LINDMORE IRRIGATION DISTRICT MULTI-BENEFIT BASIN PROJECT

DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

DECEMBER 2021

SCH NO.

PREPARED FOR:

Lindmore Irrigation District
P.O. Box 908 / 315 E. Lindmore Ave.
Lindsay, CA 93247

PREPARED BY:

Provost & Pritchard Consulting Group

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CHAPTER 1 INTRODUCTION

Provost & Pritchard Consulting Group (Provost & Pritchard) has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) on behalf of Lindmore Irrigation District (LID or District) to address the environmental effects of the Multi-Benefit Basin Project (Project). This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 *et seq.* and the State CEQA Guidelines (Code of Regulations, Title 14 Chapter 3, Section 15000, *et seq*. The District is the CEQA lead agency for this Project.

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

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. 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 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. Chapter 1 Introduction, provides an overview of the Project and the CEQA process. Chapter 2 Project Description, provides a detailed description of proposed Project components and objectives. Chapter 3 Determination, the Lead Agency's determination based upon this initial evaluation. Chapter 4 Environmental Impact Analysis presents the CEQA checklist and environmental analysis for all impact areas, mandatory findings of significance, and feasible mitigation measures. If the 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 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 5 Mitigation, Monitoring, and Reporting Program (MMRP), provides the

proposed mitigation measures, implementation timelines, and the entity/agency responsible for ensuring implementation.

The Air Quality and Greenhouse Gas Emissions Model, Biological Resources Information, Cultural Resources Information and the Soils Report, are provided as technical Appendix A, Appendix B, and Appendix C, respectively, at the end of this document.

CHAPTER 2 PROJECT DESCRIPTION

2.1 PROJECT BACKGROUND

2.1.1 Project Title

Multi-Benefit Basin Project (Project)

2.1.2 Lead Agency Name and Address

Lindmore Irrigation District
P.O. Box 908 / 315 E. Lindmore Ave.
Lindsay, CA 93247

Lead Agency Contact

Michael Hagman
District Manager
(559) 562-2534

CEQA Consultant

Provost & Pritchard Consulting Group
Amy M. Wilson, Environmental Project Manager
(559) 636-1166

2.1.3 Project Location

The Project is located in Tulare County, California, approximately 200 miles southeast of Sacramento and 50 miles north of Bakersfield (see Figure 2-1 and Figure 2-2). The closest community is Plainview. The Project site is located approximately on Assessor's Parcel Number(s) 198-100-006, 007, 008; 198-110-002, 003. The centroid of the Project basin site is 36.1673217 N, 119.1575682 W.

2.1.4 General Plan Designation and Zoning

Project Area	General Plan Designation	Zoning District
ONSITE	VA-Valley Agriculture - RVLP	AE-40 and AE-20

2.1.5 Description of Project

2.1.5.1 Project Background and Purpose

The Lindmore Irrigation District (District), a federal water contractor in the Friant Division, with a Class 1 and Class 2 water contract, is located at the base of the western foothills of the Sierra Nevada, on the east side of the San Joaquin Valley. The District extends from two miles north of the City of Lindsay, and nine miles south of the City of Lindsay which is approximately 1.5 miles south of the census designated place (CDP) of Strathmore. It services approximately 27,256 acres of farmland.

The historic passage of Sustainable Groundwater Management Act (SGMA) in 2014 set forth a statewide framework to help protect groundwater resources over the long-term. SGMA is comprised from a three-bill legislative package, including AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley), and subsequent statewide Regulations. In signing SGMA, then-Governor Jerry Brown emphasized that "groundwater management in California is best accomplished locally." Department of Water Resources (Sustainable Groundwater Management Act (SGMA) (ca.gov)).

Due to the implementation of SGMA, the District is pursing projects to enhance groundwater levels and achieve sustainability, through groundwater recharge.

2.1.5.2 Project Description

The District acquired approximately 320 acres of property (APNs 198-100-008, 198-100-007, 198-100-006, and 198-110-002) at the southwest corner of Avenue 212 and Road 188. The property currently sits outside of the District's boundaries, and is being annexed into the District as part of this Project. The Project property is located in southwest Tulare County, southwest of the City of Lindsay near the CDP of Plainview. These lands historically have been farmed and are currently fallowed. There is one rural residence on the site, located at the corner of Road 188 and Avenue 208. The residence will not be removed as part of this Project. The existing site has several wells on site that were previously used to irrigate the 320-acres of farmland at the Project site. The total area of potential effect (APE) analyzed is approximately 336 acres.

The Project involves several phases of construction of groundwater recharge basin facilities. The first phase will involve 80 acres of basins that will be constructed with habitat for migrating birds, funded by the Wildlife Conservation Board. This habitat will consist of adding islands to the basins and sloping the floors to create varying water levels to benefit a wide diversity of shorebirds and other waterbirds. The first phase of basins will be designed around the residence that is located on that parcel. Construction of other basins on the remaining 240 acres will occur during subsequent phases. For the purposes of CEQA this document is analyzing the impacts of 320 acres of recharge basins to be annexed, and two proposed pipeline options.

2.1.5.3 Construction

2.1.5.3.1 Basins

Construction of each phase will include equipment mobilization, earthwork for excavation of recharge/regulation basins, and construction of basin perimeter berms of no greater than six feet in external height. Project components include constructing ponds/cells within the basins separated by levees, as well as performance testing and demobilization, depth of cut is estimated to be in the range of four to six feet. Construction of the 80-acre basin is expected to take four months. Future basin work on the remaining 240 acres is anticipated to take no more than six months of additional active construction time. Excavated material will be balanced on site.

2.1.5.3.2 Pipelines

There are two potential tie-in locations of a 1-mile 36-inch diameter pipeline, placed a minimum of 36 inches below ground, and trench depth of approximately 6-8 feet deep, and approximately 7 to 8 feet wide. It is likely that the pipeline can be placed with the County right of way under a Longitudinal Encroachment Permit, from The County of Tulare. Should the pipeline be placed on private property, an easement with the landowner will be put in place.

Pipeline alternatives:

- Option 1: On Road 20 from Road 118 to Road 196.

- Option 2: On Heber Ave from Road 188 to Road 196.

The selected pipeline would tie into District facilities in Road 196. As it is unknown at this time which pipeline route will be selected, for the purposes of this document both options are being evaluated.

2.1.5.4 Operation and Maintenance

It is anticipated that the Project will primarily recharge during wet years for a minimum of 30 days but will service the basin for an extended period when Section 215 flood water is available. The Project is anticipated to recharge a minimum of 720 acre feet of surface water (AF). The basin and its associated facilities will be maintained by District staff. Water will be delivered to the basin site via the selected pipeline and will be gravity fed. The East Kaweah Groundwater Sustainability Agency (EKGSA) holds jurisdiction over the proposed Project area and is responsible for implementing a Groundwater Sustainability Plan (GSP), and any water brought to the Project site would be accounted for under the GSP.

2.1.6 Site and Surrounding Land Uses and Setting

Table 2-1: Existing Uses, General Plan Designation, & Zone Districts of Surrounding Properties

Direction from Project Site	Existing Use	General Plan Designation	Zone District
NORTH	Agriculture	VA, Agriculture- RVLP	AE-20
EAST	Agriculture	VA, Agriculture- RVLP	AE-40
SOUTH	Agriculture	VA, Agriculture- RVLP	AE-20
WEST	Agriculture	VA, Agriculture- RVLP	AE-20

2.1.7 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, Rule 4641)
- Tulare County LAFCO

2.1.8 Consultation with California Native American Tribes

Public Resource Code Section 21080.3.1, *et seq., (codification of AB 52, 2013-14)*) requires that a lead agency, within 14 days of determining that it will undertake a project, must notify in writing any California Native American Tribe traditionally and culturally affiliated with the geographic area of the project if that Tribe has previously requested notification about projects in that geographic area. The notice must briefly describe the project and inquire whether the Tribe wishes to initiate a request for 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.

Lindmore Irrigation District has not received any written correspondence from a Tribe pursuant to Public Resources Code Section 21080.3.1 requesting notification of proposed project.

