waterways and to undisturbed areas within ecological reserves, managed wildlife areas, and national wildlife refuges.

There are several managed reserves and wildlife areas in the vicinity of Mendota, most of which are dedicated to the preservation of native habitat for waterfowl and special status species. The CDFW-managed Mendota Wildlife Area lies approximately three miles southeast of the Project and encompasses 11,825 acres of wetland and upland habitats including a portion of the Fresno Slough. The Alkali Sink Ecological Reserve and the Kerman Ecological Reserve are located east-southeast of the Project, at a distance of approximately 6 miles and 10.5 miles, respectively. Little Panoche Reservoir Wildlife Area and the Panoche Hills Ecological Reserve are located west of Interstate 5, approximately 20 miles west of the Project. The southern portion of the San Luis National Wildlife Refuge complex, which encompasses over 26,800 acres of wetlands, riparian forests, native grasslands, and vernal pools lies approximately 20 miles northwest of the Project.

2.2 Project Site

The Project involves a westward expansion of the existing City of Mendota's Rojas-Pierce Park. As illustrated in **Figure 3** and **Figure 4**, the proposed impact areas include the developed soccer field within the park and an expansion of development and facilities into the ruderal-vacant lot west of the existing park boundaries. There is an existing subdivision to the north and a ruderal-fallow field to the south. To the west, there is a compacted dirt road, beyond which lies an expanse of fallow fields. Photographs of the Project site and surrounding areas are available in **Appendix A** at the end of this document.

2.3 Biological Communities

Two biological communities were identified within the Project area: developed and ruderal. Surrounding land uses consist of developed, ruderal, and fallow field. All habitats of the Project area and surrounding lands are disturbed or frequently maintained and therefore of relatively low quality for most native wildlife species.

2.3.1 Developed

The eastern portion of the Project area includes an existing soccer field. This portion of the site has been graded and leveled and planted with ornamental grass. This area is enclosed with chain-link fence and two soccer goal structures are present. Chalk or paint lines are present on the well-manicured grass.

This developed and fenced portion of land represents low-quality habitat for most wildlife species. Avian species would be deterred from nesting in this area due to the lack of trees and shrubs and frequent human disturbance. Occurrence of common mammal species tolerant of disturbance such as raccoons (*Procyon lotor*), coyotes (*Canis latrans*), striped skunks (*Mephitis mephitis*), gray foxes (*Urocyon cinereoargenteus*) and non-native opossums (*Didelphis virginiana*) would be restricted by the chain-link fence. Urban and agricultural “pests” such as Botta’s pocket gophers (*Thomomys bottae*) and California ground squirrels (*Otospermophilus beecheyi*) were not observed during the biological survey, and populations within developed regions are likely managed by rodenticides or other pest control techniques. Common reptiles and amphibians associated with urban development such as the San Joaquin fence lizard (*Sceloporus occidentalis biseriatus*) or California toad (*Anaxyrus boreas halophilus*) could occasionally pass through the site, although suitable breeding habitat and refugia was not observed during the biological survey. The light fixtures in the vicinity of the existing park could attract flying arthropods, which may encourage foraging by nocturnal raptors and bats, although they would likely be deterred by frequent human disturbance.

Frequent disturbance associated with landscaping and organized sports makes the developed portion of the site unsuitable for rare plant species. During the biological survey, a turbid ephemeral pool was observed within a lawnmower tire rut. The rut was in a barren area of clay soils in the fenced soccer field area. *Daphnia* sp., oligochaetes, and mosquito larvae were present, but no tadpoles, fairy shrimp, or other sensitive branchiopod species were observed. Although the clay soils onsite are conducive to pooling, the aforementioned frequent disturbance makes the site unsuitable for special status vernal pool invertebrates or amphibians.

Suitable nesting and foraging habitat is absent from the developed soccer field; however, the following avian species were observed either perched or passing over this portion of site: American crow (*Corvus brachyrhynchos*), cliff swallow (*Petrochelidon pyrrhonota*), house finch (*Haemorhous mexicanus*), house sparrow (*Passer domesticus*), mourning dove (*Zenaida macroura*), California scrub jay (*Apelcoma californica*), and northern mockingbird (*Mimus polyglottos*).

2.3.2 Ruderal

Ruderal habitats are characterized by a high level of human disturbance and absence of vegetation or dominated by non-native plant species. The portion of the Project to the west of the existing soccer field was once utilized for agricultural production. This land has been fallow for several seasons and is disced at least once a year for weed abatement. The site has been graded and subject to years of ground disturbance, resulting in alteration of the original topography and vegetation composition. Signs of heavy vehicle traffic were observed within the field and it was likely used as a staging area for equipment during the development of the subdivision to the north. The ruderal lot abuts the rear fence line of residential backyards, many of which contain large, barking domestic dogs. There are constructed berms of compacted dirt walking trails bisecting the site. An excavated irrigation ditch is present, although it is currently dry and appears to be unmaintained, evidenced by decaying banks and an overgrowth of vegetation. This ditch appears to have historically received water from an outlet structure in the northwest corner of the ruderal lot directly west of

the soccer field. Given the location of the outlet structure and the newly developed subdivision to the north, it is possible this ditch is now periodically used as a stormwater catch basin during peak flows. Portions of the ruderal field appear to be used as dumping grounds for refuse, demonstrated by the presence of discarded mattresses, shopping carts, a dilapidated barbecue, and other garbage. The majority of the site is overgrown with weedy invasive vegetation, consistent with ruderal-annual grassland or ruderal-fallow field. However, for the purposes of this report, because of the high level of disturbance, this land will be classified simply as ruderal. In contrast, true fallow field habitat is present to the west of the Project site's ruderal lot.

Survey of the ruderal lands within the Project area revealed an absence of rodent sign and active burrows, although a pair of American kestrels (*Falco sparverius*) were observed hunting over the site. A red-tailed hawk (*Buteo jamaicensis*) was observed perched on a light pole adjacent to a residential neighborhood, overlooking a fallow field to the northwest of the Project site. The true fallow fields to the west of the site undoubtedly provide suitable foraging habitat and ground squirrel burrows were observed among portions of those adjacent parcels.

Soils onsite were hard clay, not friable for burrowing, which may explain the absence of rodent burrows. The survey was performed shortly after a precipitation event and some ephemeral pools were observed within tire ruts. All ephemeral pools were inspected. Water ranged from clear to rather turbid. *Daphnia sp.* and mosquito larvae were present within a few of the pools, but no tadpoles, fairy shrimp, or special status vernal pool invertebrates were observed. Given its history of agricultural cultivation, and frequently disturbed nature, this site would not be considered suitable habitat for special status plants, vernal pool invertebrates, or special status amphibians. Killdeer (*Charadrius vociferous*) were observed wading and foraging within the ephemeral pools. A disturbance-tolerant ground-nesting bird, such as a killdeer could consider bare portions of this ruderal site suitable for nesting.

Weedy, overgrown herbaceous vegetation, most of which was invasive, dominated the site. Native vegetation was essentially absent with the exception of scattered fiddleneck (*Amsinckia menziesii*), and the following dominant invasive species were observed: *Brassica nigra*, *Brassica rapa*, *Capsella bursa-pastoris*, *Bromus diandrus*, *Bromus madritensis*, *Hordeum murinum*, *Erdoium botrys*, and *Malva parviflora*. Species of vegetation in the ditch were similar to those already mentioned, with the exception of the presence of *Salix exigua*, *Conium maculatum*, *Rumex crispus*, *Typha angustifolia*, and *Cyperus difformis* within the ditch.

Ruderal areas within the Project vicinity have minimal value to wildlife due to the frequent human disturbance, presence of domestic dogs and cats, and the absence of native vegetation. However, some disturbance-tolerant species may make incidental use of these ruderal lands.

2.4 Soils

One soil mapping unit was identified within the Project area: Calfax clay loam, saline-sodic, wet, 0 to 1 percent slopes, MLRA 17. This soil series consists of deep, moderately well-drained sodic soils on fan skirts in arid regions. The water table is usually found at a depth of four to six feet, but is heavily influenced by irrigation. Most areas of these soils are cultivated and irrigated or fallow land. When left fallow or uncultivated, native vegetation is usually comprised of annual grasses, forbs, and saltbrush. This soil is not considered hydric, nor are any of the minor soil components. 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 is supported. Some hydrophytic vegetation was observed within the excavated irrigation ditch onsite, and therefore areas within the irrigation ditch may have historically experienced seasonal ponding due to precipitation, stormwater runoff, or flood irrigation practices.

The site lies within Major Land Resource Area (MLRA) 17, which encompasses the Central Valley. MLRA 17 supports naturalized annuals and scattered trees. Dominate herbaceous species include wild barley and oats,

soft chess, ripgut and red brome, foxtail fescue, burclover, and filaree. Major wildlife species of this region include jackrabbit, coyote, fox, ground squirrel, pocket gopher, and various passerines.

The complete Natural Resources Conservation Service (NRCS) Web Soil Survey report and explanation of MLRA 17 are available in **Appendix E** at the end of this document.

2.5 Natural Communities of Special Concern

Natural communities of special concern are those that are of limited distribution, distinguished by significant biological diversity, or home to special status species. CDFW is responsible for the classification and mapping of all natural communities in California. Just like the special status plant and animal species, these natural communities of special concern can be found within the CNDDDB.

According to CNDDDB, there are no recorded observations of natural communities of special concern with potential to occur within the Project area or vicinity. Additionally, no natural communities of special concern were observed during the biological survey.

2.6 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 and that may require special management and protection.

According to CNDDDB and IPaC, designated critical habitat is absent from the Project area and vicinity.

2.7 Wildlife Movement Corridors

Wildlife movement corridors are routes that animals regularly and predictably follow during seasonal migration, dispersal from native ranges, daily travel within home ranges, and inter-population movements. Movement corridors in California are typically associated with valleys, ridgelines, and rivers and creeks supporting riparian vegetation.

The Project area does not contain features that would be likely to function as wildlife movement corridors. Furthermore, the Project is located in a region often disturbed by intensive agricultural cultivation practices and human disturbance which would discourage dispersal and migration.

2.8 Special Status Plants and Animals

California contains several “rare” plant and animal species. In this context, “rare” is defined as species known to have low populations or limited distributions. As the human population grows, resulting in urban expansion which encroaches on the already limited suitable habitat, these sensitive species become increasingly more vulnerable to extirpation. State and Federal regulations have provided the CDFW and the U.S. Fish and Wildlife Service (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 California Native Plant Society (CNPS) has its list of native plants considered rare, threatened, or endangered. Collectively these plants and animals are referred to as “special status species.”

A thorough search of the CNDDDB for published accounts of special status plant and animal species was conducted for the *Firebaugh* 7.5-minute quadrangle that contains the Project site in its entirety, and for the 8 surrounding quadrangles: *Oxalis*, *Poso Farm*, *Firebaugh NE*, *Broadview Farms*, *Mendota Dam*, *Chaney Ranch*, *Coit*

Ranch, and *Tranquillity*. An official species list was obtained using the USFWS IPaC system for federally listed species with potential to be affected by the Project. These species, and their potential to occur within the Project area are listed in **Table 1** and **Table 2** on the following pages. Additionally, Section 7 determinations are made in Error! Reference source not found. in **Section 3.5**. Raw data obtained from CNDDDB and IPaC are available in **Appendix B** and **Appendix C**, respectively, at the end of this document. Other sources of information utilized in the preparation of this analysis included the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Vascular Plants of California, CalFlora's online database of California native plants, the Jepson Herbarium online database (Jepson eFlora), U.S. Fish and Wildlife Service (USFWS) Environmental Conservation Online System (ECOS), the NatureServe Explorer online database, the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Plants Database, the California Department of Fish and Wildlife (CDFW) California Wildlife Habitat Relationships (CWHR) database, ebird.org, and the California Herps online database. **Figure 2** shows the Project's 7.5-minute quadrangle, according to USGS Topographic Maps.

Table 1. List of Special Status Animals with Potential to Occur Onsite and/or in the Vicinity

Species	Status	Habitat	Occurrence on Project Site
American badger <i>(Taxidea taxus)</i>	CSC	Grasslands, savannas, and mountain meadows near timberline are preferred. Most abundant in drier open spaces of shrub and grassland. Burrows in soil.	Absent. Suitable burrows were absent during the biological survey. The disturbed habitats and clay soils onsite are unsuitable for this species. There is a recorded observation of this species within the Alkali Sink Ecological Reserve, approximately 6.5 miles southeast of the Project. The largest recorded home range of a male of this species is 7.64 square miles, therefore, even if this species does inhabit one of the ecological reserves in the vicinity, the chances of an individual passing through the site during dispersal or mating movements is highly unlikely. The Project site is isolated from any patches of remaining suitable habitat, separated by urban and agricultural development. Frequent human disturbance and vehicle traffic along roadways would further preclude this species from reaching the site.
bank swallow (<i>Riparia riparia</i>)	CT	These aerial insectivores nest colonially in burrows constructed along vertical banks and bluffs near waterbodies. This disturbance tolerant species is also known to nest in man-made sites, such as quarries, mounds of gravel or dirt, and road cuts.	Unlikely. Suitable habitat is absent from the Project site and surrounding lands. At most, an individual could pass through the site as a transient or during migration.
blunt-nosed leopard lizard (<i>Gambelia sila</i>)	FE, CE, CFP	Inhabits semi-arid grasslands, alkali flats, low foothills, canyon floors, large washes, and arroyos, usually on sandy, gravelly, or loamy substrate, sometimes on hardpan. Often found where there are abundant rodent burrows in dense vegetation or tall grass. Cannot survive on lands under cultivation. Known to bask on kangaroo rat mounds and often seeks shelter at the base of shrubs, in small mammal burrows, or in rock piles. Adults may excavate shallow burrows, but rely on deeper pre-existing rodent burrows for hibernation and reproduction.	Unlikely. The disturbed habitats, vegetative cover, and clay soils onsite are unsuitable for this species. The ruderal parcel is disced at least yearly for weed abatement and rodent burrows are absent.

Species	Status	Habitat	Occurrence on Project Site
burrowing owl (<i>Athene cunicularia</i>)	CSC	Resides in open, dry annual or perennial grasslands, deserts, and scrublands with low growing vegetation. Nests underground in existing burrows created by burrowing mammals, most often ground squirrels.	Unlikely. Suitable nesting habitat for this species is absent from the Project area and surrounding lands. Foraging habitat is marginal. No ground squirrel individuals or burrows were observed onsite during the biological survey.
California red-legged frog (<i>Rana draytonii</i>)	FT	Inhabits perennial rivers, creeks, and stock ponds with vegetative cover within the Coast Range and northern Sierra foothills.	Absent. The Project area does not provide suitable habitat for this species and is outside of its current known range.
coast horned lizard (<i>Phrynosoma blainvillii</i>)	CSC	Found in grasslands, coniferous forests, woodlands, and chaparral, primarily in open areas with patches of loose, sandy soil and low-lying vegetation in valleys, foothills, and semi-arid mountains. Frequently found near ant hills and along dirt roads in lowlands along sandy washes with scattered shrubs.	Absent. The highly disturbed habitats and vegetative cover of the Project area are unsuitable for this species. There are recorded observations of this species within the Alkali Sink Ecological Reserve, approximately 6.5 miles southeast of the Project.
Delta smelt (<i>Hypomesus transpacificus</i>)	FT, CE	This pelagic and euryhaline species is Endemic to the Sacramento-San Joaquin River Delta, upstream through Contra Costa, Sacramento, San Joaquin, and Solano Counties.	Absent. Suitable perennial aquatic habitat for this species is absent from the Project area and surrounding lands.
Fresno kangaroo rat (<i>Dipodomys nitratooides exilis</i>)	FE, CE	An inhabitant of alkali sink open grassland environments in western Fresno County. Prefers bare, alkaline, clay-based soils subject to seasonal inundation with more friable soil mounds around shrubs and grasses.	Absent. The highly disturbed habitats of the Project area and surrounding lands are unsuitable for this species. There is a recorded observation of this species within the Alkali Sink Ecological Reserve in 1992, approximately 6.5 miles southeast of the Project. The status of this observation has since been updated to “possibly extirpated,” which means the species has been searched for but unobserved for many years.
giant gartersnake (<i>Thamnophis gigas</i>)	FT, CT	Occurs in marshes, sloughs, drainage canals, irrigation ditches, rice fields, and adjacent uplands. Prefers locations with emergent vegetation for cover and open areas for basking. This species uses small mammal burrows adjacent to aquatic habitats for hibernation in the winter and to escape from excessive heat in the summer.	Absent. Habitats required by this species are absent from the Project area and surrounding lands.

Species	Status	Habitat	Occurrence on Project Site
giant kangaroo rat (<i>Dipodomys ingens</i>)	FE, CE	Inhabits annual grassland communities with few or no shrubs and well-drained, sandy-loam soils on gentle slopes.	Absent. The highly disturbed habitats of the Project area and surrounding lands are unsuitable for this species. This species was observed in 1987 approximately 15 miles southwest of the Project. The status of this observation has since been updated to “possibly extirpated,” which means the species has been searched for but unobserved for many years.
longhorn fairy shrimp (<i>Branchinecta longiantenna</i>)	FE	Inhabits clear to turbid vernal pools or seasonally ponded areas.	Unlikely. Traditional vernal pools are absent. Although the clay soils onsite are conducive to seasonal pooling, frequent disturbance, including ground disturbance associated with discing, makes the site unsuitable for this species.
mountain plover (<i>Charadrius montanus</i>)	CSC	Breeds on open plains at moderate elevations. Winters in short-grass plains and fields, plowed or fallow fields, and sandy deserts. Prefers flat, bare ground with burrowing rodents.	Possible. Burrowing rodents were not observed onsite during the biological survey. However, this species is known to winter in fallow fields in the vicinity. Much of the ruderal site consists of fallow field and surrounding uses are fallow fields, which would provide suitable wintering habitat for this species.
Nelson’s antelope squirrel (<i>Ammospermophilus nelsoni</i>)	CT	Found in the western San Joaquin Valley on dry, sparsely vegetated loamy soils. Relies heavily on existing small mammal burrows.	Unlikely. The disturbed habitats, vegetative cover, and clay soils onsite are unsuitable for this species. The ruderal parcel is disced at least yearly for weed abatement and rodent burrows are absent.
northern California legless lizard (<i>Anniella pulchra</i>)	CSC	Found primarily underground, burrowing in loose, sandy soil. Forages in loose soil and leaf litter during the day. Occasionally observed on the surface at dusk and night.	Unlikely. The highly disturbed habitats and clay soils of the Project area are unsuitable for this species. The nearest observation of this species was approximately 5.5 miles north of the Project.
San Joaquin coachwhip (<i>Masticophis flagellum ruddocki</i>)	CSC	Found in open dry habitats with little or no tree cover in valley grassland and saltbush scrub communities in the San Joaquin Valley. Relies on mammal burrows for refuge and oviposition sites.	Absent. Mammal burrows were not observed onsite during the biological survey. The disturbed habitats of the site do not provide suitable habitat for this species. There is a recorded observation of this species within the Alkali Sink Ecological Reserve in 2004, approximately 6.5 miles southeast of the Project.