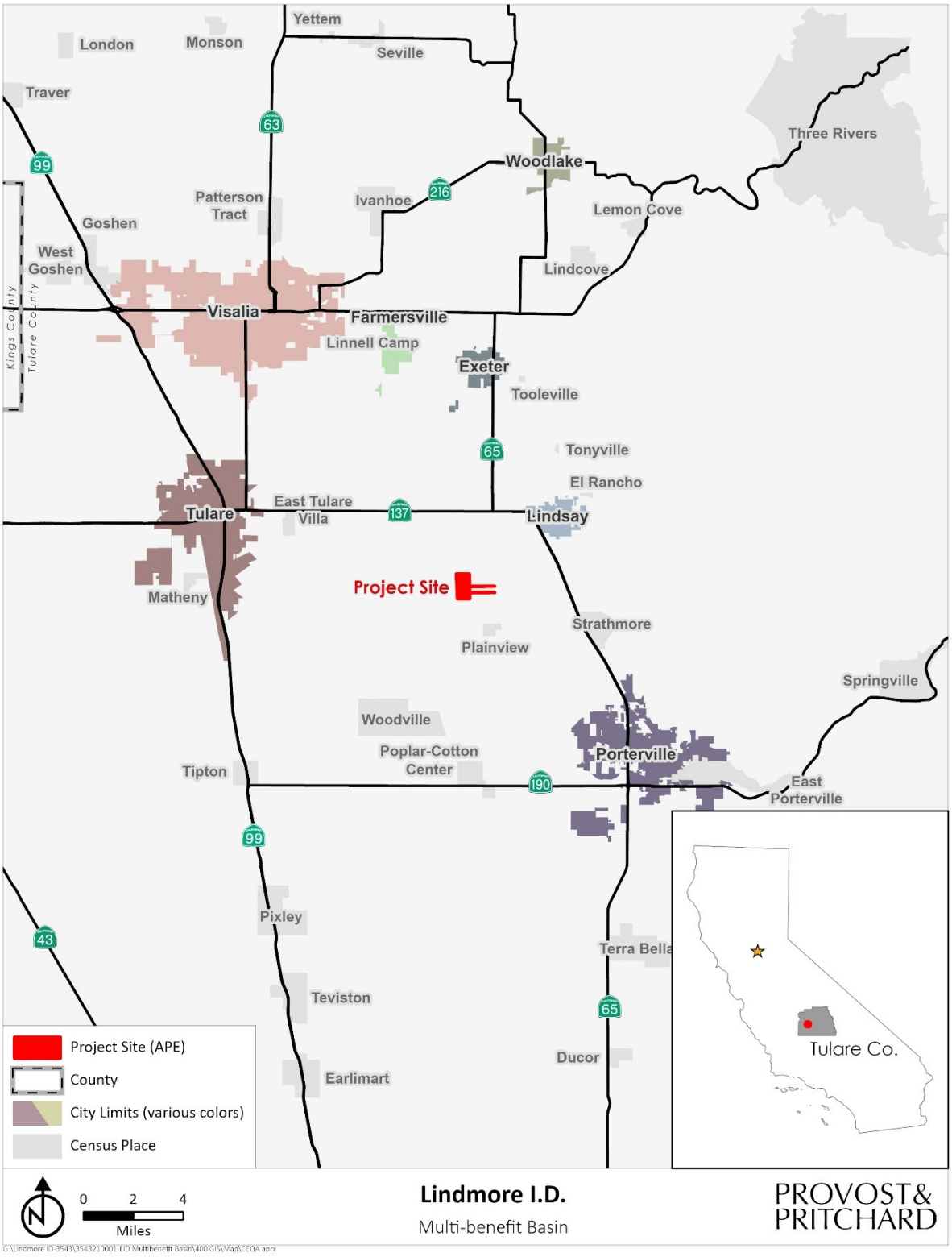

Figure 2-1: Regional Location Map

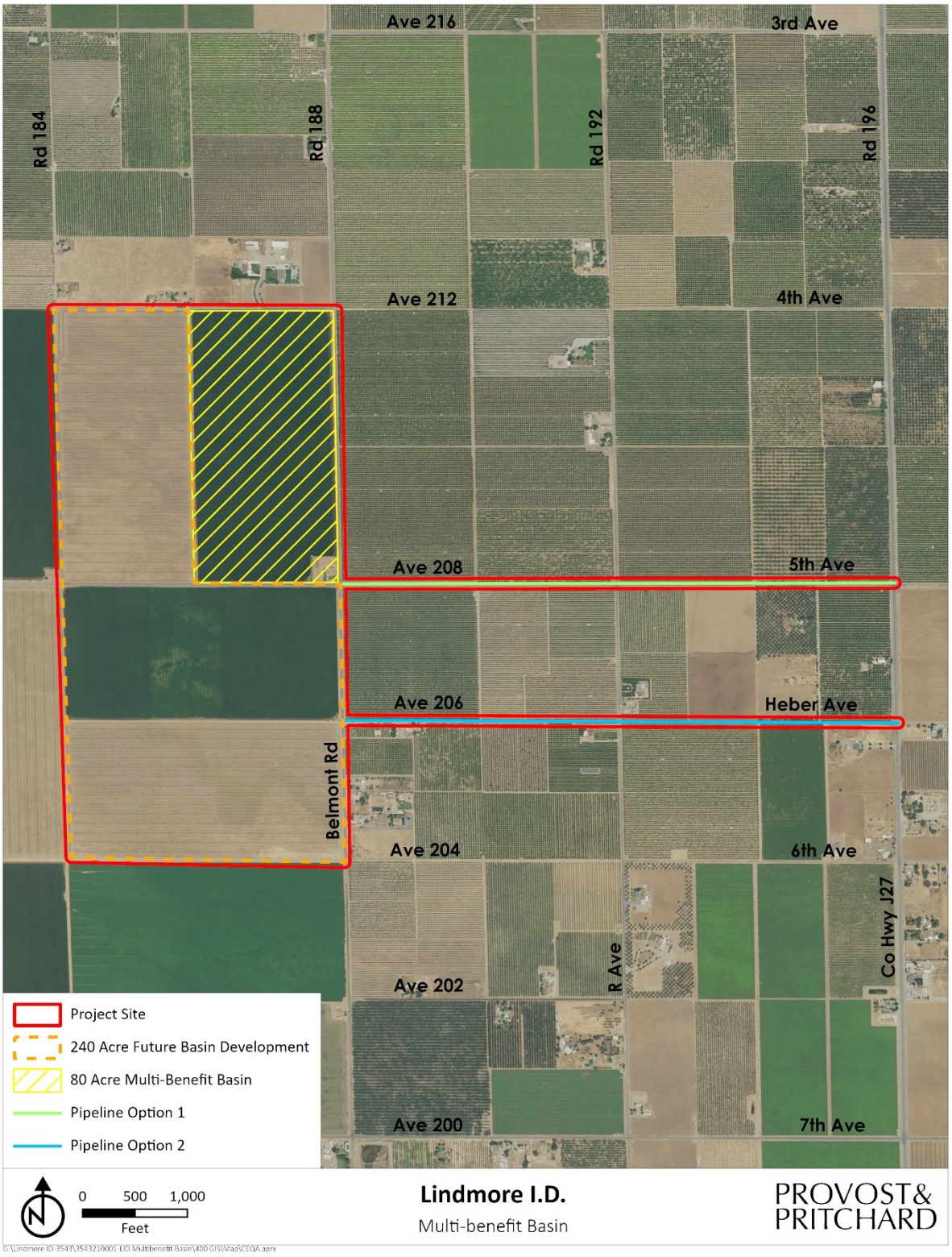

Figure 2-2: Site Plan

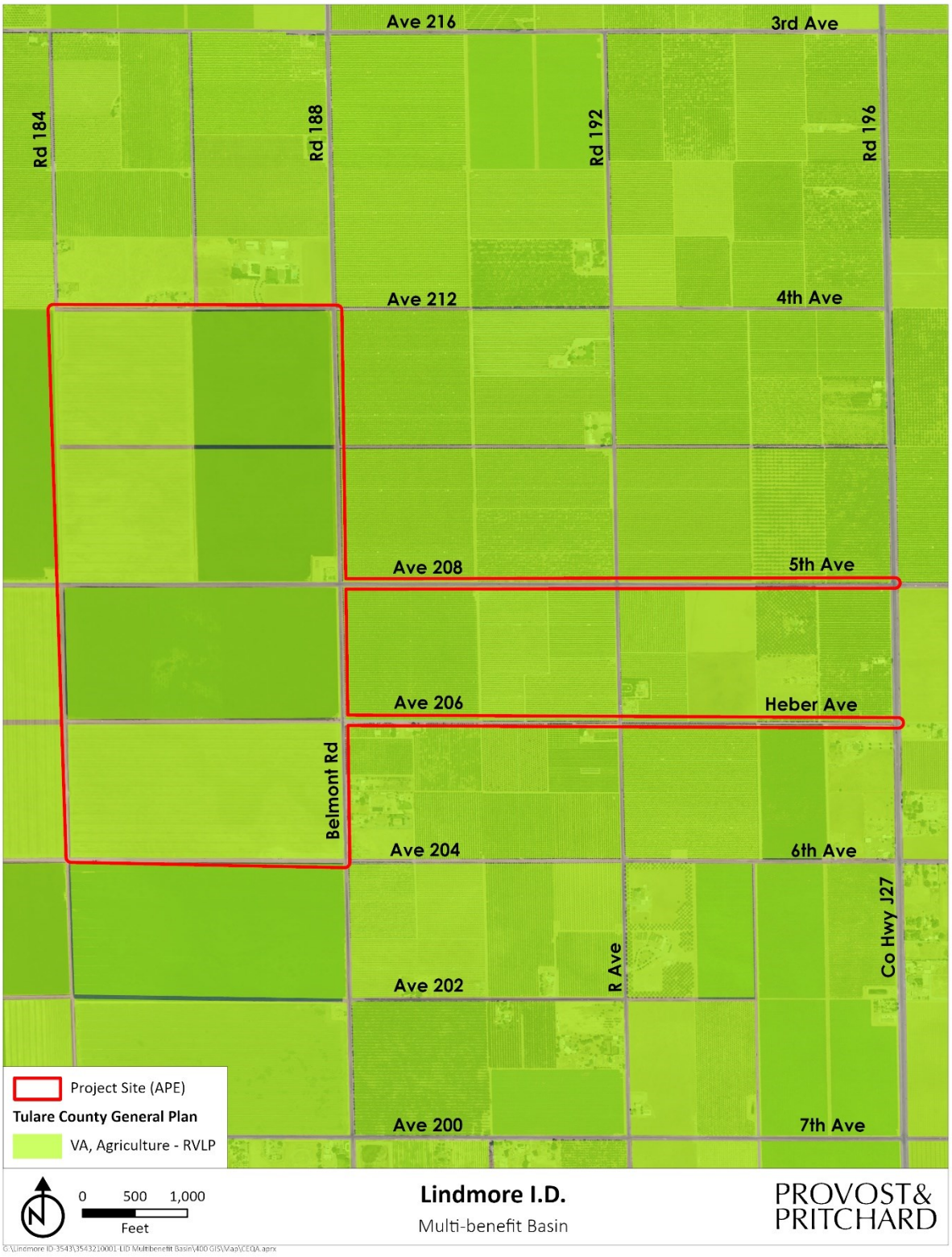

Figure 2-3: General Plan Land Use Designation Map

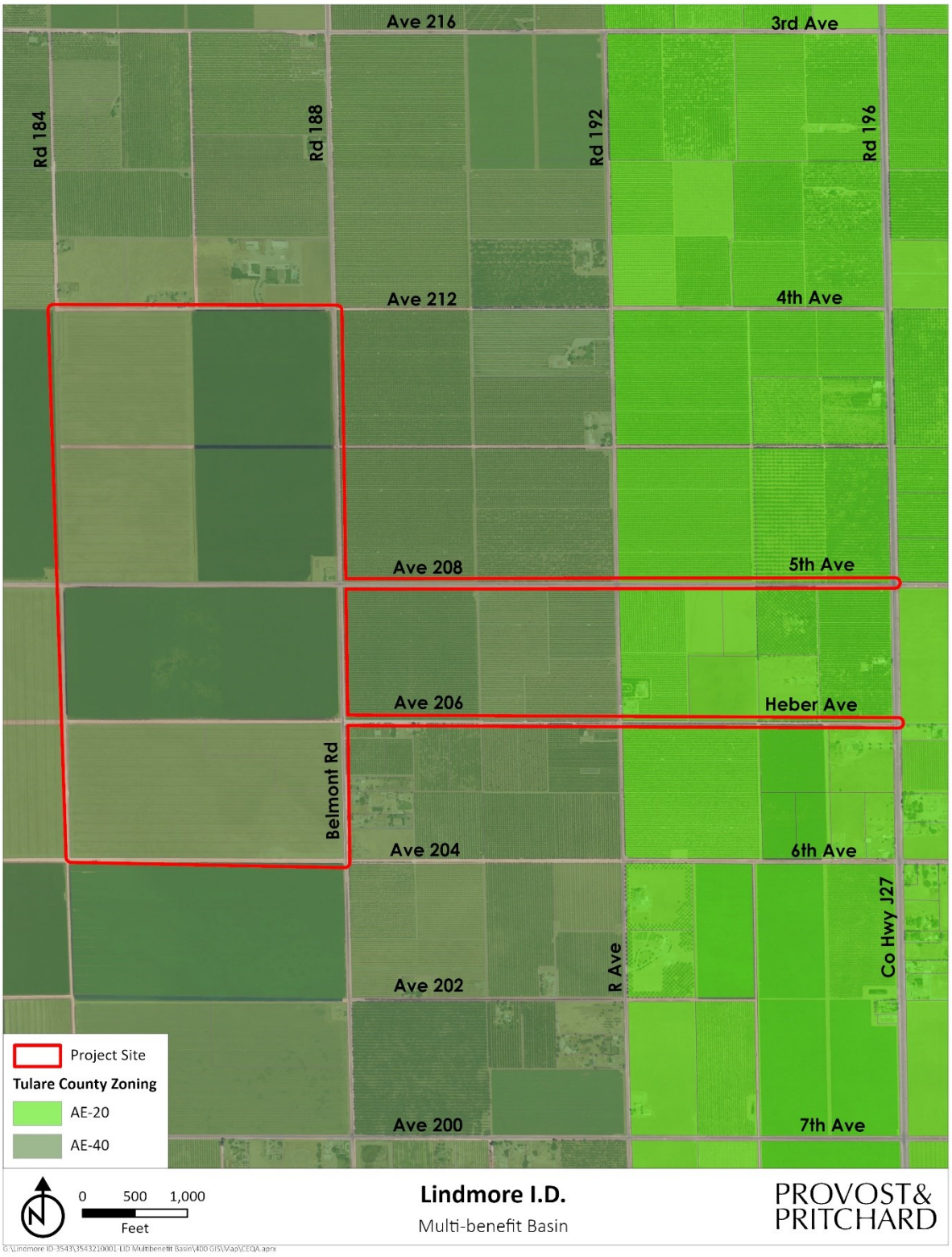

Figure 2-4 Zone District Map

CHAPTER 3 DETERMINATION

3.1 POTENTIAL ENVIRONMENTAL IMPACTS

As indicated by the discussions of existing and baseline conditions, and impact analyses that follow in this Chapter, environmental factors not checked below would have no impacts or less than significant impacts resulting from the project. Environmental factors that are. checked below would have potentially significant impacts resulting from the project. Mitigation measures are recommended for each of the potentially significant impacts that would reduce the impact to less than significant.

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

The analyses of environmental impacts in Chapter 4 Impact Analysis result in an impact statement, which shall have the following meanings.

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).

3.2 DETERMINATION

On the basis of this initial evaluation (to be completed by the Lead Agency):

☐ 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 Date

_____

Printed Name/Position

CHAPTER 4 ENVIRONMENTAL IMPACT ANALYSIS

4.1 AESTHETICS

Table 4-1: Aesthetics Impacts

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

4.1.1 Baseline Conditions

The Project site is located approximately one mile north of the CDP of Plainview, California. It is surrounded by land designated as Farmland of Local Importance, Farmland of State Importance, Prime Farmland, and Rural Residential parcel at the Southeast corner of the project. It is currently agricultural fields, with one rural residence on the corner of Road 188 and Avenue 208.

According to the California State Scenic Highway System Map, the closest eligible and officially designated scenic highways are State Route 198 to the north of the site and State Route 190[1] southeast of the site, which are both approximately 10 miles from the project. There are no known historic buildings in the vicinity of the project.

[1] California State Scenic Highway System Map. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed 10/27/2021.

4.1.2 Impact Analysis

a) Have substantial adverse effect on a scenic vista?

No Impact. The Project proposes the construction of a groundwater recharge basin facility with habitat for migrating birds on the first 80 acres of the property, with a pipeline to connect to with additional basins constructed on the remaining 240 acres during future phases. The nearest scenic vistas to the Project are State Route 198 to the north of the site and State Route 190 southeast of the site, which are both approximately 10 miles from the project site. The Project site is not within the viewshed of these features and the site does not stand out from its surroundings in any remarkable fashion. Therefore, there would be no impact to the scenic vistas.

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

No Impact. The Project does not propose to remove any specimen trees, rock outcroppings, or historic buildings. Furthermore, the Project is not visible from a designated scenic highway or eligible highway (State Route 198 or State Route 190). There would be no impact.

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

No Impact. The visual character of the Project area is dominated by existing farmland and crops. The water recharge basins would be consistent with other uses in the area and would not substantially degrade the visual character of the area. Therefore, there would be no impact.

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

No Impact. There would not be any light fixtures installed as part of the Project, and therefore there would be no source to produce a glare that would affect day or nighttime views in the Project area. There would be no impact.

4.2 AGRICULTURE AND FORESTRY RESOURCES

Table 4-2: Agriculture and Forest Impacts

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

4.2.1 Baseline Conditions

Tulare County is located in California's agricultural heartland. According to the California County Agricultural Commissioner's Report, Tulare is the 3rd largest county in the San Joaquin Valley. The county's total gross production value for 2019 was $7.5 billion. Milk is the county's number one commodity at nearly $1.6 billion. A wide range of commodities are cultivated in the county, including grapes, citrus and stone fruits, nuts, corn, and cattle. Rich soil, irrigation water, Mediterranean climate, and steady access to local, national, and global markets make this possible.

The District is composed of approximately 27,256 acres, an estimated 85% of which are irrigated permanent crops. The major crops grown in the District include citrus, grapes, pistachios, almonds, and other fruit and nut trees. A total of more than two dozen different crops are grown within Lindmore's boundary. Irrigation methods include drip, micro, gravity, and sprinkler. The Project area is currently fallowed, with one rural residence on at the corner of Road 188 and Avenue 208. Most of the land adjacent to the Project site is zoned for agricultural use, with the majority designated as Farmland of State Importance.

Farmland Mapping and Monitoring Program (FMMP): The FMMP produces maps and statistical data used for analyzing impacts to California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. The maps are updated every two years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance. The California DOC's 2012 FMMP is a non-regulatory program that produces "Important Farmland" maps and statistical data used for analyzing impacts on California's agricultural resources. The Important Farmland maps identify eight land use categories, five of which are agriculture related: prime farmland, farmland of statewide importance, unique farmland, farmland of local importance, and grazing land — rated according to soil quality and irrigation status. Each is summarized below:[2]

- PRIME FARMLAND (P): Farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

- FARMLAND OF STATEWIDE IMPORTANCE (S): Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

- UNIQUE FARMLAND (U): Farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated but may include non- irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.

- 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.

- GRAZING LAND (G): Land on which the existing vegetation is suited to the grazing of livestock. The minimum mapping unit for Grazing Land is 40 acres.

- URBAN AND BUILT-UP LAND (D): Land occupied by structures with a building density of at least 1 unit to 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.

- OTHER LAND (X): Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

- WATER (W): Perennial water bodies with an extent of at least 40 acres.

[2] California Department of Conservation. FMMP – Interactive Maps. https://maps.conservation.ca.gov/agriculture/. Accessed October 2021.

As demonstrated in Figure 4-1, the FMMP for Tulare County designates the project site as Farmland of State Importance.

4.2.2 Impact Analysis

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

No Impact. The Project site is designated as Farmland of Statewide Importance and is currently fallowed. See Figure 4-1 The Project would construct 320 acres of groundwater recharge basin facilities over several phases. The first phase will involve 80 acres of basins that will be constructed with habitat for migrating birds. The purpose of the Project is to support agricultural activity by improving water supply. Because the Project site would continue to serve an agricultural purpose, implementation of the Project would not result in the conversion of farmland to nonagricultural use. Therefore, there is no impact.

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

No Impact. Chapter 3, Section 9.5 of the Tulare County Zoning Ordinance addresses the AE zone districts. Section 9.5 does not list basins as a permitted use. However, pursuant to Government Code Section 53091(e), location or construction of facilities for the production, generation, storage, treatment, or transmission of water by a special district are not subject to the zoning ordinance of the county in which the project would be located. Although the Project is not required to comply with the Tulare County Zoning Ordinance, it is the Project's intent to enhance groundwater levels, thereby sustaining agriculture. The basins will facilitate greater security of groundwater storage for District growers, inherently promoting the agricultural zoning and Williamson Act intentions. The Project parcels are under a Williamson Act contract. The principal objectives of the Williamson Act program include protection of agricultural resources, preservation of open space land, and promotion of efficient urban growth patterns. The implementation of a recharge basin would promote groundwater security inherently protecting agricultural resources and would not conflict with existing zoning for agricultural use or the Williamson Act contracts on any of the parcels. Therefore, there would be no impact.

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

No Impact. There are no forests or timberland in the region, and the site is not zoned to support forest land or timberland. The Project does not propose any rezoning. The Proposed Project would not convert forest land to non-forest use. There will be no impact.

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

No Impact. No conversion of forestland, as defined under Public Resource Code or General Code, would occur because of the Project and there would be no impact.

f) 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?

Less than Significant Impact. The Project would convert the land from its existing agricultural use to a use that is considered Urban and Built-Up Land pursuant to the FMMP; however, the sole purpose of said conversion is to support ongoing agricultural endeavors by enhancing groundwater availability. As a result, the Project will likely result in continued farming on District agricultural lands that might otherwise be fallowed due to lack of water. Impacts would be less than significant.