Species	Status	Habitat	Occurrence on Project Site
San Joaquin kit fox (<i>Vulpes macrotis mutica</i>)	FE, CT	Underground dens with multiple entrances in alkali sink, valley grassland, and woodland in valleys and adjacent foothills.	Unlikely. Burrows and suitable refugia are absent. Ground squirrels and rodents or associated sign were not observed, and therefore, foraging habitat is absent. The highly disturbed habitats of the Project area and fragmentation of the surrounding lands are generally unsuitable for this species. The Project is located approximately 20 miles east of the nearest known core population in Ciervo-Panoche Natural Area. Although some populations of San Joaquin Kit Fox in other parts of California have adapted to an urbanized environment, modern kit fox occurrences are locally scarce. At most, this species could conceivably pass through the Project area during dispersal movements, although that would be unlikely considering the Project is separated from the Ciervo-Panoche core population by Interstate 5 and miles of land intensively disturbed by agricultural practices.
Steelhead – Central Valley DPS (<i>Oncorhynchus mykiss irideus pop.1f</i>)	FT	This winter-run fish begins migration to fresh water during peak flows during December and February. Spawning season is typically from February to April. After hatching, fry move to deeper, mid-channel habitats in late summer and fall. In general, both juveniles and adults prefer complex habitat boulders, submerged clay and undercut banks, and large woody debris.	Absent. Suitable perennial aquatic habitat for this species is absent from the Project area and surrounding lands.
Swainson's hawk (<i>Buteo swainsoni</i>)	CT	Nests in large trees in open areas adjacent to grasslands, grain or alfalfa fields, or livestock pastures suitable for supporting rodent populations.	Possible. Swainson's hawks are not uncommon in this portion of the Central Valley. Nesting habitat is absent onsite and absence of rodents makes the ruderal field marginal, at best, for foraging. Large ornamental trees, associated with landscaping, could provide suitable nesting habitat, although the constant disturbance and presence of humans would likely discourage nesting in the few trees large enough to support a raptor nest in the vicinity. Swainson's hawks may use fallow fields west of the Project for foraging.

Species	Status	Habitat	Occurrence on Project Site
tricolored blackbird (<i>Agelaius tricolor</i>)	CCE, CSC	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 on dairy farm forage fields.	Unlikely. Suitable nesting habitat is absent from the Project area and surrounding lands. Foraging habitat is marginal, at best. The nearest known occurrence of this species was recorded approximately 4.5 miles southeast of the Project area in 1994.
Tulare grasshopper mouse (<i>Onychomys torridus tularensis</i>)	CSC	Typically inhabit arid shrubland communities in hot, arid grassland and shrubland associations. Diet consists almost exclusively of arthropods.	Unlikely. The only recorded observation of this species in the vicinity of the Project is a historic collection from Panoche Creek in 1918.
two-striped gartersnake (<i>Thamnophis hammondi</i>)	CSC	Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Absent. Habitats required by this species are absent from the Project area and surrounding lands.
vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	FT	Occupies vernal pools, clear to tea-colored water, in grass or mud-bottomed swales, and basalt depression pools.	Unlikely. Traditional vernal pools are absent. Although the clay soils onsite are conducive to seasonal pooling, frequent disturbance, including ground disturbance associated with discing, makes the site unsuitable for this species.
western mastiff bat (<i>Eumops perotis californicus</i>)	CSC	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.	Possible. Breeding habitat is absent from the Project area and surrounding lands. The ruderal field could be used for nocturnal foraging.
western pond turtle (<i>Emys marmorata</i>)	CSC	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. This species is known to occur in parts of the San Joaquin River, Fresno Slough, and Mendota Pool; however, the highly disturbed habitats of the Project area and surrounding lands are unsuitable due to frequent ground disturbance associated with discing. Major roads and urban development separate Mendota's suitable aquatic features from the Project site. Therefore, it is extremely unlikely that even a highly mobile individual of this species would be able to reach the Project in seek of a nesting site.
western red bat (<i>Lasiurus blossevillii</i>)	CSC	Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	Possible. Breeding habitat is absent from the Project area and surrounding lands. The ruderal field could be used for nocturnal foraging.

Species	Status	Habitat	Occurrence on Project Site
western spadefoot (<i>Spea hammondi</i>)	CSC	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 pools or temporary wetlands, lasting a minimum of three weeks, which do not contain bullfrogs, fish, or crayfish are necessary for breeding.	Unlikely. The highly disturbed habitats of the Project area and surrounding lands are unsuitable for this species. Furthermore, the Project area and surrounding lands do not contain typical vernal pools or wetlands which are required for suitable breeding habitat. All occurrences in the vicinity have been reported within vernal pool in alkali sink and within undisturbed lands of ecological reserves.
western yellow-billed cuckoo (<i>Coccyzus americanus occidentalis</i>)	FT, CE	Suitable nesting habitat in California includes dense riparian willow-cottonwood and mesquite habitats along a perennial river. Once a common breeding species in riparian habitats of lowland California, this species currently breeds consistently in only two locations in the State: along the Sacramento and South Fork Kern Rivers.	Absent. Suitable nesting habitat for this species is absent from the Project area and surrounding lands. The nearest known occurrence of this species was recorded near the Mendota Pool, along the San Joaquin River, approximately 2.5 miles northeast of the Project area in 1950. The status of this observation has since been updated to “possibly extirpated,” which means evidence of habitat destruction or extirpation has been received by the CNDDDB.
yellow-headed blackbird (<i>Xanthocephalus xanthocephalus</i>)	CSC	Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds.	Absent. Suitable habitat is absent from the Project site and surrounding area. The most recent observation of this species in the Project’s vicinity occurred in 1919 at an unspecified location near the city of Los Banos.

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

Species	Status	Habitat	Occurrence on Project Site
brittlescale (<i>Atriplex depressa</i>)	CNPS 1B	Found in the San Joaquin Valley and Sacramento Valley in alkali or clay soils in shadescale scrub, valley grassland, alkali sink, and riparian communities at elevations below 1050 feet. Equally likely to occur in wetlands and non-wetlands. Blooms June – October.	Absent. The disturbed habitats of the Project site are unsuitable for this species. The nearest observation of this species was recorded approximately 5 miles east of the site in 2008.
California alkali grass (<i>Puccinellia simplex</i>)	CNPS 1B	Found in the San Joaquin Valley and other parts of California in saline flats and mineral springs within valley grassland and wetland-riparian communities at elevations below 3000 feet. Blooms March – May.	Absent. Suitable habitat required by this species is absent from the Project area and surrounding lands. The nearest known occurrence of this species was recorded approximately 13 miles northeast of the Project area in 2011.
heartscale (<i>Atriplex cordulata</i> var. <i>cordulata</i>)	CNPS 1B	Found in the San Joaquin Valley and Sacramento Valley in alkaline flats and sandy soils in chenopod scrub, valley and foothill grassland, meadows and seeps at elevations up to 900 feet. Blooms June – July.	Absent. The disturbed habitats of the Project site are unsuitable for this species. The nearest observation of this species occurred within Mendota Wildlife Area, approximately 3 miles southeast of the Project site in 1996.
lesser saltscale (<i>Atriplex minuscula</i>)	CNPS 1B	Found in the San Joaquin Valley in playas; sandy, alkaline soils in shadescale scrub, valley grassland, and alkali sink communities at elevations below 300 feet. Blooms April – October.	Absent. The disturbed habitats of the Project site are unsuitable for this species. The nearest observation of this species occurred within Alkali Sink Ecological Reserve, approximately 5 miles southeast of the Project site in 2009.
Lost Hills crownscale (<i>Atriplex coronata</i> var. <i>vallicola</i>)	CNPS 1B	Found in the San Joaquin Valley in chenopod scrub, valley and foothill grassland, and vernal pools at elevations below 1400 feet. Typically found in dried ponds on alkaline soils. Blooms April – September.	Absent. The disturbed habitats of the Project site are unsuitable for this species. There are two recorded observations of this species in the vicinity of the Project. One occurrence is a historic collection (1937) from an unknown location in the vicinity of Mendota. The most recent occurrence is from 2008 near Alkali Sink Ecological Reserve, approximately 5 miles east of the Project area.

Species	Status	Habitat	Occurrence on Project Site
Munz's tidy-tips (<i>Layia munzii</i>)	CNPS 1B	Found in the San Joaquin Valley in alkali clay soils at elevations between 160 feet and 2625 feet in shadescale scrub, valley grassland, and riparian communities. Occurs predominantly in wetlands, but occasionally found in non-wetlands. Blooms March – April.	Absent. The disturbed habitats of the Project site are unsuitable for this species. The only recent observation of this species was recorded in 2008 near Alkali Sink Ecological Reserve, approximately 5 miles east of the Project.
palmate-bracted bird's beak (<i>Chloropyron palmatum</i>)	FE, CE, CNPS 1B	Found in the San Joaquin Valley and Sacramento Valley in alkaline soils (usually Pescadero silty clay) in chenopod scrub, valley and foothill grassland at elevations below 500 feet. Blooms June – August.	Absent. The disturbed habitats of the Project site are unsuitable for this species. The only recent observation of this species was recorded in 2017 in Alkali Sink Ecological Reserve, approximately 5 miles east of the Project.
Panoche pepper-grass (<i>Lepidium jaredii</i> ssp. <i>album</i>)	CNPS 1B	Found on steep slopes, washes, alluvial-fans, and clay, sometimes alkaline, within Valley and Foothill Grassland communities in western Fresno County at elevations between 600 feet and 2400 feet. Blooms February – June.	Absent. Suitable habitat required by this species is absent from the Project area and surrounding lands. The Project area is also outside of the elevational range of this species. The only recorded observation of this species in the vicinity has been reportedly extirpated by gravel extraction activities.
recurved larkspur (<i>Delphinium recurvatum</i>)	CNPS 1B	Found in the San Joaquin Valley and other parts of California. Occurs in poorly drained, fine, alkaline soils in grassland at elevations between 100 feet and 1965 feet. Most often found in non-wetlands, but occasionally found in wetlands. Blooms March – June.	Absent. The disturbed habitats of the Project site are unsuitable for this species. The nearest observation of this species corresponds to a historic (1903) collection mapped to the general area northeast of Mendota, exact location unknown.
San Joaquin woollythreads (<i>Monolopia congdonii</i>)	FE, CNPS 1B	Occurs in the San Joaquin Valley in sandy soils in shadescale shrub and grasslands at elevations between 300 feet and 2300 feet. Found primarily in non-wetlands, but occasionally found in wetlands. Blooms February – May.	Absent. The disturbed habitats of the Project site are unsuitable for this species. The nearest observation of this species corresponds to a historic (1935) collection approximately 7 miles south of the Project area. The status of this observation has been updated to “possibly extirpated” due conversion of native habitat to irrigated agriculture.

Species	Status	Habitat	Occurrence on Project Site
Sanford's arrowhead <i>(Sagittaria sanfordii)</i>	CNPS 1B	Found in the San Joaquin Valley and other parts of California in freshwater-marsh, primarily ponds and ditches, at elevations below 1000 feet. Blooms May – October.	Absent. Habitats required by this species are absent from Project areas, and frequent ground disturbance further makes the site unsuitable.
subtle orache <i>(Atriplex subtilis)</i>	CNPS 1B	Found in the San Joaquin Valley in saline depressions at elevations below 230 feet. Blooms June – October.	Absent. The disturbed habitats of the Project site are unsuitable for this species. The nearest observation of this species was 14 miles northeast of the Project in 2009.

EXPLANATION OF OCCURRENCE DESIGNATIONS AND STATUS CODES

- Present: Species observed on the site at time of field surveys or during recent past
- Likely: Species not observed on the site, but it may reasonably be expected to occur there on a regular basis
- Possible: Species not observed on the site, but it could occur there from time to time
- Unlikely: Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient
- Absent: Species not observed on the site, and precluded from occurring there due to absence of suitable habitat

STATUS CODES

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

CNPS LISTING

- | | | | |
|----|--|---|---|
| 1A | Plants Presumed Extinct in California | 2 | Plants Rare, Threatened, or Endangered in California, but more common elsewhere |
| 1B | Plants Rare, Threatened, or Endangered in California and 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 state and/or federally listed as threatened or endangered 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 *California Environmental Quality Act, Statute and Guidelines* (AEP 2012), “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 (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, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

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 (CFR 1508.27).

Context means that the significance of an action must be analyzed in terms of the affected environment in which a proposed action would occur. For the purposes of assessing effects of an action on biological resources, the relevant context is often local, which means the analysis requires a comparison of the action area’s biological resources to the biological resources of the local area. However, the analysis may also require a comparison of the action area’s biological resources with the biological resources of an entire region.

Intensity refers to the severity of impact. In considering intensity of impact to biological resources, it is necessary to address the unique qualities of wetlands and ecologically critical areas that may be affected, the degree to which the action will be controversial, the degree to which the effects will be controversial, the degree to which the effects will be uncertain, the degree to which the action will establish a precedent for future actions with potentially significant effects, and the potential for the action to result in cumulatively significant effects.

The effects of an action on some biological resources are generally considered to be “significant.” An action that adversely affects federally listed threatened or endangered species, waters of the United States, or migratory movements of fish and wildlife are some examples of significant effects.

NEPA requires disclosure of feasible mitigation measures for the effects of an action on the environment. Suitable measures include the following:

- a) Avoidance of the effect by not taking a certain action or parts of an action.
- b) Mitigation of the effect by limiting the degree or magnitude of the action and its implementation.
- c) Rectifying the effect by repairing, rehabilitating, or restoring the affected environment.
- d) Reducing or eliminating the effect over time by preservation and maintenance operations throughout the life of the action.
- e) Compensating for the effect by replacing or providing substitute resources or environments.

This report identifies likely effects of an action, identifies those that may be considered significant pursuant to the provisions of NEPA, and provides mitigation measures to avoid adverse effects to biological resources.

3.2 Relevant Goals, Policies, and Laws

3.2.1 City of Mendota General Plan Update

The City of Mendota General Plan Update (2005-2025) sets forth the following goals and policies that protect biological resources and which have potential relevance to the Project's CEQA review:

Goal OSC-7: Preservation of important ecological and biological resources, including habitat for flora and fauna.

Policy OSC-7.1: The City shall require a biological resources evaluation for private and public development projects in areas identified to contain or possibly contain listed plant and/or wildlife species based upon the City's biological resource mapping provided in the General plan EIR or other technical materials. This evaluation shall be conducted prior to the authorization of any ground disturbance.

Policy OSC-7.5: If habitat for Swainson's hawk is present, a protocol-level survey shall be conducted in accordance with *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee, 2000), to include the following:

- 1) Schedule construction activities to avoid nesting activities. The avian breeding window on average is between February 1 and August 30, which complies with the Migratory Bird Treaty Act and Section 3503.5 of the FGC, therefore construction activities should occur between September and January.
- 2) Conduct all vegetation clearing (including trees, shrubs, and bushes) outside of the nesting season. If clearing of any vegetation and/or construction activities occur during the avian breeding window, then preconstruction surveys for nesting raptors shall be conducted up to 30 days before construction. The qualified biologist shall survey the construction zone and a 100-foot radius surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds.
- 3) If an active nest is located within the 100-foot area surrounding the construction zone and construction must take place during the breeding season, a buffer zone shall be established by the biologist and confirmed by the appropriate resource agency and a qualified biologist shall monitor the nest to determine when the young have fledged and submit bi-weekly reports to City of Mendota planning Department throughout the nesting season. The biological monitor shall have the authority to cease construction if there is any sign of distress to the raptor. Reference to this requirement, the MBTA, and Section 3503.5 of the FGC shall be included in the construction specifications.

3.2.2 Threatened and Endangered Species

Permits may be required from the USFWS and/or CDFW if activities associated with a Project have the potential to result in the "take" of a species listed as threatened or endangered under the federal and/or state Endangered Species Acts. "Take" is defined by the state of California as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" (California Fish and Game Code, Section 86). "Take" is more broadly defined by the federal Endangered Species Act to include "harm" (16 USC, Section 1532(19), 50 CFR, Section 17.3). The CDFW and the USFWS are responding agencies under CEQA. Both agencies

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

3.2.4 Migratory Birds

The Federal Migratory Bird Treaty Act (MBTA: 16 USC 703-712) prohibits killing, possessing, or trading in any bird species covered in one of four international conventions to which the United States is a party, except in accordance with regulations prescribed by the Secretary of the Interior. The name of the act is misleading, as it actually 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 bird covered by the MBTA (Section 3513), as well as any other native non-game bird (Section 3800).

3.2.5 Birds of Prey

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

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”

Natural drainage channels and adjacent wetlands may be considered “waters of the United States” or “jurisdictional waters” subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE). The extent

of jurisdiction has been defined in the Code of Federal Regulations but has also been subject to interpretation of the federal courts. Jurisdictional waters generally include:

- All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- All interstate waters including interstate wetlands;
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce;
- All impoundments of waters otherwise defined as waters of the United States under the definition;
- Tributaries of waters identified in paragraphs (a)(1)-(4) (i.e. the bulleted items above).

As determined by the United States Supreme Court in its 2001 *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers (SWANCC)* decision, 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 U.S. Supreme Court ruled that a significant nexus between a wetland and other navigable waters must exist for the wetland itself to be considered a navigable and therefore jurisdictional water. Furthermore, the Supreme Court clarified that the Environmental Protection Agency (EPA) and the USACE will not assert jurisdiction over ditches excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

The USACE regulates the filling or grading of Waters of the U.S. under the authority of Section 404 of the Clean Water Act. 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 U.S. 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 result 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 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 U.S. require a Section 401 Water Quality Certification from the RWQCB as a prerequisite to obtaining certain federal permits, such as a Section 404 Clean Water Act permit. Discharges into all Waters of the State, even those that are not also Waters of the U.S., 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 or more acres 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 Water of the U.S. 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 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.

3.3 Potentially Significant Project-Related Impacts and Mitigation

Species identified as candidate, sensitive, or special status species in local or regional plans policies or regulations by CDFW or the USFWS that have the potential to be impacted by the Proposed Project are identified below with corresponding mitigation measures.

3.3.1 Project-Related Mortality and/or Disturbance of Nesting Raptors, Migratory Birds, and Special Status Birds (Including Swainson's Hawk and Mountain Plover)

Although burrowing rodents were not detected during the biological survey, a pair of American kestrels were observed foraging over the site, and a red-tailed hawk was observed perched on a light pole, overlooking a fallow field in the vicinity. Portions of the Project site contain marginal foraging habitat for several avian species, including the Swainson's hawk. Although the Project site does not contain any trees, there are a few ornamental trees in the vicinity large enough to house a raptor nest, and smaller avian species may nest within ornamental trees and shrubs in the vicinity. Ground-nesting birds, such as the killdeer could nest on the bare ground, and swallows could nest within buildings or structures in the vicinity.

Swainson's hawks are common in this portion of Fresno County, and there are known nest trees within five miles of the Project site. In the absence of preferred habitat, especially within the Central Valley, Swainson's hawks often nest within eucalyptus trees lining highways, and several raptor species nest within ornamental Mexican fan palms. Although nesting habitat onsite and in the vicinity is not ideal due to the absence of native riparian trees, and foraging habitat is suboptimal, raptors, such as the special status Swainson's hawk could conceivably nest or forage near Project areas. In the event that a Swainson's hawk or other avian species is foraging within the Project site during construction activities, the individual would be expected to fly away from disturbance they encounter, subsequently eliminating the risk of injury or mortality while foraging. Birds nesting within the Project site could be injured or killed by Project activities. Furthermore, construction activities could disturb birds nesting within or adjacent to work areas, resulting in nest abandonment. Project construction activities that adversely affect the nesting success of raptors and migratory birds or result in the mortality of individual birds constitutes a violation of State and federal laws and is considered a significant impact under CEQA.

Although they do not breed in California, mountain plovers are known to winter in fallow fields of the Central Valley. Since they do not breed in this region, loss of nesting habitat and disruption of reproductive success is not a concern for this Project, although a wintering mountain plover onsite could potentially be injured or killed by construction activities. Then again, avian species are highly mobile and would be expected to simply fly away from a disturbance.

As previously mentioned, due to the developed and ruderal nature of the lands, nesting and foraging habitat for raptors, resident and migratory birds, and special status birds within the Project area is marginal, at best. Habitat of higher foraging and nesting value is regionally abundant. Therefore, the development resulting from implementation of the Project would not be considered a significant loss of foraging or nesting habitat under CEQA or NEPA.

Nesting bird season is generally accepted as February 1 through August 31; however, Swainson's hawk nesting season is generally accepted as March 1 through September 15. For simplicity, these timeframes have been combined.