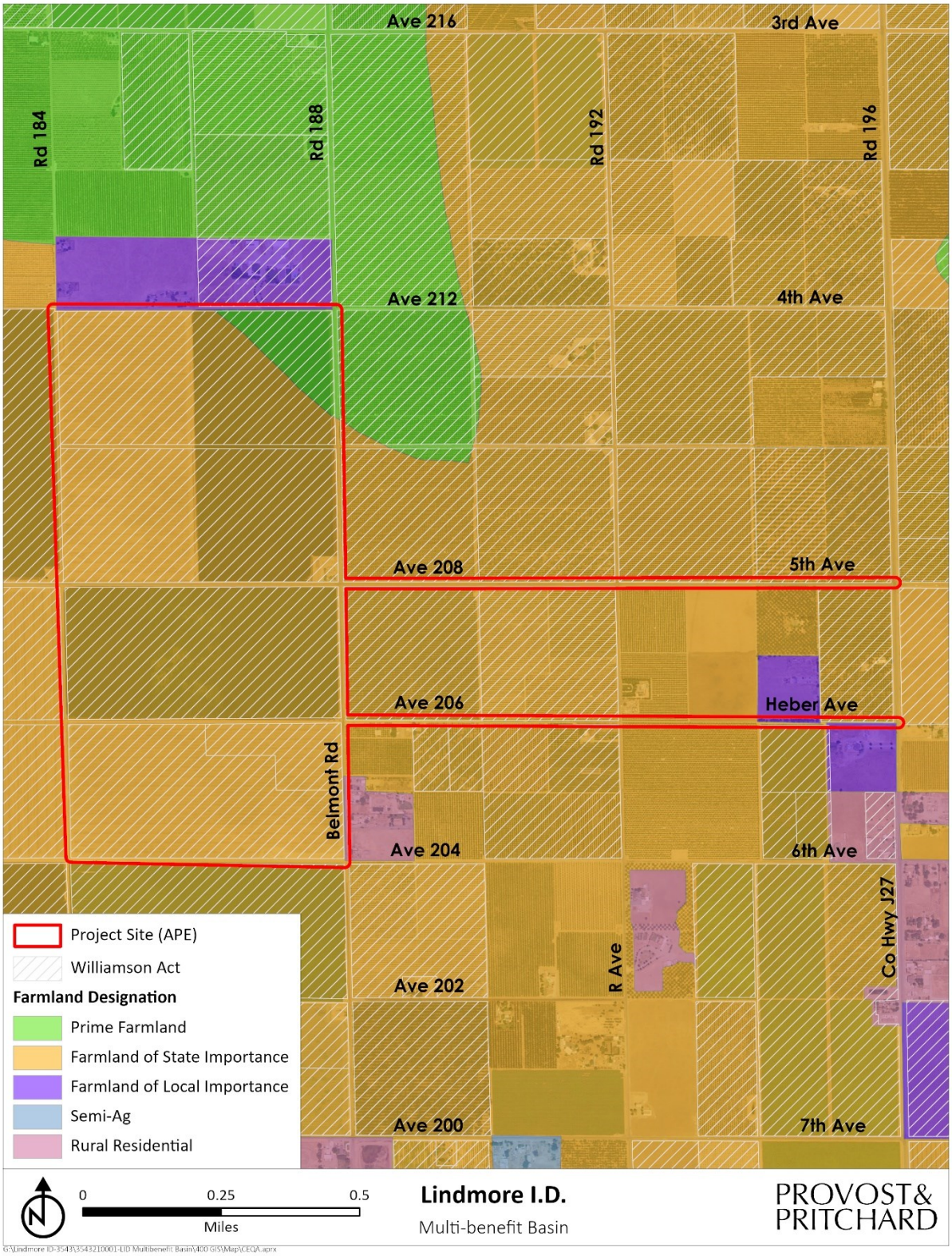

Figure 4-1 Farmland Map

4.3 AIR QUALITY

Table 4-3: Air Quality Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒

4.3.1 Baseline Conditions

4.3.1.1 Regulatory Attainment Designations

Under the California Clean Air Act (CCAA), the California Air Resources Board (CARB) is required to designate areas of the State as attainment, nonattainment, or unclassified with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of the classifications. An "unclassified" designation signifies that the data does not support either an attainment or nonattainment designation. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The EPA designates areas for ozone, CO, and NO_2 as "does not meet the primary standards," "cannot be classified," or "better than national standards." For SO_2, areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better than national standards." However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used. The EPA uses the same sub-categories for nonattainment status: serious, severe, and extreme. In 1991, EPA assigned new nonattainment designations to areas that had previously been classified as Group I, II, or III for PM_{10} based on the likelihood that they would violate national PM_{10} standards. All other areas are designated "unclassified."

The State and national attainment status designations pertaining to the SJVAB are summarized in Appendix A. The SJVAB is currently designated as a nonattainment area with respect to the State PM_{10} standard, ozone, and $PM_{2.5}$ standards. The SJVAB is designated nonattainment for the NAAQS 8-hour ozone and $PM_{2.5}$

standards. On September 25, 2008, the EPA re-designated the San Joaquin Valley to attainment status for the PM_{10} NAAQS and approved the PM_{10} Maintenance Plan.

Table 4-4: Summary of Ambient Air Quality Standards and 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_2S)	1-hour	0.03 ppm (42 µg/m^3)	Unclassified		
Vinyl Chloride (C_2H_3Cl)	24-hour	0.01 ppm (26 µg/m^3)	Attainment		
Visibility-Reducing Particle Matter	8-hour	Extinction coefficient: 0.23/km-visibility of 10 miles or more due to particles when the relative humidity is less than 70%.	Unclassified		

** For more information on standards visit: https://ww3.arb.ca.gov/research/aaqs/aaqs2.pdf*
*** No Federal 1-hour standard. Reclassified extreme nonattainment for the Federal 8-hour standard.*
****Secondary Standard*
Source: CARB 2015; SJVAPCD 2016

4.3.2 Impact Analysis

CalEEMod modeling software was run (Appendix A) using CalEEmod, Version 2016.3.2 for the proposed Project in November 2021. The sections below detail the methodology of the air quality and greenhouse gas emissions analysis and its conclusions.

4.3.2.1 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. While the Project would be constructed in multiple phases, the CalEEMod software was run as if the whole 320 acres of basin were constructed at one time over 10 months, which would be a worst-case scenario for air quality impacts. 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.

4.3.2.2 Long-Term Operational Emissions

Long-term operational emissions associated with the Project are estimated to be minimal in nature. Maintenance would be provided on an as needed basis by existing staff, and the operational equipment, such as digital flow meters, would be similar to the existing system which results in negligible emissions. Modeling assumptions and output files are included in Appendix A.

4.3.2.3 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 (PM_{10}): Operational impacts associated with the proposed Project would be considered significant if the project generates emissions of PM_{10} 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 PM_{10}, if the project-generated emissions of either of the ozone precursor pollutants (i.e., ROG and NO_x) or PM_{10} 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.

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

Less than Significant Impact. The CEQA Guidelines indicate that a significant impact would occur if the Project would conflict with or obstruct implementation of the applicable air quality plan. The GAMAQI does not provide specific guidance on analyzing conformity with the Air Quality Plan (AQP)[3]. Therefore, it is assumed the following criteria for determining Project consistency with the current AQPs:

1. Will the project result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQPs? This measure is determined by comparison to the regional and localized thresholds identified by the SJVAPCD for regional and local air pollutants.
2. Will the project comply with applicable control measures in the AQPs? The primary control measures applicable to development projects is Regulation VII-Fugitive PM_{10} Prohibitions and Rule 2201 New and Modified Source Review.

Regional air quality impacts and attainment of standards are the result of cumulative impacts of all emission sources within the air basin. Individual projects are generally not large enough to contribute measurably to an existing violation of air quality standards. Therefore, the cumulative impact of the Project is based on its cumulative contribution. Because of the region's non-attainment status for ozone, $PM_{2.5}$, and $PM_{10,}$ if Project generated emission of either of the ozone precursor pollutants ROG, NO_x, PM_{10}, or $PM_{2.5}$ would exceed the SJVAPCD's significance thresholds, then the Project would be considered to contribute to violations of the applicable standards and conflict with the attainment plans. As demonstrated in Table 4-5 for construction generated emissions. Project emissions of criteria pollutants would not exceed the

[3] Air Quality Plans can be found at http://valleyair.org/Air_Quality_Plans/air-quality-plans.htm.

SJVAPCD's significance threshold for oxides of nitrogen. Therefore, the Project would not contribute to air quality violations in conflict with attainment plans.

The AQP contains a number of control measures, including Regulation VII-Fugitive PM_{10} Prohibitions and Rule 2201-New and Modified Source Review (described above) which are applicable to the Project. Regulation VII-Fugitive PM_{10} Prohibitions and Rule 2201 New and Modified Source Review are adopted rules and regulations that constitute enforceable requirements with which the project must comply. The Project would comply with all applicable SJVAPCD rules and regulations, and the Project has been analyzed and quantified and no significant impact was found. Therefore, the Project complies with the criterion and would not conflict with or obstruct implementation of the applicable air quality attainment plans. Impacts would be less than significant.

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

Less than Significant Impact.

Short-Term Construction-Generated Emissions

Estimated construction-generated emissions are summarized in Table 4-5.

Table 4-5. Short-Term Construction-Generated Emissions of Criteria Air Pollutants

Source	Annual Emissions (Tons/Year) [1]					
	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$	SO_x
2022	0.3655	3.7647	2.9215	0.8577	0.3606	<1
SJVAPCD Significance Thresholds:	10	10	100	15	15	27
Exceed SJVAPCD Thresholds?	*No*	*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.

Long-Term Operational Emissions

Existing conditions consist of water pumping for agricultural purposes and automobile trips during harvest. The Project is not anticipated to generate emissions beyond those currently experienced. PM_{10} and $PM_{2.5}$ emissions are anticipated to be significantly reduced due to the reduction in unpaved areas and heavy-duty diesel equipment usage commonly used in farming operations. Impacts would be less than significant.

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

No Impact. Existing conditions consist of agricultural operations that require the operation of heavy-duty diesel-powered equipment and vehicles. Project construction is anticipated to be approximate in emissions to one harvest season. As the Project proposes to remove the agricultural land use, exposure to substantial pollutant concentrations would be reduced. There would be no impact.

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

No Impact. Project construction would utilize diesel and gasoline powered equipment, which are already used during harvest and cultivation phases of the existing farming taking place at the Project site. There would be no additional adverse impact.

4.4 BIOLOGICAL RESOURCES

Table 4-6: Biological Resources Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

4.4.1 Baseline Conditions

4.4.1.1 General

The Project is located at the southwest corner of Avenue 212 and Road 188 in southwest Tulare County, southwest of the City of Lindsay near the CDP of Plainview. The APE includes approximately a 320-acre parcel of land and two pipeline alignments, plus a 50-foot buffer surrounding the APE. These lands historically have been farmed and are still currently experiencing regular discing and agricultural farming. The surrounding lands are agricultural with a few rural residential homes. The Project lies within the Lower San Joaquin Valley, part of the Central Valley of California (See Figure 2-1). The Central 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 April.

4.4.1.2 Water

Watersheds are made up of many smaller subwatersheds that drain into a particular stream, river, or lake. The Project site lies within the Elk Bayou watershed; Hydrologic Unit Code (HUC): 1803000608 and a two subwatersheds: Upper Elk Bayou subwatershed; HUC: 180300060803 and Middle Elk Bayou; HUC: 180300060804. A watershed is the topographic region that drains into a stream, river, or lake. The Elk Bayou watershed is comprised of stormwater or snowmelt collected in upland areas which flows down into the two subwatersheds from Lewis Creek and Frazier Creek into canals that are used to irrigate the agricultural fields. The runoff from these agricultural fields run into canals that leads to the Elk Bayou stream which then flows into the Tulare River and into Tulare Lake. The nearest surface water is Lindmore Irrigation District Canal and is located 1-mile northwest of the APE.[4]

4.4.1.3 Soil

Three soil mapping units representing Exeter loam, Flamen loam and Quonal-Lewis association were identified within the APE. Exeter Loam is found within 9.8% of the APE and is moderately well drained, moderately slow permeability, and has a medium runoff class. One minor soil unit comprising 0.098 percent of the APE was identified as hydric. Flamen loam is found within 4.1 percent of the APE and is moderately well drained, moderate permeability, and low to moderate runoff. One minor soil unit comprising 0.041 percent of the APE was identified as hydric. This soil is used for irrigated crops and orchards growing grapes, cotton, alfalfa, corn silage, wheat, and stone fruits. It is also used for dairy and cattle production and building site development. Quonal-Lewis association is found within 86.1 percent of the APE and is moderately well drained, slow permeability, and medium to high runoff. One minor soil unit comprising 0.861 percent of the APE was identified as hydric. These soils are used for irrigated cropland growing oranges, olives and deciduous orchards, vineyards, and row crops. It is also used for dairy and cattle production and building site development. Vegetation in uncultivated areas is mainly annual grasses and forbs. Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions such that under sufficiently wet conditions, hydrophytic vegetation can be supported.[5]

4.4.1.4 Wildlife and Plant Species

A qualified biologist conducted a desktop 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

[4] United States Environmental Protection Agency (USEPA). (2021). Retrieved from Waters GeoViewer: https://www.epa.gov/waterdata/waters-geoviewer (Accessed November 2021).

[5] United States Department of Agriculture, Natural Resources Conservation Service. (2021). *Custom Soil Resources Report, California*. Retrieved from http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx (Accessed November 2021).

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 United States 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); 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 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.

A thorough search of the CNDDB for published accounts of special status plant and animal species was conducted for the *Cairns Corner* 7.5-minute quadrangle that contain the APE in its entirety, and for the eight surrounding quadrangles: *Visalia*, *Exeter*, *Rocky Hill*, *Lindsay*, *Porterville*, *Woodville*, *Tipton*, and *Tulare*. These species, and their potential to occur within the proposed Project area are listed in Table 4-7 and Table 4-8.

Table 4-7. List of Special Status Animals with Potential to Occur Onsite and/or in the Vicinity.

Species	*Status*	*Habitat*	*Occurrence within APE*
American badger (*Taxidea taxus*)	CSC	Grasslands, savannas, and mountain meadows near timberline are preferred. Most abundant in drier open spaces of shrub and grassland. Burrows in soil.	**Unlikely.** The APE and surrounding areas are frequently cultivated agricultural lands that are unsuitable for this species.
Blunt-nosed leopard lizard (*Gambelia sila)*	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 APE and surrounding areas are frequently cultivated agricultural lands that are unsuitable for this species.
California red-legged frog (*Rana draytonii*)	FT, CSC	Inhabits perennial rivers, creeks, and stock ponds with vegetative cover within the Coast Range and northern Sierra foothills.	**Unlikely.** The APE does not provide suitable habitat for this species and is outside of its current known range.
California tiger salamander (*Ambystoma californiense*)	FT, CT, CWL	Requires vernal pools or seasonal ponds for breeding and small mammal burrows for aestivation. Generally found in grassland and oak savannah plant communities in central California from sea level to 1500 feet in elevation.	**Unlikely.** The APE does not provide suitable habitat for this species and is outside of its current known range.
Crotch bumble bee (*Bombus crotchii*)	CCE	Occurs throughout coastal California, as well as east to the Sierra-Cascade crest,	**Unlikely.** The disturbed habitats of the APE are unsuitable for this

Species	*Status*	*Habitat*	*Occurrence within APE*
		and south into Mexico. Food plant genera include *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia*, and *Eriogonum*.	species. A crotch bumblebee could potentially pass through the area, but nesting and foraging habitat is absent due to agricultural land use.
Delta smelt (Hypomesus transpacificus)	FT, CE	This pelagic and euryhaline species is Endemic to the Sacramento-San Joaquin River Delta, upstream through Contra Costa, Sacramento, San Joaquin, and Solano Counties.	**Absent.** Suitable perennial aquatic habitat for this species is absent from the APE and surrounding lands. The nearest surface water, Lindmore Irrigation District Canal, is located 1-mile northwest of the APE and lacks a connection to a water body known to have delta smelt.
Foothill yellow-legged frog (*Rana boylii*)	CCT, CSC	Frequents rocky streams and rivers with rocky substrate and open, sunny banks in forests, chaparral, and woodlands. Occasionally found in isolated pools, vegetated backwaters, and deep, shaded, spring-fed pools.	**Unlikely.** The APE and surrounding areas are frequently cultivated agricultural lands that are unsuitable for this species. The nearest surface water, Lindmore Irrigation District Canal, is located 1-mile northwest of the APE.
Giant gartersnake (*Thamnophis gigas*)	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.	**Unlikely.** The APE and surrounding areas are frequently cultivated agricultural lands that are unsuitable for this species.
Loggerhead shrike (*Lanius ludovicianus*)	CSC	Frequents open habitats with sparse shrubs and trees, other suitable perches, bare ground, and low herbaceous cover. In the Central Valley, nests in riparian areas, desert scrub, and agricultural hedgerows.	**Unlikely.** The APE and surrounding areas are frequently cultivated agricultural lands that are unsuitable for this species.
Monarch Butterfly (*Danaus plexippus*)	FC	Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Larval host plants consist of milkweeds (*Asclepias* sp.). Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico.	**Unlikely.** The APE and surrounding areas are frequently cultivated agricultural lands that are unsuitable for this species.
Northern California legless lizard (*Anniella pulchra*)	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 APE and surrounding areas are frequently cultivated agricultural lands that are unsuitable for this species.

Species	*Status*	*Habitat*	*Occurrence within APE*
Pallid bat (*Antrozous pallidus*)	CSC	Found in grasslands, chaparral, and woodlands, where it feeds on ground- and vegetation-dwelling arthropods, and occasionally takes insects in flight. Prefers to roost in rock crevices, but may also use tree cavities, caves, bridges, and other man-made structures.	**Unlikely.** The APE and surrounding areas are frequently cultivated agricultural lands that are unsuitable for this species. A pallid bat could potentially pass through the area, but roosting and foraging habitat is minimal on the surrounding lands and is absent in the APE due to agricultural land use. Structures and trees will not be disturbed as a part of Project activities.
San Joaquin kit fox (*Vulpes macrotis mutica*)	FE, CT	Underground dens with multiple entrances in alkali sink, valley grassland, and woodland in valleys and adjacent foothills.	**Possible.** The APE and surrounding areas are frequently cultivated agricultural lands but there have been many recorded observations this species less than 4 miles from the APE.
Swainson's Hawk (*Buteo swainsoni*)	CT	Nests in large trees in open areas adjacent to grasslands, grain or alfalfa fields, or livestock pastures suitable for supporting rodent populations.	**Possible.** The area surrounding the APE has suitable trees for nesting and there have been recorded observations of this species less than 3 miles from the APE.
Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*)	FE, CE	Burrows in soil. Often found in grassland and shrubland.	**Unlikely.** The APE and surrounding areas are frequently cultivated agricultural lands that are unsuitable for this species.
Tricolored Blackbird (*Agelaius tricolor*)	CT, 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.** The APE is lacking suitable habitat and consists of cultivated, managed, agricultural lands that are unsuitable for this species.
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT	Lives in mature elderberry shrubs of the Central Valley and foothills. Adults are active March to June.	**Unlikely.** The APE and surrounding areas are frequently cultivated agricultural lands that are unsuitable for this species.
Vernal pool fairy shrimp (*Branchinecta lynchi*)	FT	Occupies vernal pools, clear to tea-colored water, in grass or mud-bottomed swales, and basalt depression pools.	**Unlikely.** The APE and surrounding areas are frequently cultivated agricultural lands that are unsuitable for this species. Suitable soils and vernal pool habitat are absent from the APE.
Western mastiff bat (*Eumops perotis californicus*)	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	**Unlikely.** The APE and surrounding areas are frequently cultivated agricultural lands that are unsuitable for this species. A western mastiff bat could potentially pass through the area, but roosting and foraging habitat

Species	Status	Habitat	Occurrence within APE
		in crevices in cliff faces but may also use high buildings and tunnels.	is minimal on the surrounding lands and is absent in the APE due to agricultural land use. Structures and trees will not be disturbed as a part of Project activities.
Western pond turtle (*Emys marmorata*)	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.	**Unlikely.** The APE is lacking suitable habitat and consist of cultivated, managed, agricultural lands that are unsuitable for this species. The nearest surface water, Lindmore Irrigation District Canal, is located 1-mile northwest of the APE.
Western spadefoot (*Spea hammondii*)	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 APE and surrounding areas are frequently cultivated agricultural lands that are unsuitable for this species. The nearest surface water, Lindmore Irrigation District Canal, is located 1-mile northwest of the APE.
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	FT, CE	Suitable nesting habitat in California includes dense riparian willow-cottonwood and mesquite habitats along a perennial river. Once 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.	**Unlikely.** The APE and surrounding areas are frequently cultivated agricultural lands that are unsuitable for this species.

Table 4-8. List of Special Status Plants with Potential to Occur Onsite and/or in the Vicinity.