Implementation of the following measures will reduce potential impacts to nesting raptors, migratory birds, and special status birds, including Swainson's hawk to a less than significant level under CEQA and NEPA, and will ensure compliance with State and federal laws protecting these avian species.

Mitigation. The following measures will be implemented prior to the start of construction:

Mitigation Measure 3.3.1a (Avoidance): The Project’s construction activities shall occur, if feasible, between September 16 and January 31 (outside of nesting bird season) in an effort to avoid impacts to nesting birds.

Mitigation Measure 3.3.1b (Pre-construction Surveys): If activities must occur within nesting bird season (February 1 to September 15), a qualified biologist shall conduct pre-construction surveys for active nests within 30 days prior to the start of construction. The survey shall include the proposed work area and surrounding lands within 0.5 mile. If no active nests are observed, no further mitigation is required. Raptor nests are considered “active” upon the nest-building stage.

Mitigation Measure 3.3.1c (Establish Buffers): On discovery of any active nests near work areas, the biologist shall determine appropriate construction setback distances based on applicable CDFW and/or USFWS guidelines and/or the biology of the species in question. Construction buffers shall be identified with flagging, fencing, or other easily visible means, and shall be maintained until the biologist has determined that the nestlings have fledged.

3.3.2 Project-Related Impacts to Special Status Bats (Including Western Mastiff Bat and Western Red Bat)

Although roosting and breeding habitat is absent, the ruderal fallow portion of the site could serve as marginal foraging habitat for bats, including the western mastiff bat and western red bat. If a special status bat were foraging onsite, it could be injured or killed by construction activities. Projects that adversely affect the reproductive success of special status species or result in the mortality of special status species is considered a violation of state and federal laws and are considered a potentially significant impact under CEQA.

Implementation of the following measure will reduce potential impacts to foraging special status bats to a less than significant level under CEQA, and will ensure compliance with State and federal laws protecting this species.

Mitigation. The following measures will be implemented during or prior to the start of construction:

Mitigation Measure 3.3.2a (Operational Hours): Construction activities shall be limited to daylight hours to reduce potential impacts to special status bats that could be foraging onsite.

3.4 Less Than Significant Project-Related Impacts

3.4.1 Project-Related Impacts to Special Status Plant Species

Twelve special status plant species have been documented in the Project vicinity, including brittlescale (*Atriplex depressa*), California alkali grass (*Puccinellia simplex*), heartscale (*Atriplex cordulata* var. *cordulata*), lesser saltscale (*Atriplex miniscula*), Lost Hills crownscale (*Atriplex coronata* var. *vallicola*), Munz’s tidy-tips (*Layia munzii*), palmate-bracted bird’s beak (*Chloropyron palmatum*), Panoche pepper-grass (*Lepidium jaredii* ssp. *album*), recurved larkspur (*Delphinium recurvatum*), San Joaquin woollythreads (*Monolopia congdonii*), Sanford’s arrowhead (*Sagittaria sanfordii*), and subtle orache (*Atriplex subtilis*). None of these species were observed during the biological survey, which was conducted in Spring, during the typical blooming season for many of these species. In fact, the biological survey revealed a heavily disturbed lot of land overgrown with weedy invasive plant species. As explained in **Table 2**, all of the aforementioned special status plant species are absent from the Project area due to past and ongoing disturbance and/or the absence of suitable habitat.

Therefore, the implementation of the Project will have no effect on individual plants or regional populations of these special status plant species. Mitigation measures are not warranted.

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

Of the 28 regionally occurring special status species, 24 are considered absent or unlikely to occur within the Project area due to past or ongoing disturbance and/or absence of suitable habitat. As explained in **Table 1**, the following species were deemed absent from the Project area: American badger (*Taxidea taxus*), California red-legged frog (*Rana draytonii*), coast horned lizard (*Phrynosoma blainvillii*), Delta smelt (*Hypomesus transpacificus*), Fresno kangaroo rat (*Dipodomys nitratoides exilis*), giant gartersnake (*Thamnophis gigas*), giant kangaroo rat (*Dipodomys ingens*), San Joaquin coachwhip (*Masticophis flagellum ruddocki*), Steelhead-Central Valley DPS (*Oncorhynchus mykiss irideus pop.11*), two-striped gartersnake (*Thamnophis hammondi*), western pond turtle (*Emys marmorata*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), and yellow-headed blackbird (*Xanthocephalus xanthocephalus*), and the following species were deemed unlikely to occur within the Project area: bank swallow (*Riparia riparia*), blunt-nosed leopard lizard (*Gambelia sila*), burrowing owl (*Athene cunicularia*), longhorn fairy shrimp (*Branchinecta longiantenna*), Nelson's antelope squirrel (*Ammospermophilus nelson*), northern California legless lizard (*Anniella pulchra*), San Joaquin kit fox (*Vulpes macrotis mutica*), tricolored blackbird (*Agelaius tricolor*), Tulare grasshopper mouse (*Onychomys torridus tularensis*), vernal pool fairy shrimp (*Branchinecta lynchi*), and western spadefoot (*Spea hammondi*). Therefore, implementation of the Project will have no impact on these 24 special status species through construction mortality, disturbance, or loss of habitat. Mitigation measures are not warranted.

3.4.3 Project-Related Impacts to Jurisdictional Waters, Wetlands, Navigable Waters, Wild and Scenic Rivers, or other Water Features, and Riparian Habitat

The only aquatic feature onsite is a dry, isolated, excavated irrigation ditch with no connection to navigable waters or a natural drainage channel with a bed or bank, and therefore it can be reasonably assumed that jurisdictional waters are absent. A small amount of riparian vegetation is present within the dry excavated irrigation ditch due to lack of recent vegetation maintenance; however, the site is diked and cleared for weed abatement at least once per year and does not provide suitable habitat for wildlife species. The Project does not propose impacts or discharge to any surface waters. Regardless, due to proposed ground disturbance of an area greater than one acre in size, the Project will implement a SWPPP. For all of these reasons, implementation of the Project should have no impact on jurisdictional waters, wetlands, navigable waters, wild and scenic rivers, or other water features, and riparian habitat. Furthermore, the Project will not impact any bodies of water and will not require compliance with the Fish and Wildlife Coordination Act. Mitigation measures are not warranted.

3.4.4 Project-Related Impacts to Wildlife Movement Corridors

The Project area does not contain features that would be likely to function as wildlife movement corridors. Furthermore, the Project is located in a region often disturbed by intensive agricultural cultivation practices and human disturbance which would discourage dispersal and migration. Therefore, implementation of the Project will have no impact on wildlife movement corridors. Mitigation is not warranted.

3.4.5 Project-Related Impacts to Critical Habitat

Designated critical habitat is absent from the Project area and surrounding lands. Therefore, there will be no impact to critical habitat, and mitigation is not warranted.

3.4.6 Local Policies or Habitat Conservation Plans

Proposed Project design appears to be consistent with the goals and policies of the Fresno County General Plan. There are no known habitat conservation plans in the Project vicinity. Mitigation is not warranted.

3.4.7 Coastal Zone and Coastal Barriers Resources Act

The Project is not located within the coastal zone. The Project will 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 is not warranted.

3.4.8 Project-Related Impact to Essential Fish Habitat

Essential Fish Habitat (EFH) and Habitat Areas of Particular Concern (HAPC) are absent from the Project area and surrounding lands, and consultation with the National Marine Fisheries (NMFS) Service will not be required. Query results of the NMFS EHF Mapper can be found in **Appendix D** at the end of this document. Mitigation is not warranted.

3.5 Section 7 Determination

In addition to the effects analysis performed in Sections 2 and 3 of this document, Error! Reference source not found. summarizes Project effect determinations for Federally Listed Species found on the USFWS IPaC list generated on March 12, 2019 (**Appendix C**), in accordance with Section 7 of the Endangered Species Act.

Table 3. Section 7 Determinations

Species	Determination	Rationale for Determination
Fresno kangaroo rat (<i>Dipodomys nitratoide</i> <i>exilis</i>)	No effect	Habitat absent. No observations in the vicinity for more than 25 years.
giant kangaroo rat (<i>Dipodomys ingens</i>)	No effect	Habitat absent. No observations in the vicinity for more than 30 years.
San Joaquin kit fox (<i>Vulpes</i> <i>macrotis mutica</i>)	No effect	Habitat absent. No observations in the vicinity for more than 25 years.
yellow-billed cuckoo (<i>Coccyzus americanus</i>)	No effect	Habitat absent. No observations in the vicinity for more than 65 years.
blunt-nosed leopard lizard (<i>Gambelia sila</i>)	No effect	Habitat absent.
giant gartersnake (<i>Thamnophis gigas</i>)	No effect	Habitat absent.
California red-legged frog (<i>Rana draytonii</i>)	No effect	Habitat absent. Project area is outside of the known distribution range of this species.
Delta smelt (<i>Hypomesus</i> <i>transpacificus</i>)	No effect	Habitat absent. Water features absent from the site and surrounding areas. The Project does not include lake or streambed altering activities. Therefore, there is no potential for indirect downstream effects.
vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	No effect	Habitat absent.

4 References

- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.G. Wilken, editors. 2012. The Jepson Manual; Vascular Plants of California, second edition. University of California Press, Berkeley.
- Staff Report on Burrowing Owl Mitigation. State of California Natural Resources Agency. Prepared by The Department of Fish and Game. March, 2012. Available online at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline=true> (Accessed March and April 2019).
- Calflora: Information on California Plants for Education, Research and Conservation. 2019. Berkeley, CA. Available online at: <http://www.calflora.org/> (Accessed March and April 2019).
- California Department of Fish and Wildlife (CDFW). 2019. California Natural Diversity Database. The Resources Agency, Sacramento, CA.
- California Department of Fish and Wildlife (CDFW). 2019. California Wildlife Habitat Relationships (CHWR). Available online at: <https://www.wildlife.ca.gov/Data/CWHR> (Accessed March and April 2019).
- California Native Plant Society. 2019. Inventory of Rare and Endangered Vascular Plants of California. Available online at: <http://www.rareplants.cnps.org/> (Accessed March and April 2019).
- City of Mendota General Plan Update 2005-2025. (Adopted 2009). Available online at: <http://ci.mendota.ca.us/wp-content/uploads/2014/06/City-of-Mendota-General-Plan-Update.pdf> (Accessed March and April 2019).
- eBird. 2019. eBird: An online database of bird distribution and abundance [web application]. eBird, Cornell Lab of Ornithology, Ithaca, New York. Available online at: <https://ebird.org/> (Accessed March and April 2019).
- EPA Waters GeoViewer. <https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=ada349b90c26496ea52aab66a092593b> (Accessed March and April 2019)
- Jepson Flora Project (eds.) 2019. Jepson eFlora. Available online at: <http://ucjeps.berkeley.edu/eflora/> (Accessed March and April 2019).
- Laymon, S. and Halterman, M. Habitat Management for Yellow-Billed Cuckoos in California. USDA Forest Service Gen. Tech. Rep. PSW-110. 1989. Available online at: https://www.fs.fed.us/psw/publications/documents/psw_gtr110/psw_gtr110_f_laymon.pdf (Accessed March and April 2019).
- McBride, J. and Reid, C. . California Wildlife Habitat Relationships System: Urban. California Department of Fish and Game and California Interagency Wildlife Task Group. Available online at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=67420&inline> (Accessed March and April 2019).
- Nafis, G. 2019. California Herps: A Guide to the Amphibians and Reptiles of California. Available online at: <http://www.californiaherps.com/> (Accessed March and April 2019).

- National Wetlands Inventory (NWI) map. <https://www.fws.gov/wetlands/Data/Mapper.html> (Accessed March and April 2019).
- Natural Resources Conservation Service. 2018. Custom Soil Resources Report, California. U.S. Department of Agriculture. Available online at: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx> (accessed March and April 2019).
- NatureServe Explorer: An Online Encyclopedia of Life. 2019. Available online at: <http://explorer.natureserve.org/> (Accessed March and April 2019).
- Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Prepared by the Swainson's Hawk Technical Advisory Committee (TAC). May 31, 2000. Available online at: <https://www.wildlife.ca.gov/Conservation/Birds/Swainson-Hawks> (Accessed March and April 2019).
- Reese, D.A. and Welsh, H.H. Use of terrestrial habitat by western pond turtles, *Clemys marmorata*. Implications for management. 1997. USDA Forest Service. Arcata, CA.
- Shuford, W.D., and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.
- Smith, D; et al. Relative Abundance of Endangered San Joaquin Kit Foxes (*Vulpes macrotis mutica*) Based on Scat-Detection Dog Surveys. The Southwestern Naturalist. 51 (2): 210-219. June 2006. Available online at: http://www.carangeland.org/images/Relative_Abundance_of_Endangered_San_Joaquin_Kit_Foxes_Based_on_Scat-Detection.pdf (Accessed March and April 2019).
- U.S. Army Corps of Engineers (USACE). 1987. Corps of Engineers Wetlands Delineation Manual. Department of the Army.
- USDA, NRCS. 2019. The Plants Database. Available online at: <https://plants.sc.egov.usda.gov/java/> (Accessed March and April 2019).
- U.S. Fish and Wildlife Service Environmental Conservation Online System (ECOS). 2019. Available online at: <https://ecos.fws.gov/ecp/> (Accessed March and April 2019).
- U.S. Fish and Wildlife Service. 2019. Official Species List, Information on Planning and Consultation (IPaC).
- U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance. Prepared by the Sacramento Fish and Wildlife Office. January, 2011. Available online at: https://www.fws.gov/sacramento/es/Survey-Protocols-Guidelines/Documents/kitfox_standard_rec_2011.pdf (Accessed March and April 2019).
- Williams, D. F., et al. Recovery Plan for Upland Species of the San Joaquin Valley, California. 1998. Region 1. U.S. Fish and Wildlife Service. Portland, Oregon.

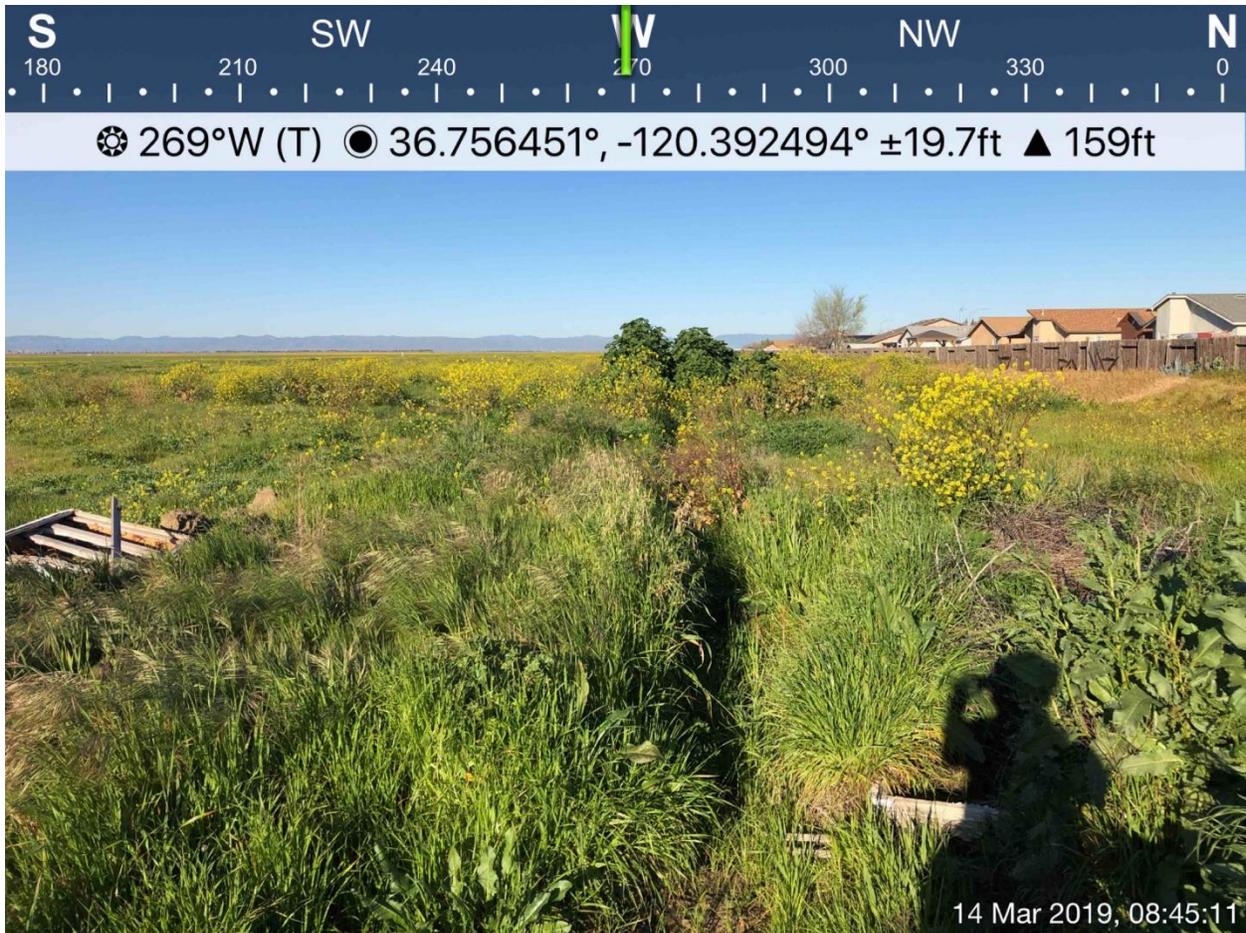
Appendix A. Selected Photographs of the Project Site



Photograph 1: Overview of the ruderal lot west of the existing park boundaries.



Photograph 2: Overview of the north-south ruderal excavated ditch onsite. The fenced soccer field is visible in the left margin of the photograph.



Photograph 3: Overview of the east-west ruderal excavated ditch onsite. The adjacent subdivision is visible in the right margin of this photograph.



Photograph 5: Drainage outlet structure near the northeast corner of the ruderal lot.



Photograph 6: Overview of the ruderal lot with dumped garbage visible in the foreground. An expanse of fallow fields, west of the Project, are visible in the background.



Photograph 7: Signs of recent ground disturbance within the ruderal field. Several ephemeral pools in tire ruts, similar to the one in this photograph, were present throughout.



Photograph 8: Overview of the ruderal field. The compacted dirt access road is visible in this photograph.



Photograph 9: Overview of the fenced soccer field in the Project area.



Photograph 10: Ephemeral pool within lawnmower tire track depression in the soccer field.



Photograph 11: Overview of the ruderal field. A compacted dirt access road atop a berm, which separates the residences from the field, is visible in this photograph.