Species	Status	Habitat	
Alkali-sink goldfields (*Lasthenia chrysantha)*	CNPS 1B	This species is found in vernal pool and wet saline flat habitats. Occurrences are documented in the San Joaquin and Sacramento Valleys at elevations below 656 feet. Bloom period is from February - April.	**Unlikely.** Vernal pool soils and habitat are absent from the APE and continued disturbance in the site makes conditions unsuitable for this species.
Brittlescale (*Atriplex depressa*)	CNPS 1B	This species is found in the San Joaquin Valley and Sacramento Valley in alkaline or clay soils, typically in meadows or annual grassland at elevations below 1050 feet. It is sometimes associated with vernal pools. Bloom period is from June–October.	**Unlikely.** Vernal pool soils and habitat are absent from the APE and continued disturbance in the site makes conditions unsuitable for this species.

Species	*Status*	*Habitat*	
Calico monkeyflower (*Diplacus pictus*)	CNPS 1B	Found in the Sierra Nevada foothills and the Tehachapi mountains in bare, sunny, shrubby areas, and around granite outcrops within foothill woodland communities at elevations between 450 feet and 4100 feet. Blooms March – May.	**Unlikely.** Required habitats are absent and continued disturbance from agriculture makes the APE unsuitable for this species.
California alkali grass (*Puccinellia simplex*)	CNPS 1B	This species is 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. Bloom period is from March–May.	**Unlikely.** Required habitats are absent and continued disturbance from agriculture makes the APE unsuitable for this species.
California jewelflower (*Caulanthus californicus*)	FE, CE, CNPS 1B	This species is found in the San Joaquin Valley and Western Transverse Ranges in sandy soils. It occurs on flats and slopes, generally in non-alkaline grassland at elevations between 230 feet and 6100 feet. Bloom period is from February–April.	**Unlikely.** Required habitats are absent and continued disturbance from agriculture makes the APE unsuitable for this species.
California satintail (*Imperata brevifolia*)	CNPS 2B	Although this facultative species is equally likely to occur in wetlands and non-wetlands, it is often found in wet springs, meadows, streambanks, and floodplains at elevations below 1600 feet. Bloom period is from September – May.	**Unlikely.** Required habitats are absent and continued disturbance from agriculture makes the APE unsuitable for this species.
Earlimart orache (*Atriplex cordulata var. erecticaulis)*	CNPS 1B	This species is found in the San Joaquin Valley in saline or alkaline soils, typically within valley and foothill grassland at elevations below 375 feet. Bloom period is from August–September.	**Unlikely.** Required habitats are absent and continued disturbance from agriculture makes the APE unsuitable for this species.
Lesser saltscale (*Atriplex minuscula*)	CNPS 1B	This species is found in the San Joaquin Valley in sandy, alkaline soils in alkali scrub, valley and foothill grassland, and alkali sink communities at elevations below 750 feet. Bloom period is from April–October.	**Unlikely.** Required habitats are absent and continued disturbance from agriculture makes the APE unsuitable for this species.
Recurved larkspur (*Delphinium recurvatum*)	CNPS 1B	This species occurs in poorly drained, fine, alkaline soils in grassland and alkali scrub communities at elevations between 100 feet and 2600 feet. Bloom period is from March–June.	**Unlikely.** Required habitats are absent and continued disturbance from agriculture makes the APE unsuitable for this species.
San Joaquin adobe sunburst (*Pseudobahia peirsonii*)	FT, CE, CNPS 1B	This species is found in the San Joaquin Valley and the Sierra Nevada Foothills in bare dark clay soils in valley and foothill grassland and cismontane woodland communities at elevations between 325 feet and 2950 feet. Bloom period is from March–May.	**Unlikely.** Required habitats are absent and continued disturbance from agriculture makes the APE unsuitable for this species.

Species	*Status*	*Habitat*	
Spiny-sepaled button-celery (*Eryngium spinosepalum*)	CNPS 1B	Found in the Sierra Nevada Foothills and the San Joaquin Valley. Occurs in vernal pools, swales, and roadside ditches. Often associated with clay soils in vernal pools within grassland communities. Occurs at elevations between 50 feet and 4160 feet. Blooms April–July.	**Unlikely.** Required habitats are absent and continued disturbance from agriculture makes the APE unsuitable for this species.
Springville clarkia (*Clarkia springvillensis*)	FT, CE, CNPS 1B	Endemic to the woodlands and grasslands of the southern portion of the Sierra Nevada range, occurring primarily in the Tule River watershed. Found at elevations between 690-7400 feet. Blooms in May.	**Unlikely.** Required habitats are absent and continued disturbance from agriculture makes the APE unsuitable for this species.
Striped adobe-lily (*Fritillaria striata*)	CT, CNPS 1B	Found in the Sierra Nevada foothills in adobe soil within valley grassland and foothill woodland communities at elevations below 3300 feet. Blooms February – April.	**Unlikely.** Required habitats are absent and continued disturbance from agriculture makes the APE unsuitable for this species.
Subtle orache (*Atriplex subtilis)*	CNPS 1B	This species is found in the San Joaquin Valley in saline depressions in alkaline soils within valley and foothill grassland communities at elevations below 330 feet. Bloom period is from June–October.	**Unlikely.** Required habitats are absent and continued disturbance from agriculture makes the APE unsuitable for this species.

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 Concern
		CWL	California Watch List
		CCE	California Endangered (Candidate)
		CR	California Rare

CNPS LISTING

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

4.4.2 Applicable Regulations

4.4.2.1 Threatened and Endangered Species

Permits may be required from the USFWS and/or CDFW if activities associated with a project have the potential to result in the "take" of a species listed as threatened or endangered under the federal and/or state Endangered Species Acts. Take is defined by the State of California as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" (California Fish and Game Code, Section 86). Take is more broadly defined by the federal Endangered Species Act to include "harm" (16 United States Code

(USC), Section 1532(19), 50 Code of Federal Regulation (CFR), Section 17.3). CDFW and USFWS are responsible agencies under CEQA and the National Environmental Policy Act (NEPA). Both agencies review CEQA and NEPA documents in order to determine the adequacy of their treatment of endangered species issues and to make project-specific recommendations for their conservation.[6]

4.4.2.2 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.[7]

4.4.2.3 Migratory Birds

The Federal Migratory Bird Treaty Act (MBTA) (16 USC 703-712) prohibits killing, possessing, or trading in any bird species covered in one of four international conventions to which the United States is a party, except in accordance with regulations prescribed by the Secretary of the Interior. The name of the act is misleading, as it covers nearly all bird's native to the United States, even those that are non-migratory. The MBTA encompasses whole birds, parts of birds, nests, and eggs. Additionally, California Fish and Game Code makes it unlawful to take or possess any non-game bird covered by the MBTA (Section 3513), as well as any other native non-game bird (Section 3800).[8]

4.4.2.4 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.[9]

4.4.2.5 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

[6] California Department of Fish and Wildlife. (2021, November). *California Natural Diversity Database*. (Accessed November 2021).
[7] United States Fish and Wildlife Service. (2021). *Environmental Conservation Online System (ECOS)*. Retrieved from https://ecos.fws.gov/ecp/ (Accessed November 2021).

[8] United States Fish and Wildlife Service. (2021). *Environmental Conservation Online System (ECOS)*. Retrieved from https://ecos.fws.gov/ecp/ (Accessed November 2021).
[9] United States Fish and Wildlife Service. (2021). *Environmental Conservation Online System (ECOS)*. Retrieved from https://ecos.fws.gov/ecp/ (Accessed November 2021).

disturbance that causes nest abandonment and/or loss of reproductive effort is considered a form of "take" by the CDFW.[10]

4.4.2.6 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 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 the bulleted items above.

As of October 2021, the regulations have reverted back to 2015 compliance standards. As determined by the United States Supreme Court in its 2001 Solid Waste Agency of Northern Cook County v. United States 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 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 United States Environmental Protection Agency (USEPA) 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 United States 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 United States are subject to the permit requirements of the USACE. Such permits are typically issued on the condition that the applicant agrees to provide mitigation that results in no net loss of wetland functions or values. No permit can be issued until the RWQCB issues a Section 401 Water Quality Certification (or waiver of such certification) verifying that the proposed activity will meet State water quality standards.

Under the Porter-Cologne Water Quality Control Act of 1969, the SWRCB has regulatory authority to protect the water quality of all surface water and groundwater in the State of California ("Waters of the State"). Nine RWQCBs oversee water quality at the local and regional level. The RWQCB for a given region regulates discharges of fill or pollutants into Waters of the State through the issuance of various permits and orders. Discharges into Waters of the State that are also Waters of the United States require a Section 401 Water Quality Certification from the RWQCB as a prerequisite to obtaining certain federal permits,

[10] United States Fish and Wildlife Service. (2021). *Environmental Conservation Online System (ECOS)*. Retrieved from https://ecos.fws.gov/ecp/ (Accessed November 2021).

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 United States., require Waste Discharge Requirements (WDRs), or waivers of WDRs, from the RWQCB. The RWQCB also administers the Construction Storm Water Program and the federal National Pollution Discharge Elimination System (NPDES) program. Projects that disturb one acre or more of soil must obtain a Construction General Permit under the Construction Storm Water Program. A prerequisite for this permit is the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. Projects that discharge wastewater, storm water, or other pollutants into a Water of the United States may require a NPDES permit.

CDFW has jurisdiction over the bed and bank of natural drainages and lakes according to provisions of Section 1601 and 1602 of the California Fish and Game Code. Activities that may substantially modify such waters through the diversion or obstruction of their natural flow, change or use of any material from their bed or bank, or the deposition of debris require a notification of a Lake or Streambed Alteration. If CDFW determines that the activity may adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement will be prepared. Such an agreement typically stipulates those certain measures will be implemented to protect the habitat values of the lake or drainage in question.[11]

4.4.3 Tulare County General Plan

The Tulare County General Plan 2030 Agriculture and Environmental Resources Management Elements contain the following goals and policies related to the Project:

3. Agriculture

AG-1.7 Preservation of Agricultural Lands: The County will promote the preservation of its agricultural economic base and open space resources through the implementation of resource management programs such as the Williamson Act, Rural Valley Lands Plan, Foothill Growth Management Plan or similar types of strategies and the identification of growth boundaries for all urban areas located in the County.

Ag-1.17 Agricultural Water Resources: The County will seek to protect and enhance surface water and groundwater resources critical to agriculture.