Appendix B. CNDDDB Query Results



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



Query Criteria: Quad (Firebaugh (3612074) OR Oxalis (3612085) OR Poso Farm (3612084) OR Firebaugh NE (3612083) OR Broadview Farms (3612075) OR Mendota Dam (3612073) OR Chaney Ranch (3612065) OR Coit Ranch (3612064) OR Tranquillity (3612063))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American badger <i>Taxidea taxus</i>	AMAJF04010	None	None	G5	S3	SSC
bank swallow <i>Riparia riparia</i>	ABPAU08010	None	Threatened	G5	S2	
blunt-nosed leopard lizard <i>Gambelia sila</i>	ARACF07010	Endangered	Endangered	G1	S1	FP
brittlescale <i>Atriplex depressa</i>	PDCHE042L0	None	None	G2	S2	1B.2
burrowing owl <i>Athene cunicularia</i>	ABNSB10010	None	None	G4	S3	SSC
California alkali grass <i>Puccinellia simplex</i>	PMPOA53110	None	None	G3	S2	1B.2
coast horned lizard <i>Phrynosoma blainvillii</i>	ARACF12100	None	None	G3G4	S3S4	SSC
Coastal and Valley Freshwater Marsh <i>Coastal and Valley Freshwater Marsh</i>	CTT52410CA	None	None	G3	S2.1	
Crotch bumble bee <i>Bombus crotchii</i>	IIHYM24480	None	None	G3G4	S1S2	
Fresno kangaroo rat <i>Dipodomys nitratooides exilis</i>	AMAFD03151	Endangered	Endangered	G3TH	SH	
giant gartersnake <i>Thamnophis gigas</i>	ARADB36150	Threatened	Threatened	G2	S2	
giant kangaroo rat <i>Dipodomys ingens</i>	AMAFD03080	Endangered	Endangered	G1G2	S1S2	
heartscale <i>Atriplex cordulata var. cordulata</i>	PDCHE040B0	None	None	G3T2	S2	1B.2
hoary bat <i>Lasiurus cinereus</i>	AMACC05030	None	None	G5	S4	
Hoover's eriastrum <i>Eriastrum hooveri</i>	PDPLM03070	Delisted	None	G3	S3	4.2
lesser saltscale <i>Atriplex minuscula</i>	PDCHE042M0	None	None	G2	S2	1B.1
longhorn fairy shrimp <i>Branchinecta longiantenna</i>	ICBRA03020	Endangered	None	G1	S1S2	
Lost Hills crownscale <i>Atriplex coronata var. vallicola</i>	PDCHE04250	None	None	G4T2	S2	1B.2



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



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
merlin <i>Falco columbarius</i>	ABNKD06030	None	None	G5	S3S4	WL
mountain plover <i>Charadrius montanus</i>	ABNNB03100	None	None	G3	S2S3	SSC
Munz's tidy-tips <i>Layia munzii</i>	PDAST5N0B0	None	None	G2	S2	1B.2
Nelson's antelope squirrel <i>Ammospermophilus nelsoni</i>	AMAFB04040	None	Threatened	G2	S2S3	
northern California legless lizard <i>Anniella pulchra</i>	ARACC01020	None	None	G3	S3	SSC
palmate-bracted bird's-beak <i>Chloropyron palmatum</i>	PDSCR0J0J0	Endangered	Endangered	G1	S1	1B.1
Panoche pepper-grass <i>Lepidium jaredii ssp. album</i>	PDBRA1M0G2	None	None	G2G3T2T3	S2S3	1B.2
recurved larkspur <i>Delphinium recurvatum</i>	PDRAN0B1J0	None	None	G2?	S2?	1B.2
San Joaquin coachwhip <i>Masticophis flagellum ruddocki</i>	ARADB21021	None	None	G5T2T3	S2?	SSC
San Joaquin kit fox <i>Vulpes macrotis mutica</i>	AMAJA03041	Endangered	Threatened	G4T2	S2	
San Joaquin Pocket Mouse <i>Perognathus inornatus</i>	AMAFD01060	None	None	G2G3	S2S3	
San Joaquin woollythreads <i>Monolopia congdonii</i>	PDASTA8010	Endangered	None	G2	S2	1B.2
Sanford's arrowhead <i>Sagittaria sanfordii</i>	PMALI040Q0	None	None	G3	S3	1B.2
steelhead - Central Valley DPS <i>Oncorhynchus mykiss irideus pop. 11</i>	AFCHA0209K	Threatened	None	G5T2Q	S2	
subtle orache <i>Atriplex subtilis</i>	PDCHE042T0	None	None	G1	S1	1B.2
Swainson's hawk <i>Buteo swainsoni</i>	ABNKC19070	None	Threatened	G5	S3	
tricolored blackbird <i>Agelaius tricolor</i>	ABPBXB0020	None	Candidate Endangered	G2G3	S1S2	SSC
Tulare grasshopper mouse <i>Onychomys torridus tularensis</i>	AMAFF06021	None	None	G5T1T2	S1S2	SSC
two-striped gartersnake <i>Thamnophis hammondi</i>	ARADB36160	None	None	G4	S3S4	SSC
Valley Sacaton Grassland <i>Valley Sacaton Grassland</i>	CTT42120CA	None	None	G1	S1.1	
Valley Sink Scrub <i>Valley Sink Scrub</i>	CTT36210CA	None	None	G1	S1.1	



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



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
vernal pool fairy shrimp <i>Branchinecta lynchi</i>	ICBRA03030	Threatened	None	G3	S3	
western mastiff bat <i>Eumops perotis californicus</i>	AMACD02011	None	None	G5T4	S3S4	SSC
western pond turtle <i>Emys marmorata</i>	ARAAD02030	None	None	G3G4	S3	SSC
western red bat <i>Lasiurus blossevillii</i>	AMACC05060	None	None	G5	S3	SSC
western spadefoot <i>Spea hammondi</i>	AAABF02020	None	None	G3	S3	SSC
western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
white-faced ibis <i>Plegadis chihi</i>	ABNGE02020	None	None	G5	S3S4	WL
yellow-headed blackbird <i>Xanthocephalus xanthocephalus</i>	ABPBXB3010	None	None	G5	S3	SSC
Yuma myotis <i>Myotis yumanensis</i>	AMACC01020	None	None	G5	S4	

Record Count: 48

Appendix C. USFWS 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:
Consultation Code: 08ESMF00-2019-SLI-1323
Event Code: 08ESMF00-2019-E-04273
Project Name: Rojas Pierce Park Expansion Project

March 12, 2019

Subject: List of threatened and endangered species that may occur in your proposed project location, and/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, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) 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 Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

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

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

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

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

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

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

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 Tracking Number 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

Consultation Code: 08ESMF00-2019-SLI-1323

Event Code: 08ESMF00-2019-E-04273

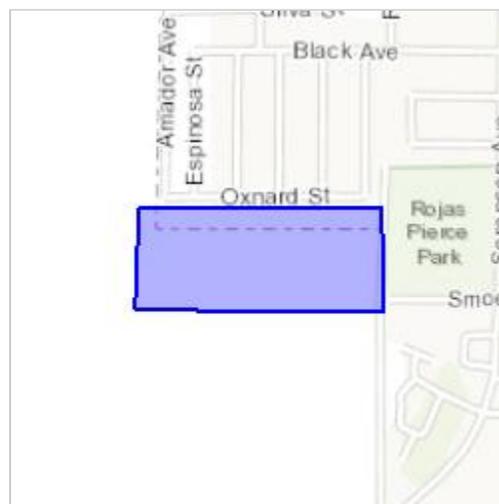
Project Name: Rojas Pierce Park Expansion Project

Project Type: RECREATION CONSTRUCTION / MAINTENANCE

Project Description: The 10-acre parcel of land adjacent to the existing park (currently outside the city limits) will receive two additional soccer fields, and a baseball diamond. Beyond the outfield of the baseball diamond an open space area will double as a storm water basin. Smoot Avenue will be fully improved to City local street standards (60-foot right-of-way) along the parcel frontage. The eastern half of Amador Street will be improved to City arterial street standards (84-foot right-of-way) extending from the residential development to the north to the Smoot Avenue extension. This will complete the circulation system in the area. An on-street parking lot will be constructed adjacent to Smoot Avenue, providing approximately 80 additional on-street parking spaces. The development activities also include installation of turf and trees, and continuation of the park's interior pedestrian circulation system. Another permanent restroom facility will be added.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/36.755944489903115N120.39381364626863W>



Counties: Fresno, CA

Endangered Species Act Species

There is a total of 9 threatened, endangered, or candidate species on this species list.

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

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

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

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

Mammals

NAME	STATUS
Fresno Kangaroo Rat <i>Dipodomys nitratooides exilis</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5150 Species survey guidelines: https://ecos.fws.gov/ipac/guideline/survey/population/37/office/11420.pdf	Endangered
Giant Kangaroo Rat <i>Dipodomys ingens</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6051	Endangered
San Joaquin Kit Fox <i>Vulpes macrotis mutica</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2873	Endangered

Birds

NAME	STATUS
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is proposed critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Reptiles

NAME	STATUS
Blunt-nosed Leopard Lizard <i>Gambelia silus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/625	Endangered
Giant Garter Snake <i>Thamnophis gigas</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened

Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/321	Threatened

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened

Critical habitats

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

Appendix D. NOAA EFH Mapping Query Results

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
Alaska Regional Office

Query Results

Degrees, Minutes, Seconds: Latitude = 36°45'24" N, Longitude = 121°36'27" W
Decimal Degrees: Latitude = 36.76, Longitude = -120.39

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

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,
Pelagic Thresher Shark - North 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 -->**

Swordfish - North Pacific,

West Coast Salmon,

All species and stocks

Activate Location Query

Print This 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](#)
[Alaska Regional Office](#)

Query Results

Degrees, Minutes, Seconds: Latitude = 36°45'24" N, Longitude = 121°36'27" W
Decimal Degrees: Latitude = 36.76, Longitude = -120.39

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

HAPCs

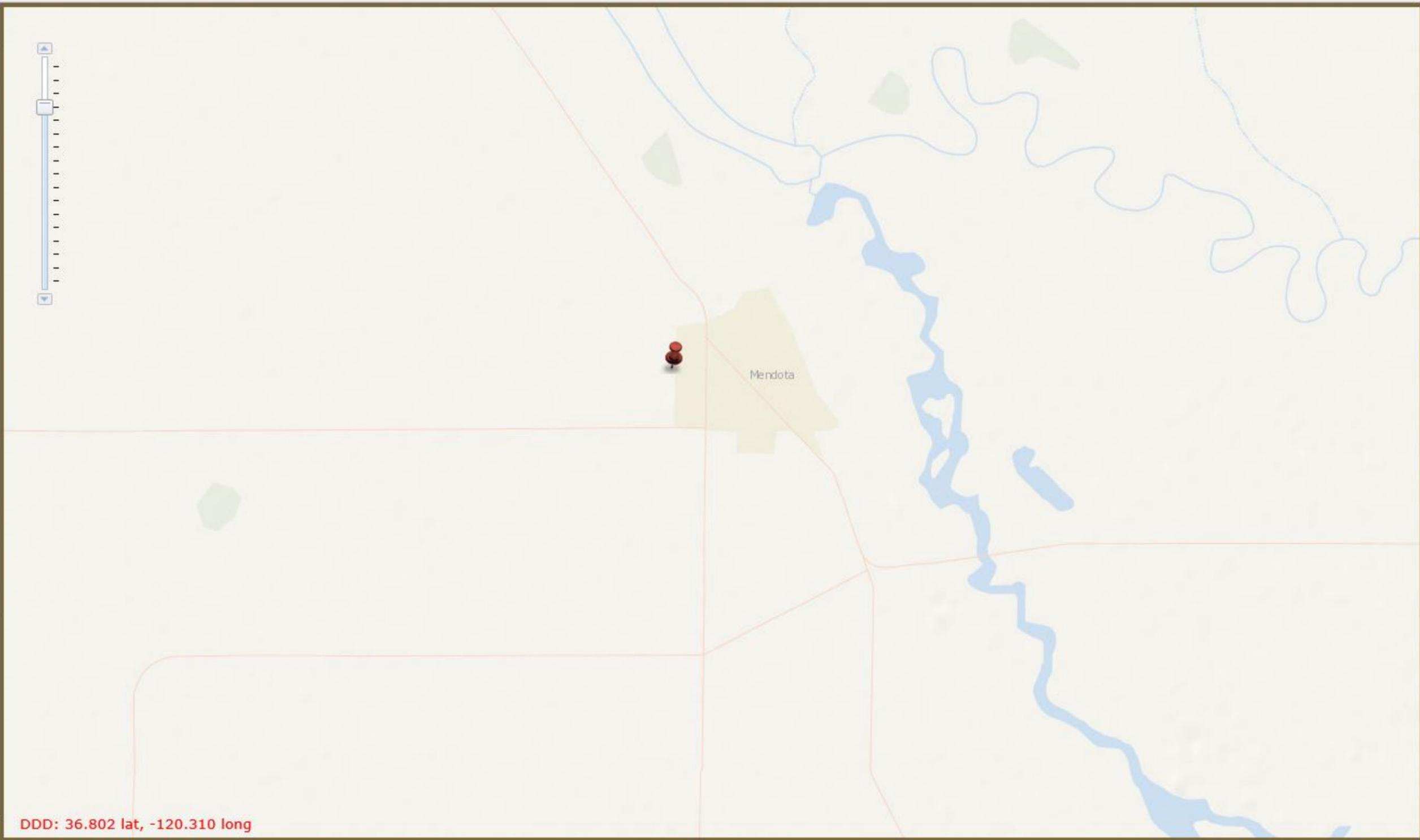
No Habitat Areas of Particular Concern (HAPC) were identified at the report location.

EFH Areas Protected from Fishing

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

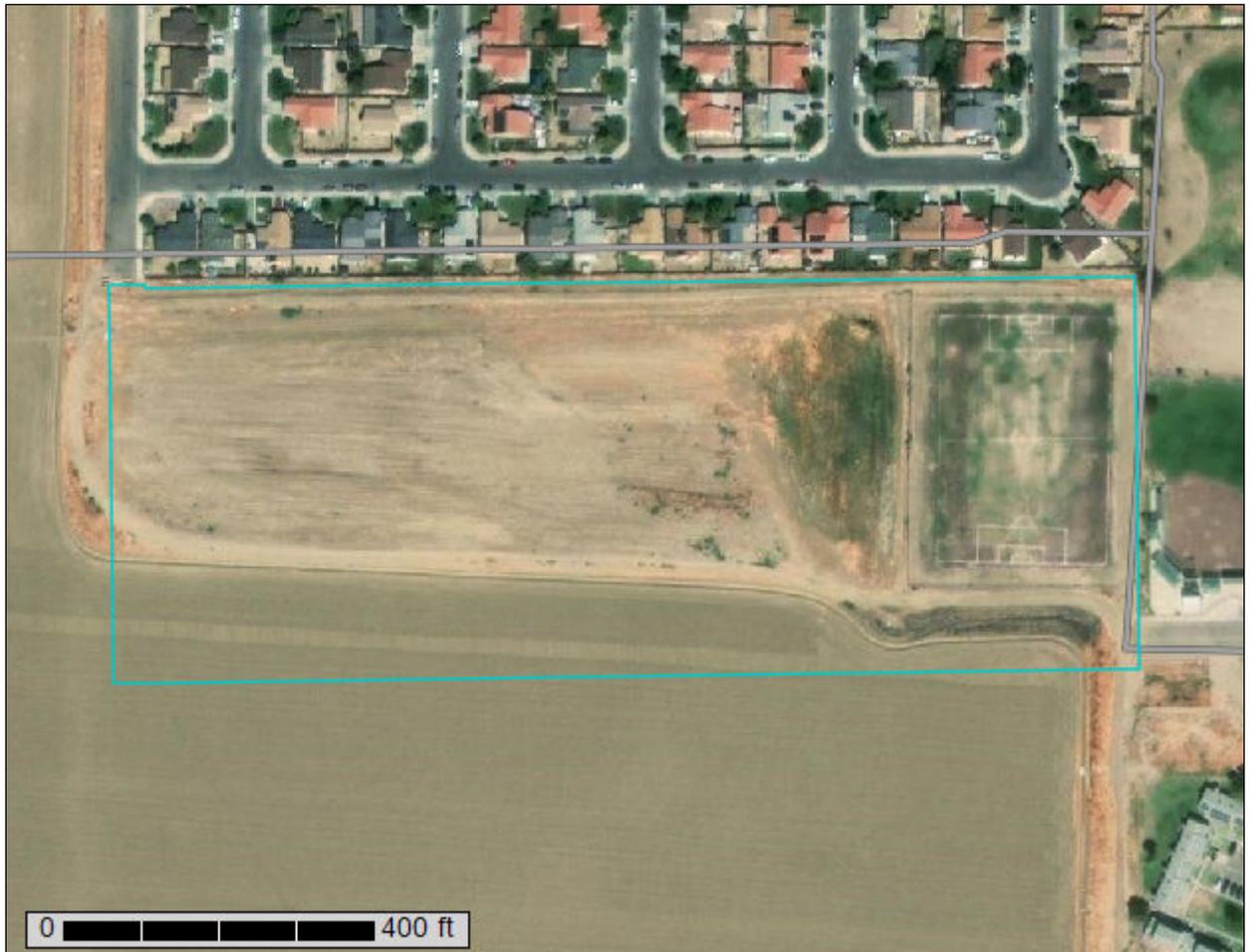
Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data.
****For links to all EFH text descriptions see the complete data inventory: [open data inventory -->](#)**

Pacific Coastal Pelagic Species,



Appendix E. Soils Report

Custom Soil Resource Report for Fresno County, California, Western Part



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

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface	2
How Soil Surveys Are Made	5
Soil Map	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	11
Map Unit Descriptions.....	11
Fresno County, California, Western Part.....	13
482—Calfax clay loam, saline-sodic, wet, 0 to 1 percent slopes, MLRA 17.....	13
References	15

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

Custom Soil Resource Report

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

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

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

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

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

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

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

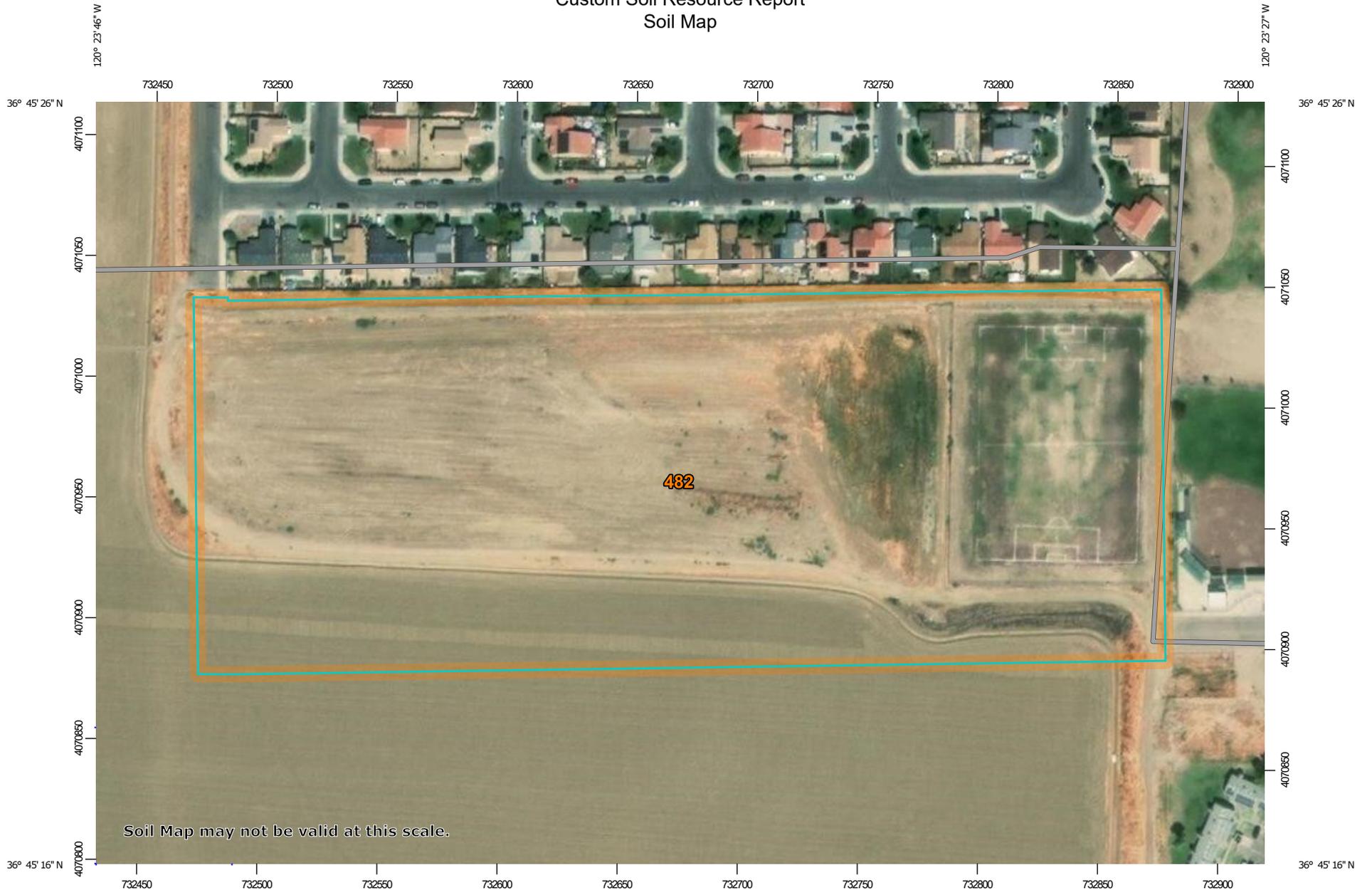
Custom Soil Resource Report

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

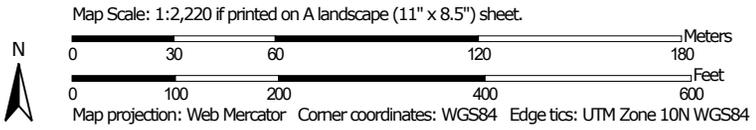
Soil Map

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

Custom Soil Resource Report Soil Map



Soil Map may not be valid at this scale.



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: Fresno County, California, Western Part
 Survey Area Data: Version 13, Sep 12, 2018

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

Date(s) aerial images were photographed: May 31, 2015—Nov 6, 2017

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
482	Calfax clay loam, saline-sodic, wet, 0 to 1 percent slopes, MLRA 17	15.4	100.0%
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,

Custom Soil Resource Report

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.

Fresno County, California, Western Part

482—Calflax clay loam, saline-sodic, wet, 0 to 1 percent slopes, MLRA 17

Map Unit Setting

National map unit symbol: 2vncl

Elevation: 160 to 340 feet

Mean annual precipitation: 7 to 9 inches

Mean annual air temperature: 62 to 64 degrees F

Frost-free period: 230 to 250 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Calflax, clay loam, saline-sodic, wet, and similar soils: 85 percent

Minor components: 15 percent

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

Description of Calflax, Clay Loam, Saline-sodic, Wet

Setting

Landform: Fan skirts

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium derived from calcareous sedimentary rock

Typical profile

Ap - 0 to 8 inches: clay loam

Bw - 8 to 26 inches: clay loam

Bny - 26 to 33 inches: loam

Bnyz1 - 33 to 47 inches: silt loam

Bnyz2 - 47 to 65 inches: loam

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Moderately well drained

Runoff class: Low

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

Depth to water table: About 48 to 60 inches

Frequency of flooding: Rare

Frequency of ponding: None

Calcium carbonate, maximum in profile: 3 percent

Gypsum, maximum in profile: 5 percent

Salinity, maximum in profile: Slightly saline to strongly saline (4.0 to 16.0 mmhos/cm)

Sodium adsorption ratio, maximum in profile: 40.0

Available water storage in profile: Moderate (about 7.3 inches)

Interpretive groups

Land capability classification (irrigated): 3s

Land capability classification (nonirrigated): 7s

Custom Soil Resource Report

Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Ciervo, clay, saline-sodic, wet

Percent of map unit: 6 percent
Landform: Fan skirts
Hydric soil rating: No

Cerini, clay loam

Percent of map unit: 2 percent
Landform: Alluvial fans
Hydric soil rating: No

Posochanet, clay loam, saline-sodic, wet

Percent of map unit: 2 percent
Landform: Fan skirts
Hydric soil rating: No

Lethent, clay loam

Percent of map unit: 2 percent
Landform: Fan remnants
Hydric soil rating: No

Kimberlina, fine sandy loam

Percent of map unit: 1 percent
Hydric soil rating: No

Garces, silt loam

Percent of map unit: 1 percent
Hydric soil rating: No

Twisselman, clay, saline-sodic

Percent of map unit: 1 percent
Hydric soil rating: No

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>

Custom Soil Resource Report

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

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

Land Resource Regions and Major Land Resource Areas of the United States, the Caribbean, and the Pacific Basin

MLRA Explorer Custom Report

C - California Subtropical Fruit, Truck, and Specialty Crop Region
17 - Sacramento and San Joaquin Valleys

MLRA 17 - Sacramento and San Joaquin Valleys

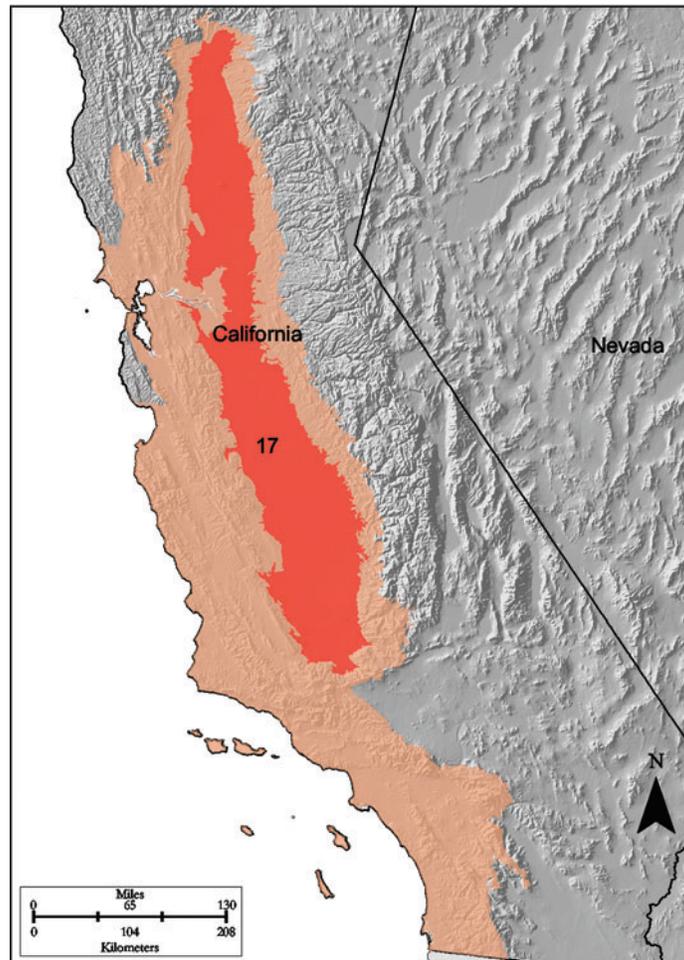


Figure 17-1: Location of MLRA 17 in Land Resource Region C

Introduction

This area is entirely in California (fig. 17-1). It makes up about 18,650 square miles (48,330 square kilometers). From north to south, the major towns or cities in this area are Redding, Red Bluff, Chico, Yuba City, Marysville, Woodland, Davis, Vacaville, Fairfield, Sacramento, Stockton, Modesto, Merced, Madera, Firebaugh, Fresno, Hanford, Visalia, and Bakersfield. Interstate 5 and California State Highway 99 both traverse the entire length of the area. Interstate 80 crosses the midpoint of the area in Sacramento. The MLRA includes Beale, McClellan, Mather, Travis, and Castle Air Force Bases; the Sacramento Army Depot, Lemoore Naval Air Station, and Naval Petroleum Reserves #1 and #2; and numerous national wildlife refuges. The area is locally known as the Central Valley and is part of the Pacific migratory waterfowl flyway.

Biology

This area supports naturalized annuals and scattered trees. Wild barley, wild oats, soft chess, ripgut brome, red brome, foxtail fescue, burclover, and filaree are the dominant species.

Scattered oaks on terraces and oak, willow, and cottonwood grow along the rivers and streams and in overflow areas. Saltgrass, along with such shrubs as iodinebush and Australian saltbush, grow on saline-sodic soils on terraces and in basins.

The major wildlife species include jackrabbit, coyote, fox, ground squirrel, pocket gopher, and various songbirds. The species of fish include salmon, striped bass, steelhead, shad, sturgeon, largemouth bass, smallmouth bass, bluegill, and catfish. Portions of the area are extremely important for wintering waterfowl and seasonally neotropical migrants.

Appendix C

Cultural Information

Cultural Resources Information **Rojas Pierce Park Expansion Project**

Southern San Joaquin Valley Information Center, CSUB, California Historical Resources Information System: Record Search 19-096, dated March 26, 2019.

- There are no recorded cultural resources within the project area or within a one-half mile radius.
- There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, the California Inventory of Historical Resources or the California State Historical Landmarks.
- There has been one cultural resource study conducted within the project area and six additional studies conducted within a half mile radius.

Native American Heritage Commission (NAHC): Sacred Lands File & Native American Contacts List Request, dated March 19, 2019.

- A Record Search of the NAHC Sacred Lands File was completed for the Area of Potential Effect (APE) with negative results
- A list of 13 tribes was provided, and letters to the 13 tribes were then mailed out March 19, 2019.
- No additional responses or additional cultural information was received.

AB 52 Consultation pursuant to Public Resource Code Section 21080.3.1

- The City of Mendota received a letters from the Santa Rosa Rancheria Tachi Tribe on August 8, 2016 regarding AB 52.
 - The City of Mendota sent a letter to the Santa Rosa Rancheria Tachi Tribe on April 4, 2019 regarding AB 52.
- No additional responses or request for cultural consultation was received.

Photographs of the Area of Potential Effect (APE) were taken March 14, 2019 by staff which show the ground disturbance and site conditions.



To: Briza Sholars
Provost & Pritchard Consulting Group
286 W. Cromwell Ave.
Fresno, CA 93711

Record Search 19-096

Date: March 26, 2019

Re: Rojas Pierce Park

County: Fresno

Map(s): Firebaugh 7.5'

CULTURAL RESOURCES RECORDS SEARCH

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

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, Historic Property Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the 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.

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

According to the information in our files, there has been one previous cultural resource study conducted within the project area, FR-02501. There have been six additional studies conducted within the one-half mile radius, FR-00171, 00806, 01617, 02201, 02505, and 02506.

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

There are no recorded cultural resource within project area or within the one-half mile radius and it is not known if any exist in most of this area.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand this project consists of construction of two soccer fields, a baseball diamond, and an open space area that will double as a storm water basin. Further, we understand the project area was previously used for agricultural purposes. The study completed in this project area did not include any field survey. Therefore, it is unknown if cultural resources are present in the project area. Therefore, prior to project activities, we recommend a survey of the project area be conducted by a qualified, professional consultant to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

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

By:



Celeste M. Thomson, Coordinator

Date: March 26, 2019

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

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: <http://www.nahc.ca.gov>
Twitter: @CA_NAHC



March 19, 2019

Briza Sholars
Provost & Pritchard Consulting

VIA Email to: bsholars@ppeng.com

RE: Rojas Pierce Park, Fresno County

Dear Ms. Sholars:

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 the NAHC. 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: katy.sanchez@nahc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Katy Sanchez".

Katy Sanchez
Associate Environmental Planner

Attachment

**Native American Heritage Commission
Native American Contacts List
3/19/2019**

<p>Big Sandy Rancheria of Western Mono Indians Elizabeth D. Kipp, Chairperson PO. Box 337 Auberry, CA 93602 lkipp@bsrnation.com (559) 374-0066 (559) 374-0055</p>	<p>Western Mono</p>	<p>Kings River Choinumni Farm Tribe Stan Alec 3515 East Fedora Avenue Fresno, CA 93726 (559) 647-3227 Cell</p>	<p>Foothill Yokuts Choinumni</p>
<p>Cold Springs Rancheria Carol Bill, Chairperson P.O. Box 209 Tollhouse, CA 93667 coldsprgstriben@netptc.net (559) 855-5043 (559) 855-4445 Fax</p>	<p>Mono</p>	<p>North Fork Mono Tribe Ron Goode, Chairperson 13396 Tollhouse Road Clovis, CA 93619 rwgoode911@hotmail.com (559) 299-3729 Home (559) 355-1774 - cell</p>	<p>Mono</p>
<p>Dumna Wo-Wah Tribal Government Robert Ledger Sr., Chairperson 2191 West Pico Ave. Fresno, CA 93705 ledgerrobert@ymail.com (559) 540-6346</p>	<p>Dumna/Foothill Yokuts Mono</p>	<p>Santa Rosa Rancheria Tachi Yokut Tribe Rueben Barrios Sr., Chairperson P.O. Box 8 Lemoore, CA 93245 (559) 924-1278 (559) 924-3583 Fax</p>	<p>Tache Tachi Yokut</p>
<p>Dunlap Band of Mono Indians Benjamin Charley Jr., Tribal Chair P.O. Box 14 Dunlap, CA 93621 ben.charley@yahoo.com (760) 258-5244</p>	<p>Mono</p>	<p>Table Mountain Rancheria Leanne Walker-Grant, Chairperson P.O. Box 410 Friant, CA 93626 rpennell@tmr.org (559) 822-2587 (559) 822-2693 Fax</p>	<p>Yokuts</p>
<p>Dunlap Band of Mono Indians Dick Charley, Tribal Secretary 5509 E. McKenzie Avenue Fresno, CA 93727 dcharley2016@gmail.com (559) 554-5433</p>	<p>Mono</p>	<p>Table Mountain Rancheria Bob Pennell, Cultural Resources Director P.O. Box 410 Friant, CA 93626 rpennell@tmr.org (559) 325-0351 (559) 325-0394 Fax</p>	<p>Yokuts</p>

This list is current as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes for the proposed: Rojas Pierce Park, Fresno County.

**Native American Heritage Commission
Native American Contacts List
3/19/2019**

Traditional Choinumni Tribe
David Alvarez, Chairperson
2415 E. Houston Avenue
Fresno CA 93720
davealvarez@sbcglobal.net
(559) 217-0396 Cell

Choinumni

Traditional Choinumni Tribe
Rick Osborne, Cultural Resources
2415 E. Houston Avenue
Fresno CA 93720
(559) 324-8764
lemek@att.net

Choinumni

Wuksache Indian Tribe/Eshom Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct.
Salinas CA 93906
kwood8934@aol.com
(831) 443-9702

Foothill Yokuts
Mono
Wuksache

This list is current as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes for the proposed: Rojas Pierce Park, Fresno County.

March 19, 2019

Cold Springs Rancheria
P.O. Box 209
Tollhouse CA 93667

RE: Mendota Rojas Pierce Park Expansion Project

Dear Ms. Bill:

Provost and Pritchard Consulting Group, is providing cultural resources services in support of the City of Mendota Rojas Pierce Park Expansion Project.

The 10-acre parcel of land adjacent to the existing park (currently outside the city limits) will receive two additional soccer fields, and a baseball diamond. Beyond the outfield of the baseball diamond an open space area will double as a storm water basin. Smoot Avenue will be fully improved to City local street standards (60-foot right-of-way) along the parcel frontage. The eastern half of Amador Street will be improved to City arterial street standards (84-foot right-of-way) extending from the residential development to the north to the Smoot Avenue extension. This will complete the circulation system in the area. An on-street parking lot will be constructed adjacent to Smoot Avenue, providing approximately 80 additional on-street parking spaces. The development activities also include installation of turf and trees, and continuation of the park's interior pedestrian circulation system. Another permanent restroom facility will be added.

The project site is located in northwestern Mendota. Mendota is approximately 35 miles west of Fresno, and 8 miles south of Firebaugh in western Fresno County. State Routes 180 and 33 intersect approximately ½-mile north of the project site. It is situated in Section 36, Township 13 South, Range 14 East, Mount Diablo Base & Meridian; Assessor's Parcel Number 012-190-55. See attached map.

Provost and Pritchard Consulting Group has requested a records search of the California Historic Resources Information System from the Southern San Joaquin Valley Information Center to identify any cultural resources within or adjacent to the Project Area. A search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed with negative results. The NAHC provided your name and address as a tribal contact that is culturally affiliated to the project area. If you have any information that you wish to share, or have questions or would like more information about the project, please do not hesitate to contact me by phone (559) 449-2700, email (bsholars@ppeng.com), or send a letter to my attention. I would appreciate any information you might provide to assist us with our inventory efforts.

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

Sincerely, Briza Sholars



encl.: Topo Quad Map

March 19, 2019

Wuksache Indian Tribe/Eshom Valley Band
1179 Rock Haven Ct.
Salinas CA 93906

RE: Mendota Rojas Pierce Park Expansion Project

Dear Mr. Woodrow:

Provost and Pritchard Consulting Group, is providing cultural resources services in support of the City of Mendota Rojas Pierce Park Expansion Project.

The 10-acre parcel of land adjacent to the existing park (currently outside the city limits) will receive two additional soccer fields, and a baseball diamond. Beyond the outfield of the baseball diamond an open space area will double as a storm water basin. Smoot Avenue will be fully improved to City local street standards (60-foot right-of-way) along the parcel frontage. The eastern half of Amador Street will be improved to City arterial street standards (84-foot right-of-way) extending from the residential development to the north to the Smoot Avenue extension. This will complete the circulation system in the area. An on-street parking lot will be constructed adjacent to Smoot Avenue, providing approximately 80 additional on-street parking spaces. The development activities also include installation of turf and trees, and continuation of the park's interior pedestrian circulation system. Another permanent restroom facility will be added.

The project site is located in northwestern Mendota. Mendota is approximately 35 miles west of Fresno, and 8 miles south of Firebaugh in western Fresno County. State Routes 180 and 33 intersect approximately ½-mile north of the project site. It is situated in Section 36, Township 13 South, Range 14 East, Mount Diablo Base & Meridian; Assessor's Parcel Number 012-190-55. See attached map.

Provost and Pritchard Consulting Group has requested a records search of the California Historic Resources Information System from the Southern San Joaquin Valley Information Center to identify any cultural resources within or adjacent to the Project Area. A search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed with negative results. The NAHC provided your name and address as a tribal contact that is culturally affiliated to the project area. If you have any information that you wish to share, or have questions or would like more information about the project, please do not hesitate to contact me by phone (559) 449-2700, email (bsholars@ppeng.com), or send a letter to my attention. I would appreciate any information you might provide to assist us with our inventory efforts.

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

Sincerely, Briza Sholars



encl.: Topo Quad Map



286 W. Cromwell Avenue
Fresno, CA 93711-6162
Tel: (559) 449-2700
Fax: (559) 449-2715
www.ppeng.com

March 19, 2019

Traditional Choinumni Tribe
2415 E. Houston Ave
Fresno CA 93720

RE: Mendota Rojas Pierce Park Expansion Project

Dear Mr. Alvarez:

Provost and Pritchard Consulting Group, is providing cultural resources services in support of the City of Mendota Rojas Pierce Park Expansion Project.

The 10-acre parcel of land adjacent to the existing park (currently outside the city limits) will receive two additional soccer fields, and a baseball diamond. Beyond the outfield of the baseball diamond an open space area will double as a storm water basin. Smoot Avenue will be fully improved to City local street standards (60-foot right-of-way) along the parcel frontage. The eastern half of Amador Street will be improved to City arterial street standards (84-foot right-of-way) extending from the residential development to the north to the Smoot Avenue extension. This will complete the circulation system in the area. An on-street parking lot will be constructed adjacent to Smoot Avenue, providing approximately 80 additional on-street parking spaces. The development activities also include installation of turf and trees, and continuation of the park's interior pedestrian circulation system. Another permanent restroom facility will be added.

The project site is located in northwestern Mendota. Mendota is approximately 35 miles west of Fresno, and 8 miles south of Firebaugh in western Fresno County. State Routes 180 and 33 intersect approximately ½-mile north of the project site. It is situated in Section 36, Township 13 South, Range 14 East, Mount Diablo Base & Meridian; Assessor's Parcel Number 012-190-55. See attached map.

Provost and Pritchard Consulting Group has requested a records search of the California Historic Resources Information System from the Southern San Joaquin Valley Information Center to identify any cultural resources within or adjacent to the Project Area. A search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed with negative results. The NAHC provided your name and address as a tribal contact that is culturally affiliated to the project area. If you have any information that you wish to share, or have questions or would like more information about the project, please do not hesitate to contact me by phone (559) 449-2700, email (bsholars@ppeng.com), or send a letter to my attention. I would appreciate any information you might provide to assist us with our inventory efforts.