AG-1.10 Extension of Infrastructure into Agricultural Areas: The County shall oppose extension of urban services, such as sewer lines, water lines, or other urban infrastructure, into areas designated for agriculture use unless necessary to resolve a public health situation. Where necessary to address a public health issue, services should be located in public rights-of-way in order to prevent interference with agricultural operations and to provide ease of access for operation and maintenance. Service capacity and length of lines should be designed to prevent the conversion of agricultural lands into urban/suburban uses.

4. Land Use

C. Environment Component

[11] United States Environmental Protection Agency (USEPA). (2021). Retrieved from Waters GeoViewer: https://www.epa.gov/waterdata/waters-geoviewer (Accessed November 2021).

Principle 1: Protection Protect the supply and quality of urban, agricultural, and environmental water serving the County.

Principle 3: Recharge Identify and encourage the development of locations where water recharge systems can be developed to replenish water supplies.

7. Scenic Landscapes

SL-1.3 Watercourses. The County will protect visual access to, and the character of, Tulare County's scenic rivers, lakes, and irrigation canals by:

1. Locating and designing new development to minimize visual impacts and obstruction of views of scenic watercourses from public lands and right-of-ways, and

2. Maintaining the rural and natural character of landscape viewed from trails and watercourses used for public recreation.[12]

4.4.4 Impact Analysis

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

Less than Significant Impact with Mitigation Incorporated.

Of the 22 regionally occurring special status species, 20 are considered absent or unlikely to occur within the APE due to past or ongoing disturbance and/or absence of suitable habitat (see Table 4-7). The following species was deemed absent from the Project area: Delta Smelt (Hypomesus transpacificus). The following species were deemed unlikely to occur within the Project area: : American badger (Taxidea taxus), blunt-nosed leopard lizard (Gambelia sila), Crotch bumble bee (Bombus crotchii), California Red-legged frog (Rana draytonii), California Tiger Salamander (Ambystoma californiense), foothill yellow-legged frog (Rana boylii), Giant gartersnake (Thamnophis gigas), Loggerhead Shrike (Lanius ludovicianus), Monarch butterfly (Danaus plexippus), Northern California legless lizard (Anniella pulchra), pallid bat (Antrozous pallidus), Tipton kangaroo rat (Dipodomys nitratoides nitratoides), Tricolored Blackbird (Agelaius tricolor), valley elderberry longhorn beetle (Desmocerus californicus dimorphus), vernal pool fairy shrimp (Branchinecta lynchi), western mastiff bat (Eumops perotis californicus) western pond turtle (Emys marmorata), western spadefoot (Spea hammondii), and western yellow-billed cuckoo (Coccyzus americanus occidentalis). Therefore, implementation of the Project will have no impact on these 20 special status species through construction mortality, disturbance, or loss of habitat. Mitigation measures are not warranted.

There are two species identified in Table 4-7 that could possibly exist within or near the APE. These species are the Swainson's Hawk (*Buteo swainsoni*) (along with all tree and ground nesting birds) and San Joaquin kit fox (*Vulpes macrotis mutica*). These species and corresponding mitigation measures are discussed below.

[12] Tulare County. (2021, August). *Tulare County General Plan*. Tulare County, CA (Accessed November 2021).

4.4.4.1 Nesting Birds

Since there was not a biological field survey performed there is the possibility for the special status species Swainson's Hawk and other nesting birds to be impacted by the Project. The APE and surroundings contain suitable nesting and/or foraging habitat for ground and tree nesting avian species. Trees near the APE have the potential to host a multitude of nesting birds, and species such as Killdeer (*Charadrius vociferus*) are known to build nests on bare ground or compacted dirt roads. Furthermore, the trees are large enough to act as suitable nesting habitat for Swainson's Hawk and other raptors. Swainson's hawks have been recorded in the area surrounding the APE. Raptors could also potentially use the ruderal area and surrounding agricultural areas for foraging. Construction activities could disturb birds nesting within or adjacent to work areas, resulting in nest abandonment. Construction activities that adversely affect the nesting success of raptors and migratory birds or result in the mortality of individual birds constitute a violation of State and federal laws and are considered a significant impact under CEQA. Mitigation measures are warranted and are identified in Section 4.4.5 below. With implementation of mitigation measures BIO-1, BIO-2, and BIO-3, impacts would be reduced to less than significant. Additionally, the first 80 acres of basins that will be constructed will have habitat for migrating birds. This habitat will consist of adding islands to the basins and sloping the floors to create varying water levels to benefit a wide diversity of shorebirds and other waterbirds.

4.4.4.2 Mammals

San Joaquin kit fox have been documented near the Project vicinity. It is unknown if dens are present and active within or near the APE. Project construction activities could impact kit fox which is considered a significant impact under CEQA. Mitigation measures derived from the *USFWS 2011 Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* will be implemented to reduce potential impacts to this species and are identified in section Section 4.4.5 below. With implementation of mitigation measures BIO-1, BIO-2 and BIO-3, impacts would be reduced to less than significant.

Project-Related Impacts to Special Status Plant Species

The 14 special status plant species that have been documented in the Project vicinity, including Alkali-sink goldfields (Lasthenia chrysantha), Brittlescale (Atriplex depressa), calico monkeyflower (Diplacus pictus), California alkali grass (Puccinellia simplex), California jewelflower (Caulanthus californicus), California satintail (Imperata brevifolia), Earlimart orache (Atriplex cordulata var. erecticaulis), lesser saltscale (Atriplex minuscula), recurved larkspur (Delphinium recurvatum), San Joaquin adobe sunburst (Pseudobahia peirsonii), spiny-sepaled button-celery (Eryngium spinosepalum) Springville clarkia (Clarkia springvillensis), striped adobe-lily (Fritillaria striata), and subtle orache (Atriplex subtilis), are unlikely to occur within the APE due to past and ongoing disturbance and/or absence of suitable soils or water sources. 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 for special status plant species.

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

No Impact. There are no CNDDB-designated natural communities of special concern recorded within the APE or surrounding lands.[13] The APE and surrounding lands are agricultural fields that are disced regularly throughout the year which limits viable habitat from establishing. There would be no impact.

c) Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. The APE does not contain natural aquatic features and potential Waters of the United States, riparian habitat, typical wetlands, vernal pools, lakes, or streams, or other sensitive natural community.[14] The nearest identifiable water source is Lindmore Irrigation District Canal 1-mile northeast of the APE. The canal, which is an artificial water feature, and is typically not regulated by USACE or RWQCB as a jurisdictional water.[15] Implementation of the Project would have no impact on jurisdictional waters, wetlands, navigable waters, wild and scenic rivers, riparian habitat or other water features. Therefore, the Project would require jurisdictional permits from regulatory compliance agencies. There would be no impact.

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

No Impact. 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 APE does not contain features that would be likely to function as wildlife movement corridors. 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. There would be no impact.

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

No Impact. The Project would not interfere with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Vegetation or tree removal activities are not part of Project. Therefore, the Project would have no impact on the Tulare County General Plan.[16] There would be no impact.

[13] California Department of Fish and Wildlife. (2021, November). *California Natural Diversity Database*. (Accessed November 2021).

[14] (United States Fish and Wildlife Service. National Wetlands Inventory 2021)

[15] United States Environmental Protection Agency (USEPA). (2021). Retrieved from Waters GeoViewer: https://www.epa.gov/waterdata/waters-geoviewer (Accessed November 2021).

[16] Tulare County. (2021, August). *Tulare County General Plan*. Tulare County, CA (Accessed November 2021).

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

No Impact. The Project is consistent with the goals and policies of the Tulare County General Plan. There are no known habitat conservation plans (HCPs) or a Natural Community Conservation Plan (NCCP) in the Project vicinity.[17] There would be no impact.

4.4.5 Mitigation

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

BIO-2 **(Pre-construction Surveys):** For nesting birds, if activities must occur within nesting bird season (February 1 to September 15), a qualified biologist would conduct pre-construction surveys for Swainson's hawk nests onsite and within a 0.5-mile radius. This survey would be conducted in accordance with the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*[18] or current guidance. The pre-construction survey would also provide a presence/absence survey for all other nesting birds within the APE and an additional 50 feet, no more than 7 days prior to the start of construction. All raptor nests would be considered "active" upon the nest-building stage.

A pre-construction survey will also be required for the San Joaquin kit fox and in accordance with the *United States Fish and Wildlife Service (USFWS) Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior To Or During Ground Disturbance, January 2011*, or current guidance. [19]

BIO-3 **(Establish Buffers):** On discovery of any active nests or dens near work areas, the biologist would determine appropriate construction setback distances based on applicable CDFW and/or USFWS guidelines and/or the biology of the species in question. Construction buffers would be identified with flagging, fencing, or other easily visible means, and would be maintained until the biologist has determined that the nestlings have fledged, dens are inactive, and/or based on a direction from a qualified biologist on next steps.

[17] Tulare County. (2021, August). *Tulare County General Plan*. Tulare County, CA (Accessed November 2021).
[18] Swainson's Hawk Technical Advisory Committee. (2000, May). Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. CA: CDFW. (Accessed November 2021).
[19] *USFWS 2011 Standardized Recommendations for Protection of the San Joaquin Kit Fox*

4.5 CULTURAL RESOURCES

Table 4-9: Cultural Resources Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

4.5.1 Baseline Conditions

Tulare County is an archaeologically and culturally significant area and has one of the densest Native American populations in North America. Archaeological sites associated with the Santa Rosa Rancheria Tachi Yokut exists throughout the County, particularly adjacent to existing and former natural water and food sources. Many Yokut sites have been located, and the potential for remaining undiscovered sites within the County is high.

4.5.1.1 Records Search

A records search from the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS), located at California State University, Bakersfield was conducted in November 2021. The SSJVIC records search includes a review of all recorded archaeological and built-environment resources as well as a review of cultural resource reports on file. In addition, the California Points of Historical Interest (SPHI), the California Historical Landmarks (SHL), the California Register of Historical Resources (CAL REG), the National Register of Historic Places (NRHP), and the California State Built Environment Resources Directory (BERD) listings were reviewed for the above referenced APE and an additional ¼-mile radius. Due to the sensitive nature of cultural resources, archaeological site locations are not released. (**Appendix C***).*

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

4.5.1.2 Native American Outreach

The Native American Heritage Commission (NAHC) in Sacramento was also contacted in October 2021. They were provided with a brief description of the Project and a map showing its location and requested that the NAHC perform a search of the Sacred Lands File to determine if any Native American resources have been recorded in the immediate APE. The NAHC identifies, catalogs, and protects Native American cultural resources -- ancient places of special religious or social significance to Native Americans and known ancient graves and cemeteries of Native Americans on private and public lands in California. The NAHC is also charged with ensuring California Native American tribes' accessibility to ancient Native American

cultural resources on public lands, overseeing the treatment and disposition of inadvertently discovered Native American human remains and burial items, and administering the California Native American Graves Protection and Repatriation Act (CalNAGPRA), among many other powers and duties. NAHC provide a current list of Native American Tribal contacts to notify of the project. The ten tribal representatives identified by NAHC were contacted in writing via United States Postal Service in a letter mailed December 10, 2021, informing each Tribe of the Project.