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

Sincerely, Briza Sholars

A handwritten signature in blue ink that reads "Briza Sholars".

encl.: Topo Quad Map

March 19, 2019

Traditional Choinumni Tribe
2415 E. Houston Ave
Fresno CA 93720

RE: Mendota Rojas Pierce Park Expansion Project

Dear Mr. Osbourne:

Provost and Pritchard Consulting Group, is providing cultural resources services in support of the City of Mendota Rojas Pierce Park Expansion Project.

The 10-acre parcel of land adjacent to the existing park (currently outside the city limits) will receive two additional soccer fields, and a baseball diamond. Beyond the outfield of the baseball diamond an open space area will double as a storm water basin. Smoot Avenue will be fully improved to City local street standards (60-foot right-of-way) along the parcel frontage. The eastern half of Amador Street will be improved to City arterial street standards (84-foot right-of-way) extending from the residential development to the north to the Smoot Avenue extension. This will complete the circulation system in the area. An on-street parking lot will be constructed adjacent to Smoot Avenue, providing approximately 80 additional on-street parking spaces. The development activities also include installation of turf and trees, and continuation of the park's interior pedestrian circulation system. Another permanent restroom facility will be added.

The project site is located in northwestern Mendota. Mendota is approximately 35 miles west of Fresno, and 8 miles south of Firebaugh in western Fresno County. State Routes 180 and 33 intersect approximately ½-mile north of the project site. It is situated in Section 36, Township 13 South, Range 14 East, Mount Diablo Base & Meridian; Assessor's Parcel Number 012-190-55. See attached map.

Provost and Pritchard Consulting Group has requested a records search of the California Historic Resources Information System from the Southern San Joaquin Valley Information Center to identify any cultural resources within or adjacent to the Project Area. A search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed with negative results. The NAHC provided your name and address as a tribal contact that is culturally affiliated to the project area. If you have any information that you wish to share, or have questions or would like more information about the project, please do not hesitate to contact me by phone (559) 449-2700, email (bsholars@ppeng.com), or send a letter to my attention. I would appreciate any information you might provide to assist us with our inventory efforts.

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

Sincerely, Briza Sholars



encl.: Topo Quad Map

March 19, 2019

Table Mountain Rancheria
P.O. Box 410
Friant CA 93626

RE: Mendota Rojas Pierce Park Expansion Project

Dear Ms. Walker-Grant:

Provost and Pritchard Consulting Group, is providing cultural resources services in support of the City of Mendota Rojas Pierce Park Expansion Project.

The 10-acre parcel of land adjacent to the existing park (currently outside the city limits) will receive two additional soccer fields, and a baseball diamond. Beyond the outfield of the baseball diamond an open space area will double as a storm water basin. Smoot Avenue will be fully improved to City local street standards (60-foot right-of-way) along the parcel frontage. The eastern half of Amador Street will be improved to City arterial street standards (84-foot right-of-way) extending from the residential development to the north to the Smoot Avenue extension. This will complete the circulation system in the area. An on-street parking lot will be constructed adjacent to Smoot Avenue, providing approximately 80 additional on-street parking spaces. The development activities also include installation of turf and trees, and continuation of the park's interior pedestrian circulation system. Another permanent restroom facility will be added.

The project site is located in northwestern Mendota. Mendota is approximately 35 miles west of Fresno, and 8 miles south of Firebaugh in western Fresno County. State Routes 180 and 33 intersect approximately ½-mile north of the project site. It is situated in Section 36, Township 13 South, Range 14 East, Mount Diablo Base & Meridian; Assessor's Parcel Number 012-190-55. See attached map.

Provost and Pritchard Consulting Group has requested a records search of the California Historic Resources Information System from the Southern San Joaquin Valley Information Center to identify any cultural resources within or adjacent to the Project Area. A search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed with negative results. The NAHC provided your name and address as a tribal contact that is culturally affiliated to the project area. If you have any information that you wish to share, or have questions or would like more information about the project, please do not hesitate to contact me by phone (559) 449-2700, email (bsholars@ppeng.com), or send a letter to my attention. I would appreciate any information you might provide to assist us with our inventory efforts.

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

Sincerely, Briza Sholars



encl.: Topo Quad Map

March 19, 2019

Table Mountain Rancheria
P.O. Box 410
Friant CA 93626

RE: Mendota Rojas Pierce Park Expansion Project

Dear Mr. Pennell:

Provost and Pritchard Consulting Group, is providing cultural resources services in support of the City of Mendota Rojas Pierce Park Expansion Project.

The 10-acre parcel of land adjacent to the existing park (currently outside the city limits) will receive two additional soccer fields, and a baseball diamond. Beyond the outfield of the baseball diamond an open space area will double as a storm water basin. Smoot Avenue will be fully improved to City local street standards (60-foot right-of-way) along the parcel frontage. The eastern half of Amador Street will be improved to City arterial street standards (84-foot right-of-way) extending from the residential development to the north to the Smoot Avenue extension. This will complete the circulation system in the area. An on-street parking lot will be constructed adjacent to Smoot Avenue, providing approximately 80 additional on-street parking spaces. The development activities also include installation of turf and trees, and continuation of the park's interior pedestrian circulation system. Another permanent restroom facility will be added.

The project site is located in northwestern Mendota. Mendota is approximately 35 miles west of Fresno, and 8 miles south of Firebaugh in western Fresno County. State Routes 180 and 33 intersect approximately ½-mile north of the project site. It is situated in Section 36, Township 13 South, Range 14 East, Mount Diablo Base & Meridian; Assessor's Parcel Number 012-190-55. See attached map.

Provost and Pritchard Consulting Group has requested a records search of the California Historic Resources Information System from the Southern San Joaquin Valley Information Center to identify any cultural resources within or adjacent to the Project Area. A search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed with negative results. The NAHC provided your name and address as a tribal contact that is culturally affiliated to the project area. If you have any information that you wish to share, or have questions or would like more information about the project, please do not hesitate to contact me by phone (559) 449-2700, email (bsholars@ppeng.com), or send a letter to my attention. I would appreciate any information you might provide to assist us with our inventory efforts.

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

Sincerely, Briza Sholars



encl.: Topo Quad Map

March 19, 2019

Santa Rosa Rancheria Tachi Yokut Tribe
P.O. Box 8
Lemoore CA 93245

RE: Mendota Rojas Pierce Park Expansion Project

Dear Mr. Barrios:

Provost and Pritchard Consulting Group, is providing cultural resources services in support of the City of Mendota Rojas Pierce Park Expansion Project.

The 10-acre parcel of land adjacent to the existing park (currently outside the city limits) will receive two additional soccer fields, and a baseball diamond. Beyond the outfield of the baseball diamond an open space area will double as a storm water basin. Smoot Avenue will be fully improved to City local street standards (60-foot right-of-way) along the parcel frontage. The eastern half of Amador Street will be improved to City arterial street standards (84-foot right-of-way) extending from the residential development to the north to the Smoot Avenue extension. This will complete the circulation system in the area. An on-street parking lot will be constructed adjacent to Smoot Avenue, providing approximately 80 additional on-street parking spaces. The development activities also include installation of turf and trees, and continuation of the park's interior pedestrian circulation system. Another permanent restroom facility will be added.

The project site is located in northwestern Mendota. Mendota is approximately 35 miles west of Fresno, and 8 miles south of Firebaugh in western Fresno County. State Routes 180 and 33 intersect approximately ½-mile north of the project site. It is situated in Section 36, Township 13 South, Range 14 East, Mount Diablo Base & Meridian; Assessor's Parcel Number 012-190-55. See attached map.

Provost and Pritchard Consulting Group has requested a records search of the California Historic Resources Information System from the Southern San Joaquin Valley Information Center to identify any cultural resources within or adjacent to the Project Area. A search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed with negative results. The NAHC provided your name and address as a tribal contact that is culturally affiliated to the project area. If you have any information that you wish to share, or have questions or would like more information about the project, please do not hesitate to contact me by phone (559) 449-2700, email (bsholars@ppeng.com), or send a letter to my attention. I would appreciate any information you might provide to assist us with our inventory efforts.

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

Sincerely, Briza Sholars



encl.: Topo Quad Map

March 19, 2019

North Fork Mono Tribe
13396 Tollhouse Road
Clovis CA 93619

RE: Mendota Rojas Pierce Park Expansion Project

Dear Mr. Goode:

Provost and Pritchard Consulting Group, is providing cultural resources services in support of the City of Mendota Rojas Pierce Park Expansion Project.

The 10-acre parcel of land adjacent to the existing park (currently outside the city limits) will receive two additional soccer fields, and a baseball diamond. Beyond the outfield of the baseball diamond an open space area will double as a storm water basin. Smoot Avenue will be fully improved to City local street standards (60-foot right-of-way) along the parcel frontage. The eastern half of Amador Street will be improved to City arterial street standards (84-foot right-of-way) extending from the residential development to the north to the Smoot Avenue extension. This will complete the circulation system in the area. An on-street parking lot will be constructed adjacent to Smoot Avenue, providing approximately 80 additional on-street parking spaces. The development activities also include installation of turf and trees, and continuation of the park's interior pedestrian circulation system. Another permanent restroom facility will be added.

The project site is located in northwestern Mendota. Mendota is approximately 35 miles west of Fresno, and 8 miles south of Firebaugh in western Fresno County. State Routes 180 and 33 intersect approximately ½-mile north of the project site. It is situated in Section 36, Township 13 South, Range 14 East, Mount Diablo Base & Meridian; Assessor's Parcel Number 012-190-55. See attached map.

Provost and Pritchard Consulting Group has requested a records search of the California Historic Resources Information System from the Southern San Joaquin Valley Information Center to identify any cultural resources within or adjacent to the Project Area. A search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed with negative results. The NAHC provided your name and address as a tribal contact that is culturally affiliated to the project area. If you have any information that you wish to share, or have questions or would like more information about the project, please do not hesitate to contact me by phone (559) 449-2700, email (bsholars@ppeng.com), or send a letter to my attention. I would appreciate any information you might provide to assist us with our inventory efforts.

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

Sincerely, Briza Sholars



encl.: Topo Quad Map

March 19, 2019

Kings River Choinumni Farm Tribe
3515 East Fedora Ave
Fresno CA, 93726

RE: Mendota Rojas Pierce Park Expansion Project

Dear Mr. Alec:

Provost and Pritchard Consulting Group, is providing cultural resources services in support of the City of Mendota Rojas Pierce Park Expansion Project.

The 10-acre parcel of land adjacent to the existing park (currently outside the city limits) will receive two additional soccer fields, and a baseball diamond. Beyond the outfield of the baseball diamond an open space area will double as a storm water basin. Smoot Avenue will be fully improved to City local street standards (60-foot right-of-way) along the parcel frontage. The eastern half of Amador Street will be improved to City arterial street standards (84-foot right-of-way) extending from the residential development to the north to the Smoot Avenue extension. This will complete the circulation system in the area. An on-street parking lot will be constructed adjacent to Smoot Avenue, providing approximately 80 additional on-street parking spaces. The development activities also include installation of turf and trees, and continuation of the park's interior pedestrian circulation system. Another permanent restroom facility will be added.

The project site is located in northwestern Mendota. Mendota is approximately 35 miles west of Fresno, and 8 miles south of Firebaugh in western Fresno County. State Routes 180 and 33 intersect approximately ½-mile north of the project site. It is situated in Section 36, Township 13 South, Range 14 East, Mount Diablo Base & Meridian; Assessor's Parcel Number 012-190-55. See attached map.

Provost and Pritchard Consulting Group has requested a records search of the California Historic Resources Information System from the Southern San Joaquin Valley Information Center to identify any cultural resources within or adjacent to the Project Area. A search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed with negative results. The NAHC provided your name and address as a tribal contact that is culturally affiliated to the project area. If you have any information that you wish to share, or have questions or would like more information about the project, please do not hesitate to contact me by phone (559) 449-2700, email (bsholars@ppeng.com), or send a letter to my attention. I would appreciate any information you might provide to assist us with our inventory efforts.

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

Sincerely, Briza Sholars



encl.: Topo Quad Map

March 19, 2019

Dunlap Band of Mono Indians
P.O. Box 14
Dunlap CA 93621

RE: Mendota Rojas Pierce Park Expansion Project

Dear Mr. Charley.:

Provost and Pritchard Consulting Group, is providing cultural resources services in support of the City of Mendota Rojas Pierce Park Expansion Project.

The 10-acre parcel of land adjacent to the existing park (currently outside the city limits) will receive two additional soccer fields, and a baseball diamond. Beyond the outfield of the baseball diamond an open space area will double as a storm water basin. Smoot Avenue will be fully improved to City local street standards (60-foot right-of-way) along the parcel frontage. The eastern half of Amador Street will be improved to City arterial street standards (84-foot right-of-way) extending from the residential development to the north to the Smoot Avenue extension. This will complete the circulation system in the area. An on-street parking lot will be constructed adjacent to Smoot Avenue, providing approximately 80 additional on-street parking spaces. The development activities also include installation of turf and trees, and continuation of the park's interior pedestrian circulation system. Another permanent restroom facility will be added.

The project site is located in northwestern Mendota. Mendota is approximately 35 miles west of Fresno, and 8 miles south of Firebaugh in western Fresno County. State Routes 180 and 33 intersect approximately ½-mile north of the project site. It is situated in Section 36, Township 13 South, Range 14 East, Mount Diablo Base & Meridian; Assessor's Parcel Number 012-190-55. See attached map.

Provost and Pritchard Consulting Group has requested a records search of the California Historic Resources Information System from the Southern San Joaquin Valley Information Center to identify any cultural resources within or adjacent to the Project Area. A search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed with negative results. The NAHC provided your name and address as a tribal contact that is culturally affiliated to the project area. If you have any information that you wish to share, or have questions or would like more information about the project, please do not hesitate to contact me by phone (559) 449-2700, email (bsholars@ppeng.com), or send a letter to my attention. I would appreciate any information you might provide to assist us with our inventory efforts.

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

Sincerely, Briza Sholars



encl.: Topo Quad Map

March 19, 2019

Dunlap Band of Mono Indians
P.O. Box 14
Dunlap CA 93621

RE: Mendota Rojas Pierce Park Expansion Project

Dear Mr. Charley.:

Provost and Pritchard Consulting Group, is providing cultural resources services in support of the City of Mendota Rojas Pierce Park Expansion Project.

The 10-acre parcel of land adjacent to the existing park (currently outside the city limits) will receive two additional soccer fields, and a baseball diamond. Beyond the outfield of the baseball diamond an open space area will double as a storm water basin. Smoot Avenue will be fully improved to City local street standards (60-foot right-of-way) along the parcel frontage. The eastern half of Amador Street will be improved to City arterial street standards (84-foot right-of-way) extending from the residential development to the north to the Smoot Avenue extension. This will complete the circulation system in the area. An on-street parking lot will be constructed adjacent to Smoot Avenue, providing approximately 80 additional on-street parking spaces. The development activities also include installation of turf and trees, and continuation of the park's interior pedestrian circulation system. Another permanent restroom facility will be added.

The project site is located in northwestern Mendota. Mendota is approximately 35 miles west of Fresno, and 8 miles south of Firebaugh in western Fresno County. State Routes 180 and 33 intersect approximately ½-mile north of the project site. It is situated in Section 36, Township 13 South, Range 14 East, Mount Diablo Base & Meridian; Assessor's Parcel Number 012-190-55. See attached map.

Provost and Pritchard Consulting Group has requested a records search of the California Historic Resources Information System from the Southern San Joaquin Valley Information Center to identify any cultural resources within or adjacent to the Project Area. A search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed with negative results. The NAHC provided your name and address as a tribal contact that is culturally affiliated to the project area. If you have any information that you wish to share, or have questions or would like more information about the project, please do not hesitate to contact me by phone (559) 449-2700, email (bsholars@ppeng.com), or send a letter to my attention. I would appreciate any information you might provide to assist us with our inventory efforts.

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

Sincerely, Briza Sholars



encl.: Topo Quad Map



286 W. Cromwell Avenue
Fresno, CA 93711-6162
Tel: (559) 449-2700
Fax: (559) 449-2715
www.ppeng.com

March 19, 2019

Dumna Wo-Wah Tribal Government
2191 West Pico Ave
Fresno CA 93705

RE: Mendota Rojas Pierce Park Expansion Project

Dear Mr. Ledger:

Provost and Pritchard Consulting Group, is providing cultural resources services in support of the City of Mendota Rojas Pierce Park Expansion Project.

The 10-acre parcel of land adjacent to the existing park (currently outside the city limits) will receive two additional soccer fields, and a baseball diamond. Beyond the outfield of the baseball diamond an open space area will double as a storm water basin. Smoot Avenue will be fully improved to City local street standards (60-foot right-of-way) along the parcel frontage. The eastern half of Amador Street will be improved to City arterial street standards (84-foot right-of-way) extending from the residential development to the north to the Smoot Avenue extension. This will complete the circulation system in the area. An on-street parking lot will be constructed adjacent to Smoot Avenue, providing approximately 80 additional on-street parking spaces. The development activities also include installation of turf and trees, and continuation of the park's interior pedestrian circulation system. Another permanent restroom facility will be added.

The project site is located in northwestern Mendota. Mendota is approximately 35 miles west of Fresno, and 8 miles south of Firebaugh in western Fresno County. State Routes 180 and 33 intersect approximately ½-mile north of the project site. It is situated in Section 36, Township 13 South, Range 14 East, Mount Diablo Base & Meridian; Assessor's Parcel Number 012-190-55. See attached map.

Provost and Pritchard Consulting Group has requested a records search of the California Historic Resources Information System from the Southern San Joaquin Valley Information Center to identify any cultural resources within or adjacent to the Project Area. A search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed with negative results. The NAHC provided your name and address as a tribal contact that is culturally affiliated to the project area. If you have any information that you wish to share, or have questions or would like more information about the project, please do not hesitate to contact me by phone (559) 449-2700, email (bsholars@ppeng.com), or send a letter to my attention. I would appreciate any information you might provide to assist us with our inventory efforts.

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

Sincerely, Briza Sholars

encl.: Topo Quad Map

March 19, 2019

Big Sandy Rancheria of Western Mono Indians
P.O. Box 337
Auberry, CA 93602

RE: Mendota Rojas Pierce Park Expansion Project

Dear Ms. Kipp:

Provost and Pritchard Consulting Group, is providing cultural resources services in support of the City of Mendota Rojas Pierce Park Expansion Project.

The 10-acre parcel of land adjacent to the existing park (currently outside the city limits) will receive two additional soccer fields, and a baseball diamond. Beyond the outfield of the baseball diamond an open space area will double as a storm water basin. Smoot Avenue will be fully improved to City local street standards (60-foot right-of-way) along the parcel frontage. The eastern half of Amador Street will be improved to City arterial street standards (84-foot right-of-way) extending from the residential development to the north to the Smoot Avenue extension. This will complete the circulation system in the area. An on-street parking lot will be constructed adjacent to Smoot Avenue, providing approximately 80 additional on-street parking spaces. The development activities also include installation of turf and trees, and continuation of the park's interior pedestrian circulation system. Another permanent restroom facility will be added.

The project site is located in northwestern Mendota. Mendota is approximately 35 miles west of Fresno, and 8 miles south of Firebaugh in western Fresno County. State Routes 180 and 33 intersect approximately ½-mile north of the project site. It is situated in Section 36, Township 13 South, Range 14 East, Mount Diablo Base & Meridian; Assessor's Parcel Number 012-190-55. See attached map.

Provost and Pritchard Consulting Group has requested a records search of the California Historic Resources Information System from the Southern San Joaquin Valley Information Center to identify any cultural resources within or adjacent to the Project Area. A search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed with negative results. The NAHC provided your name and address as a tribal contact that is culturally affiliated to the project area. If you have any information that you wish to share, or have questions or would like more information about the project, please do not hesitate to contact me by phone (559) 449-2700, email (bsholars@ppeng.com), or send a letter to my attention. I would appreciate any information you might provide to assist us with our inventory efforts.

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

Sincerely, Briza Sholars



encl.: Topo Quad Map

SANTA ROSA RANCHERIA TACHI TRIBE

A FEDERALLY RECOGNIZED TRIBE

Ruben Barrios
Chairman

▲ Elmer Thomas
Vice-Chairman

▲ Rafaella Dieter
Secretary

▲ Rosa Hernandez
Treasurer

▲ Elaine Jeff / Patricia D. Lewis
Delegates

08/08/16

City of Mendota
C/O Director
643 Quince Street
Mendota CA 93640

RE: California Environmental Quality Act Public Resources Code section 21080.3, subd. (b) Request for Formal Notification of Proposed Projects Within the Santa Rosa Rancheria's Geographic Area of Traditional and Cultural Affiliation

To Whom It May Concern,

As of the date of this letter, in accordance with Public Resources Code Section 21080.3.1, subd. (b), Santa Rosa Rancheria Tachi Yokut Tribe which is traditionally and culturally affiliated with a geographic area within your agency's geographic area of jurisdiction, requests formal notice of and information on proposed projects for which your agency will serve as a lead agency under the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq. Pursuant to Public Resources Code section 21080.3.1, subd. (b), and until further notice, we hereby designate the following person as the tribe's lead contact person for purposes of receiving notices of proposed projects from your agency:

Santa Rosa Rancheria Tachi Yokut Tribe

Ruben Barrios, Tribal Chairman
C/O Cultural Department
P.O. Box 8, Lemoore, CA 93245

Cultural Department

Hector Franco (Director);
(559)924-1278 Ext: 4011
(559)925-8530
HFranco@tachi-yokut-nsn.gov;

Shana Powers (Cultural Specialist II)
(559)924-1278 Ext: 4013
(559)997-9919
SBrum@tachi-yokut-nsn.gov



CITY OF MENDOTA

"Cantaloupe Center Of The World"

April 4, 2019

Santa Rosa Rancheria Tachi Yokut Tribe
Rueben Barrios, Tribal Chairman
C/O Cultural Department
P.O. Box 8
Lemoore, CA 93245

Subject: Consultation pursuant to Public Resources Code Section 21080.3.1, et seq. for the Mendota Rojas Pierce Park Expansion Project, CA

Dear Mr. Barrios:

The City of Mendota is processing an application for the Mendota Rojas Pierce Park Expansion Project and is requesting your review to determine if formal consultation is appropriate pursuant to Public Resources Code Section 21080.3.1, et seq. (Assembly Bill 52). The project proposes the following activities:

The 10-acre parcel of land adjacent to the existing park (currently outside the city limits) will receive two additional soccer fields, and a baseball diamond. Beyond the outfield of the baseball diamond an open space area will double as a storm water basin. Smoot Avenue will be fully improved to City local street standards (60-foot right-of-way) along the parcel frontage. The eastern half of Amador Street will be improved to City arterial street standards (84-foot right-of-way) extending from the residential development to the north to the Smoot Avenue extension. This will complete the circulation system in the area. An on-street parking lot will be constructed adjacent to Smoot Avenue, providing approximately 80 additional on-street parking spaces. The development activities also include installation of turf and trees, and continuation of the park's interior pedestrian circulation system. Another permanent restroom facility will be added.

The project site is located in northwestern Mendota. Mendota is approximately 35 miles west of Fresno, and 8 miles south of Firebaugh in western Fresno County. State Routes 180 and 33 intersect approximately ½-mile north of the project site. It is situated in Section 36, Township 13 South, Range 14 East, Mount Diablo Base & Meridian; Assessor's Parcel Number 012-190-55ST.

We understand that pursuant to Public Resources Code Subdivision 21080.3.1(d) the Tribe has 30 days from receipt of this letter to request formal consultation. Please feel free to contact me with any questions at (559) 655-4298 or at Cristian@cityofmendota.com. Thank you.

Respectfully,

Cristian Gonzales, City Manager

Enclosures: Site Plan
Topo-Quad Map



DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION

Lisa Ann L. Mangat, Director

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

June 4, 2019

Refer to HUD_2019_0506_001

Mr. Cristian Gonzalez
City Manager
City of Mendota
643 Quince Street
Mendota, CA 93640

Re: Rojas Pierce Park Expansion Project

Dear Mr. Gonzalez:

The California State Historic Preservation Officer received the consultation submittal for the above referenced undertaking for our review and comment pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations found at 36 CFR Part 800. The regulations and advisory materials are located at www.achp.gov.

Pursuant to 36 CFR §800.4(d) we do not object to the City of Mendota's finding that no historic properties will be affected by the proposed expansion of Rojas Pierce Park, which includes the addition of two soccer fields, a baseball diamond, bleachers, LED lighting, and an open space that will double as a storm water basin. However, the City may have additional Section 106 responsibilities under certain circumstances set forth at 36 CFR Part 800. For example, in the event that historic properties are discovered during implementation of the undertaking, your agency is required to consult further pursuant to §800.13(b).

We appreciate the City of Mendota's consideration of historic properties in the project planning process. If you have questions please contact Shannon Lauchner, Historian II, with the Local Government & Environmental Compliance Unit at (916)445-7013 or by email at shannon.lauchner@parks.ca.gov.

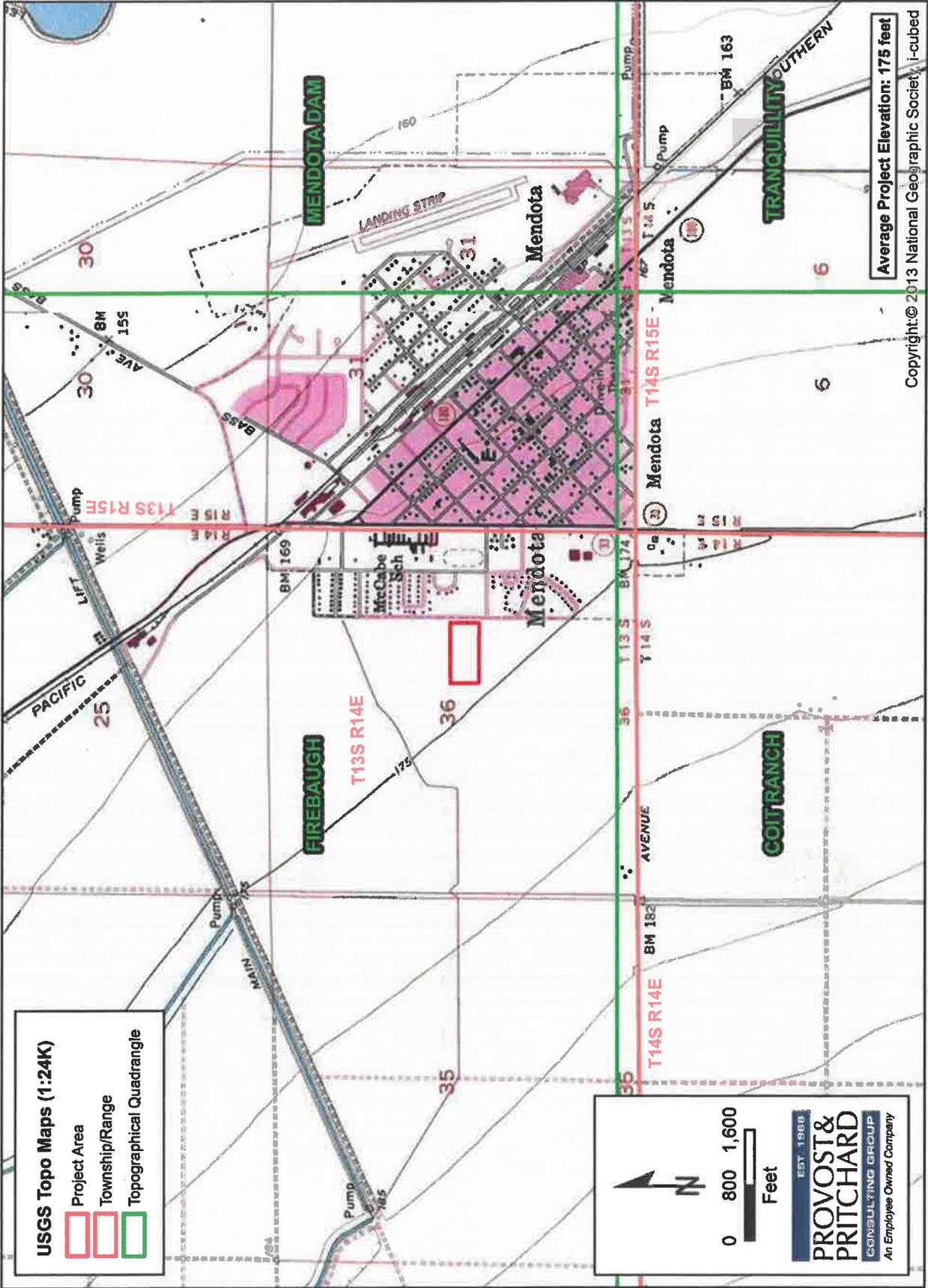
Sincerely,

Julianne Polanco
State Historic Preservation Officer



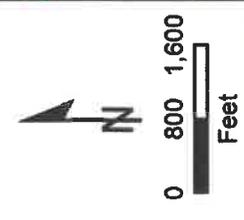
Project APE (15.4 acres)
Mendota City Limits

0 100 200
Feet
EST. 1968
PROVOST & PRITCHARD
CONSULTING GROUP
An Employee Owned Company



USGS Topo Maps (1:24K)

- Project Area
- Township/Range
- Topographical Quadrangle

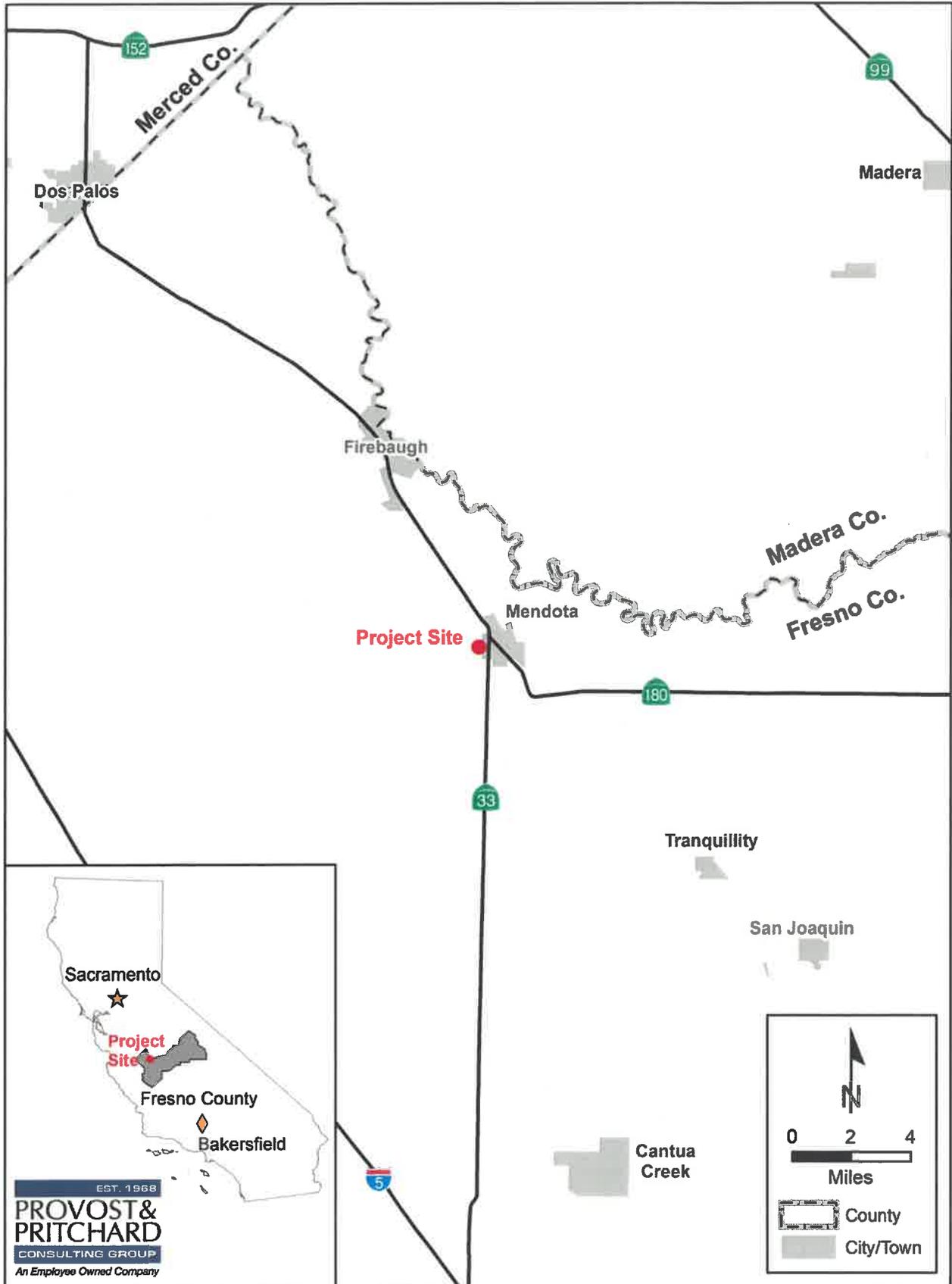


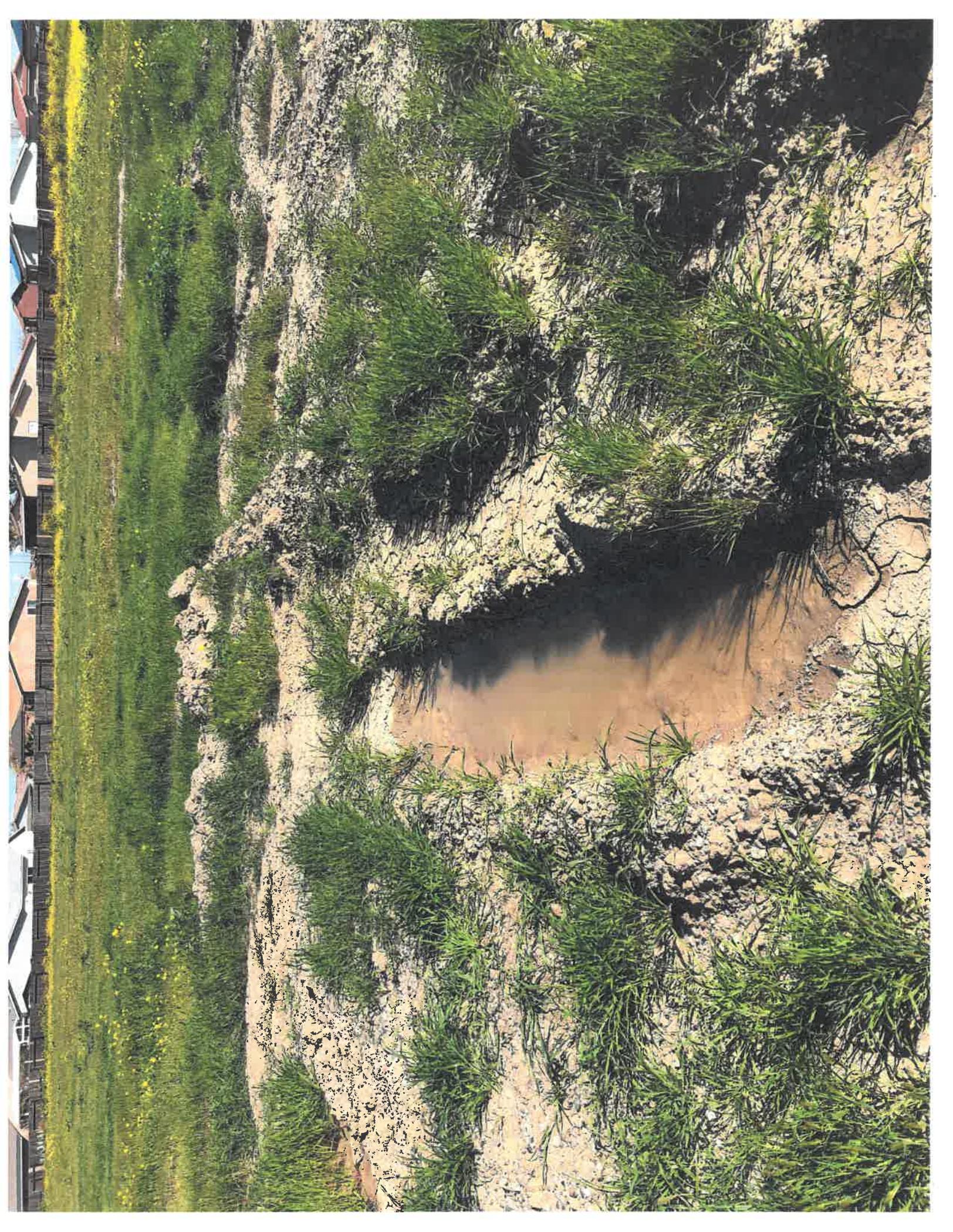
PROVOST & PRITCHARD
CONSULTING GROUP
An Employee Owned Company

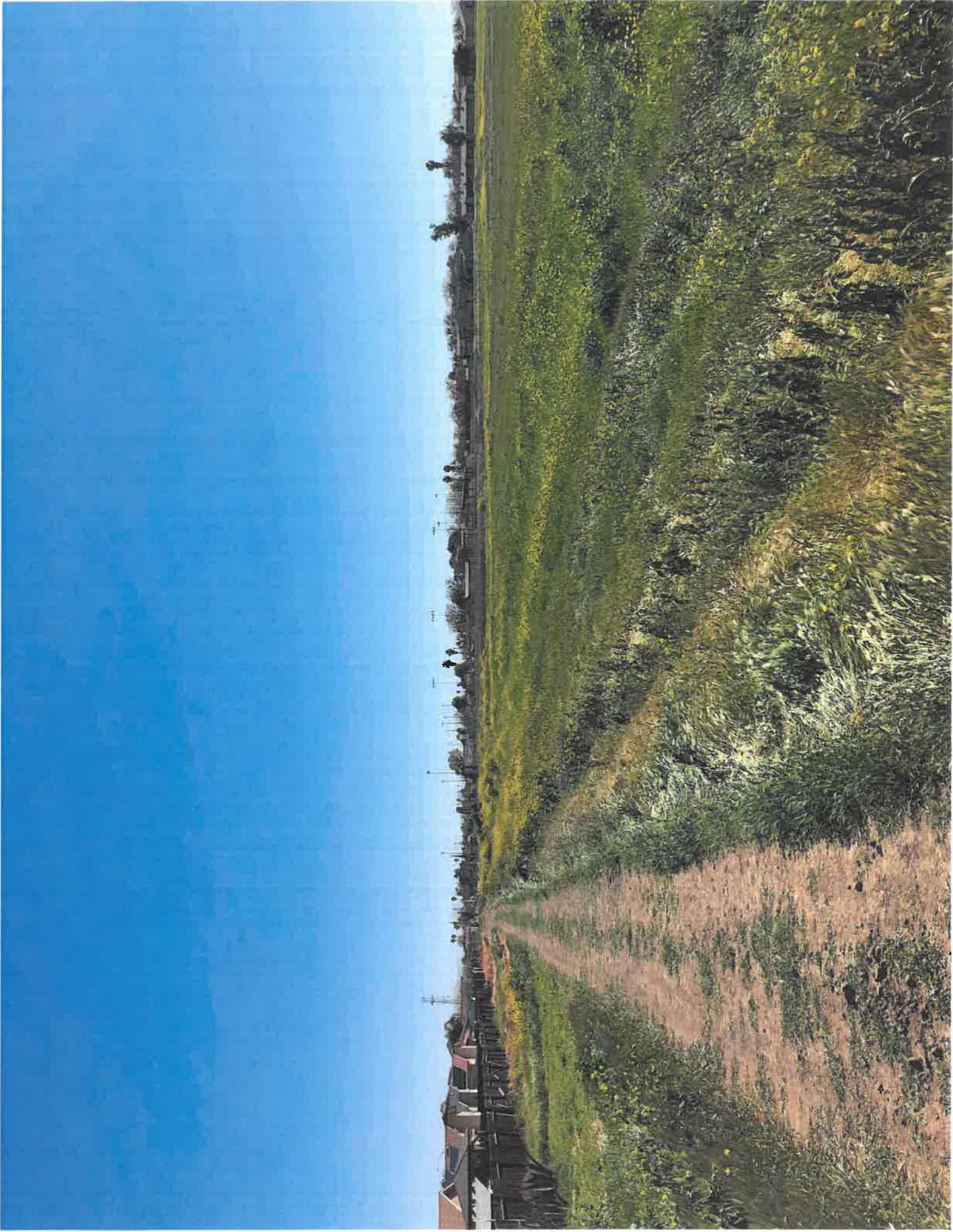
Average Project Elevation: 175 feet

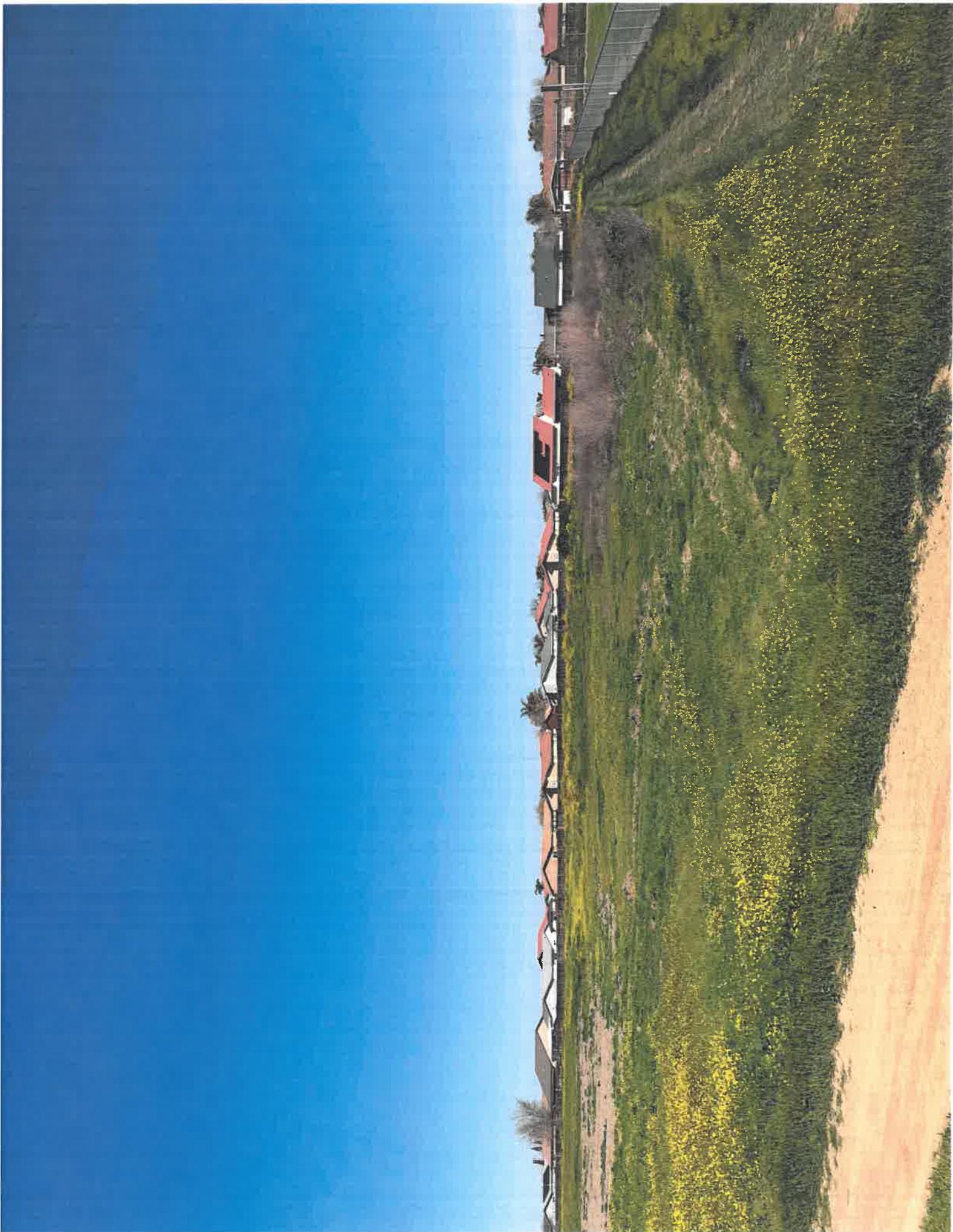
Copyright © 2013 National Geographic Society. i-cubed

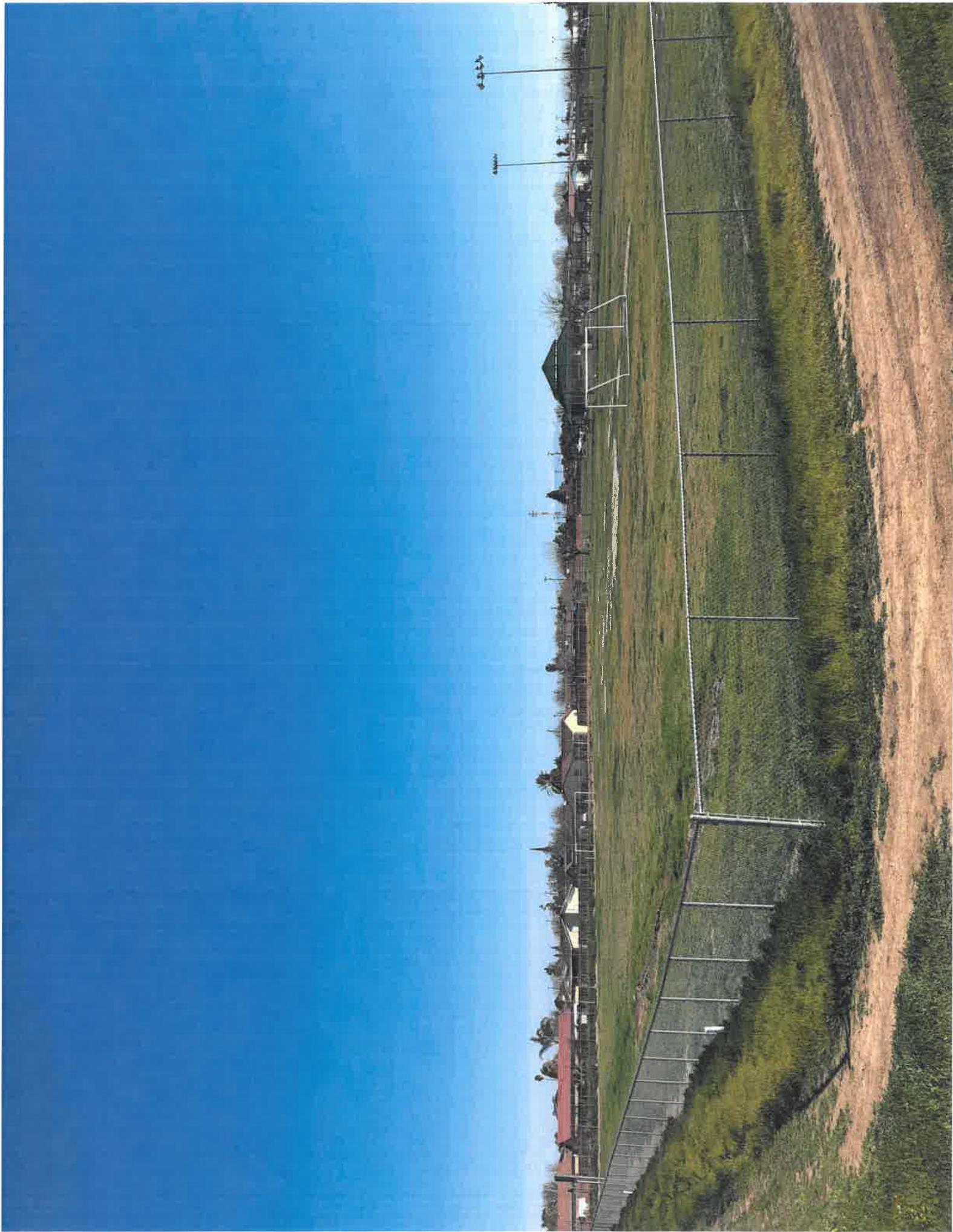
3/11/2019 . \ppleng.com\pzd\data\clients\Mendota_City of-3336\3336OG01_On-Going\100\102 Contracts\102.42 Rojas Pierce Park Improvements\GIS\Map\Topo.mxd







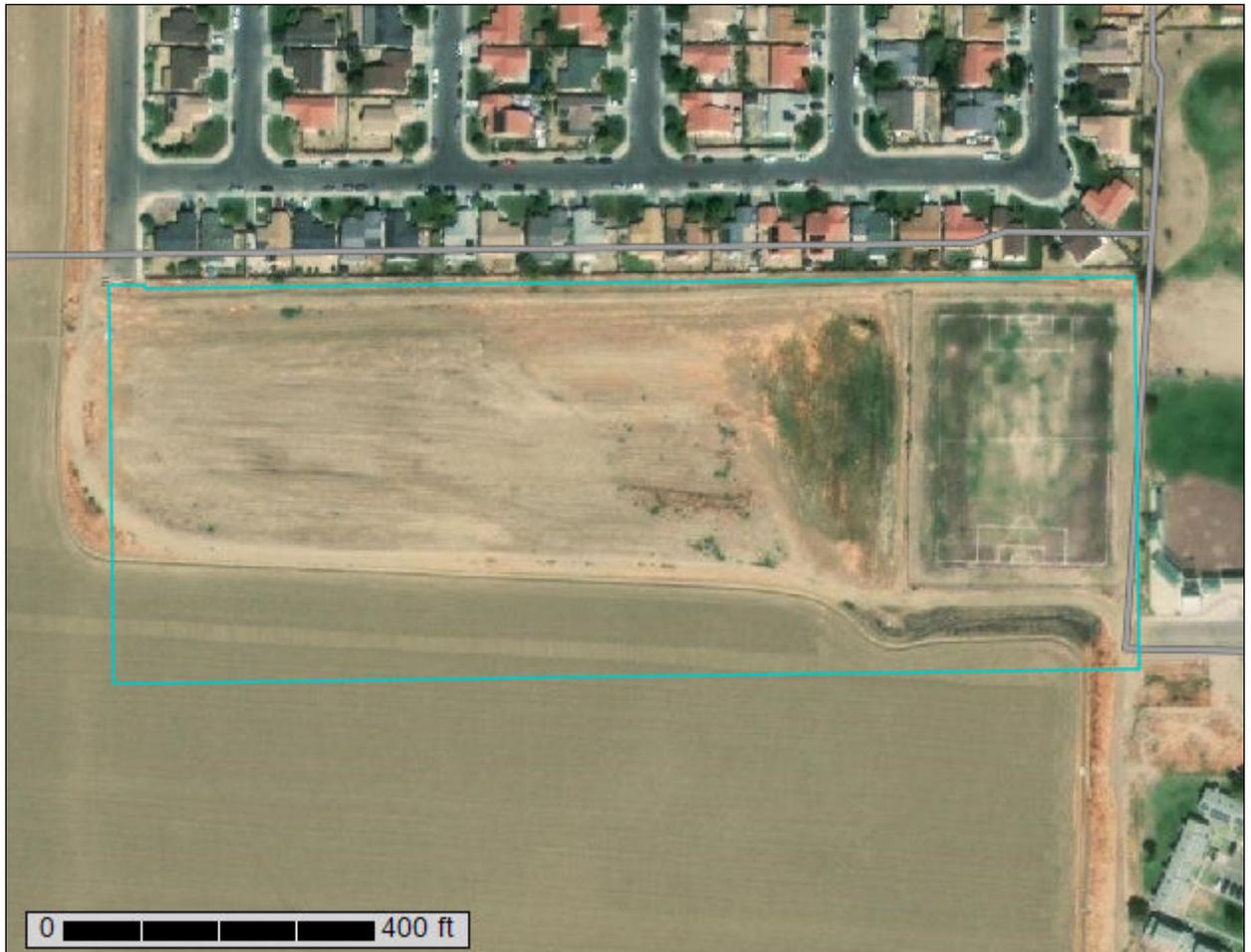




Appendix D

Soils Report

Custom Soil Resource Report for Fresno County, California, Western Part



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

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface	2
How Soil Surveys Are Made	5
Soil Map	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	11
Map Unit Descriptions.....	11
Fresno County, California, Western Part.....	13
482—Calfax clay loam, saline-sodic, wet, 0 to 1 percent slopes, MLRA 17.....	13
References	15

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

Custom Soil Resource Report

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

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

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

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

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

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

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

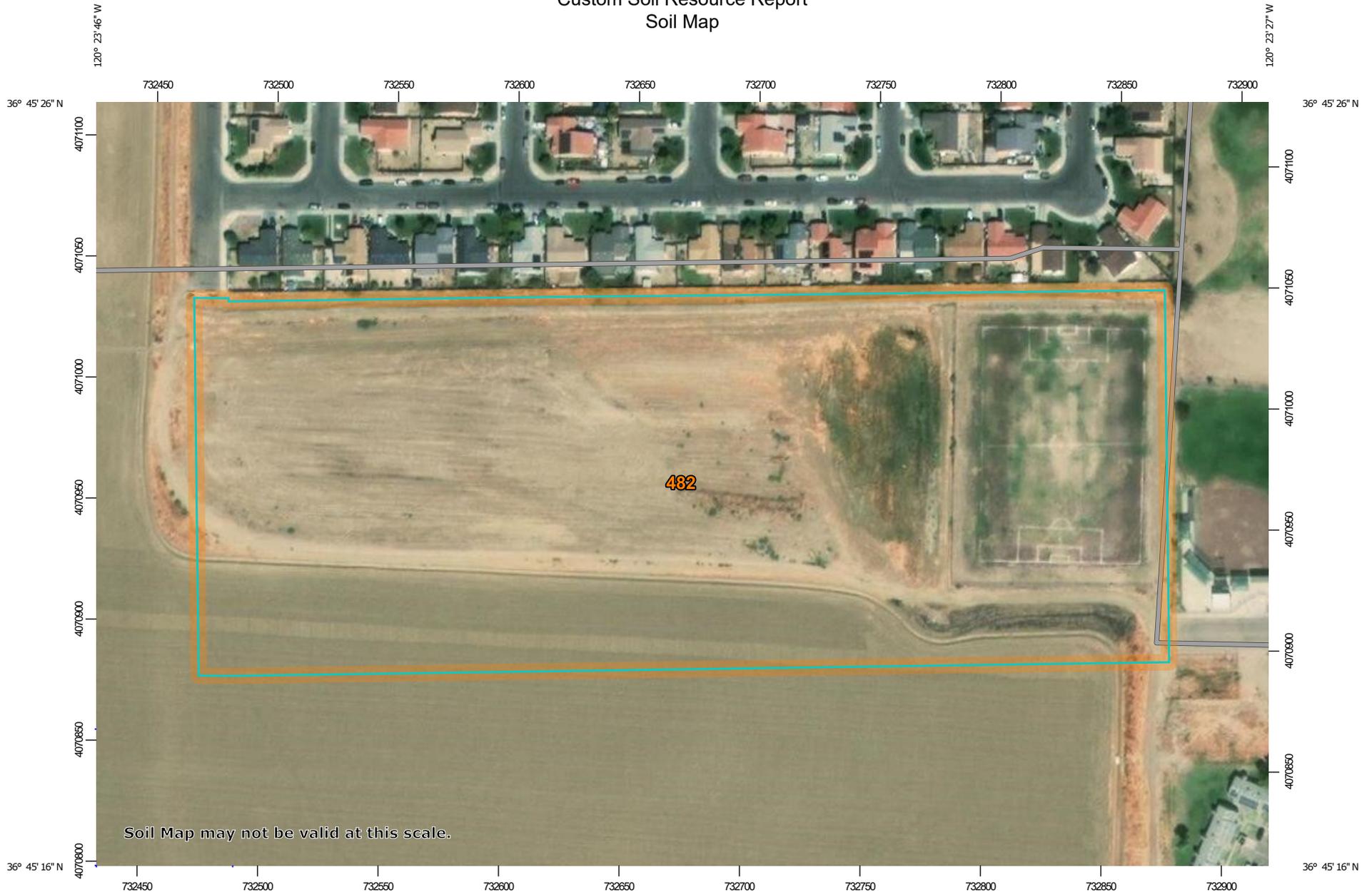
Custom Soil Resource Report

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

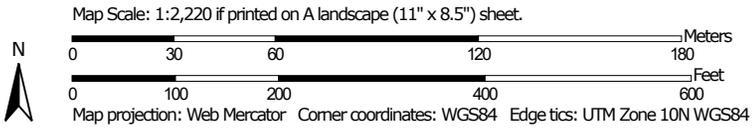
Soil Map

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

Custom Soil Resource Report Soil Map



Soil Map may not be valid at this scale.



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: Fresno County, California, Western Part
 Survey Area Data: Version 13, Sep 12, 2018

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

Date(s) aerial images were photographed: May 31, 2015—Nov 6, 2017

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
482	Calflax clay loam, saline-sodic, wet, 0 to 1 percent slopes, MLRA 17	15.4	100.0%
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,

Custom Soil Resource Report

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.

Fresno County, California, Western Part

482—Calflax clay loam, saline-sodic, wet, 0 to 1 percent slopes, MLRA 17

Map Unit Setting

National map unit symbol: 2vncl

Elevation: 160 to 340 feet

Mean annual precipitation: 7 to 9 inches

Mean annual air temperature: 62 to 64 degrees F

Frost-free period: 230 to 250 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Calflax, clay loam, saline-sodic, wet, and similar soils: 85 percent

Minor components: 15 percent

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

Description of Calflax, Clay Loam, Saline-sodic, Wet

Setting

Landform: Fan skirts

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium derived from calcareous sedimentary rock

Typical profile

Ap - 0 to 8 inches: clay loam

Bw - 8 to 26 inches: clay loam

Bny - 26 to 33 inches: loam

Bnyz1 - 33 to 47 inches: silt loam

Bnyz2 - 47 to 65 inches: loam

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Moderately well drained

Runoff class: Low

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

Depth to water table: About 48 to 60 inches

Frequency of flooding: Rare

Frequency of ponding: None

Calcium carbonate, maximum in profile: 3 percent

Gypsum, maximum in profile: 5 percent

Salinity, maximum in profile: Slightly saline to strongly saline (4.0 to 16.0 mmhos/cm)

Sodium adsorption ratio, maximum in profile: 40.0

Available water storage in profile: Moderate (about 7.3 inches)

Interpretive groups

Land capability classification (irrigated): 3s

Land capability classification (nonirrigated): 7s

Custom Soil Resource Report

Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Ciervo, clay, saline-sodic, wet

Percent of map unit: 6 percent
Landform: Fan skirts
Hydric soil rating: No

Cerini, clay loam

Percent of map unit: 2 percent
Landform: Alluvial fans
Hydric soil rating: No

Posochanet, clay loam, saline-sodic, wet

Percent of map unit: 2 percent
Landform: Fan skirts
Hydric soil rating: No

Lethent, clay loam

Percent of map unit: 2 percent
Landform: Fan remnants
Hydric soil rating: No

Kimberlina, fine sandy loam

Percent of map unit: 1 percent
Hydric soil rating: No

Garces, silt loam

Percent of map unit: 1 percent
Hydric soil rating: No

Twisselman, clay, saline-sodic

Percent of map unit: 1 percent
Hydric soil rating: No

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>

Custom Soil Resource Report

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

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