1. Big Sandy Rancheria of Western Mono Indians, Elizabeth D. Kipp, Chairperson
2. Santa Rosa Rancheria Tachi Yokut Tribe, Leo Sisco, Chairperson
3. Tule River Indian Tribe, Neil Peyron, Chairperson
4. Tule River Indian Tribe, Kerri Vera, Environmental Department
5. Tule River Indian Tribe, Joey Garfield, Tribal Archaeologist
6. Wuksache Indian Tribe/Eshom Valley Band, Kenneth Woodrow, Chairperson

4.5.2 Impact Analysis

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Less than Significant Impact with Mitigation Incorporated. The CHRIS records search confirmed there have been no previous cultural resource studies conducted within the Project area or the one-half mile radius around the site. The search also confirmed the absence of identified cultural resources within the Project APE. The search results also indicated that there were no recorded resources within the Project area or in the one-half mile radius around the site. It is unlikely that the Project has the potential to result in significant impacts or adverse effects to cultural or historical resources, such as archaeological remains, artifacts or historic properties. However, in the unusual event that cultural resources are encountered during Project construction, implementation of mitigation measure CUL-1 outlined below, would reduce impacts to less than significant.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less than Significant Impact with Mitigation Incorporated. The Project involves several phases of construction of groundwater recharge basin facilities. There is no evidence or record that the Project has the potential to be an unknown burial site or the site of buried human remains. In the unlikely event of such a discovery, mitigation shall be implemented. With incorporation of mitigation measure CUL-2 outlined below, impacts resulting from the discovery of remains interred on the Project site would be less than significant.

4.5.3 Mitigation

CUL-1 (Archaeological Remains): Should archaeological remains or artifacts be unearthed during any stage of project activities, work in the area of discovery shall cease until the area is evaluated by a qualified archaeologist. If mitigation is warranted, the project proponent shall abide by recommendations of the archaeologist.

CUL-2 (Human Remains): In the event that any human remains are discovered on the Project site, the Tulare County Coroner must be notified of the discovery (California Health and Safety Code, Section 7050.5) and all activities in the immediate area of the find or in any nearby area reasonably suspected to overlie adjacent human remains must cease until appropriate and lawful measures have been implemented. If the Coroner determines that the remains are not recent, but rather of Native American origin, the Coroner shall notify the Native American Heritage Commission (NAHC) in Sacramento within 24 hours to permit the NAHC to determine the Most Likely Descendent of the deceased Native American.

4.6 ENERGY

Table 4-10: Energy Impacts

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

4.6.1 Baseline Conditions

The Project property consists of approximately 320-acres of farmed land. Groundwater is currently delivered by an existing electric water extraction well. Gasoline and diesel are currently used for on-site harvest activities. The Project recharge basins would be constructed in phases.

4.6.2 Impact Analysis

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

Less than Significant Impact. Construction of the Project would be required to comply with California Code of Regulations Title 13, Motor Vehicles, Section 2449(d)(2)-Idling, which limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel because of unproductive idling of construction equipment. Project operations would use a negligible amount of energy as the basins would be gravity fed. Due to the site no longer being farmed, energy usage would be less than existing conditions. Impacts would be less than significant.

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

Less than Significant Impact. The existing site has several wells on site that were previously used to irrigate the 320-acres of farmland at the Project site. These wells extract groundwater from a deep aquifer. Project energy consumed would be less than existing due to the fact that the site will no longer be farmed and Project operations will largely be passive in nature. Thus, the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Impacts would be less than significant.

4.7 GEOLOGY AND SOILS

Table 4-11: Geology and Soils Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☒	☐
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.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☐	☐
iv. Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☐	☐	☒

4.7.1 Baseline Conditions

The Project is located in Tulare County near the CDP of Plainview. The Project site is in a relatively flat Agricultural area of the Central San Joaquin Valley. Using the USDA NRCS soil survey website, a report of the onsite soils was generated and is provided as Appendix D, at the end of this document. All soils are moderately well drained.

Table 4-12. Soils Report

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
114	Exeter loam, 0-2 percent slopes	33.0	9.8%
116	Flamen loam, 0-2 percent slopes	13.8	4.1%
132	Quonal-Lewis association, 0-2 percent slopes	290.1	86.1%
Total Area of Interest		**336.9**	**100.0%**

4.7.1.1 Geology and Soils

The Proposed Project is located in southwestern Tulare County, in the southern 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.[20] 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.

4.7.1.2 Faults and Seismicity

The Project site is not located within an Alquist-Priolo Earthquake Fault Zone and no known faults cut through the soil at the site. The nearest major fault is the Owens Valley Fault Zone, 1872 rupture section, located approximately 63 miles East of the Project site. The San Andreas Fault is the dominant active tectonic feature of the Coast Ranges and represents the boundary of the North American and Pacific plates. A smaller fault zone, the Poso Creek Fault, is approximately 31.33 miles southwest of the site and an unnamed fault is approximately 13.2 miles southeast.

4.7.1.3 Liquefaction

The potential for liquefaction, which is the loss of soil strength due to seismic forces, is dependent on soil types and density, the groundwater table, 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. It is reasonable to assume that due to the depth to groundwater within the southern portion of Tulare County, liquefaction hazards would be negligible. Soil conditions are key factors in selecting locations for direct groundwater recharge projects. Using the USDA NRCS soil survey of the Project site, an analysis of the soils was performed. Soils in the area consist of Exeter loam, Flamen loam, and Quonal-Lewis association, all of which are 0–2% slopes and well drained.

4.7.1.4 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,

[20] Harden, D.R. 1998, California Geology, Prentice Hall, 479 pages

high in silt or clay content. The Project site consists of Exeter loam, Flamen loam, and Quonal-Lewis association. These soil types have a low to moderate risk of subsidence.

4.7.1.5 Dam and Levee Failure

There is no inundation zone within 10 miles of the Project site.

4.7.2 Impact Analysis

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

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less than Significant Impact. The nearest major fault is the Owens Valley Fault Zone, 1872 rupture section, located approximately 63 miles East of the Project site. A smaller fault zone, the Poso Creek Fault, is approximately 31.33 miles southwest of the site and an unnamed fault is approximately 13.2 miles southeast. The Project does not include habitable residential, agricultural, commercial, or industrial structures. Operation of the Project would require infrequent, routine maintenance by LID District employees. Any impact would be less than significant.

ii. Seismic-related ground failure, including liquefaction?

Less than Significant Impact. The Project site and its vicinity are located in an area traditionally characterized by relatively low seismic activity. The site is not located in an Alquist-Priolo Earthquake Fault Zone as established by the Alquist-Priolo Fault Zoning Act (Section 2622 of Chapter 7.5, Division 2 of the California Public Resources Code). The Project does not include any activities or components which could feasibly cause strong seismic ground shaking, either directly or indirectly. Therefore, there would be no impact.

iii. Seismic-related ground failure, including liquefaction?

Less than Significant Impact. Liquefaction occurs when loose, water-saturated sediments lose strength and fail during strong ground shaking. In general, liquefiable areas are generally confined to the Valley floor covered by Quaternary-age alluvial deposits, Holocene soil deposits, current river channels, and active wash deposits and their historic floodplains, marshes, and dry lakes. Specific liquefaction hazard areas in the county have not been identified. The Project site is not in a wetland area and is located in the southwestern portion of the County where liquefaction risk is considered low to moderate. The impact would be less than significant.

iv. Landslides?

No Impact. As the Proposed 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 more than five miles from the foothills and the local topography is essentially flat and level. There will be no impact.

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

Less than Significant Impact. Earthmoving activities associated with the Project would include excavation, basin construction, trenching and placing of pipeline. These activities could expose soils to erosion processes and the extent of erosion would vary depending on slope steepness/stability, vegetation/cover, concentration of runoff, and weather conditions. Dischargers whose projects disturb one (1) or more acres of soil, or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling or excavation but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. Through the completion of a SWPPP, any possible impacts from construction related activities involving soil erosion and loss of topsoil would be reduced. Therefore, impacts would be less than significant.

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

Less than Significant Impact. Most of the Project site and the surrounding area do not have any substantial grade changes to the point where the proposed basin would expose people or structures to potential substantial adverse effects on- or offsite such as landslides, lateral spreading, subsidence, liquefaction, or collapse. Subsidence and liquefaction risk are low to moderate at the site. Any impact would be less than significant.

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

No Impact. The soil at the Project site is mostly comprised of Quonal-Lewis association. Permeability is moderate. The Project will not contain any facilities that could be affected by expansive soils nor would substantial grading change the topography such that the project would generate substantial risks to life or property. The Project will be consistent with the California Building Standards Code; therefore, there would be no impact.

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

No Impact. Septic installation or alternative wastewater disposal systems are not necessary or a part of the project. There will be no impact.

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

No Impact. Unique paleontological resources or unique geological features have not been identified in the Project area. There will be no impact.

4.8 GREENHOUSE GAS EMISSIONS

Table 4-13: Greenhouse Gas Emissions Impacts

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

4.8.1 Baseline Conditions

Commonly identified GHG emissions and sources include the following:

Carbon dioxide (CO_2) is an odorless, colorless natural greenhouse gas. CO_2 is emitted from natural and anthropogenic sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic out gassing. Anthropogenic sources include the burning of coal, oil, natural gas, and wood.

Methane (CH_4) is a flammable greenhouse gas. A natural source of methane is the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain methane, which is extracted for fuel. Other sources are from landfills, fermentation of manure, and ruminants such as cattle.

Nitrous oxide (N_2O), also known as laughing gas, is a colorless greenhouse gas. Nitrous oxide is produced by microbial processes in soil and water, including those reactions that occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load.

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

Ozone (O_3) is known as a photochemical pollutant and is a greenhouse gas; however, unlike other greenhouse gases, 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 (SF_6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It has the highest global warming potential of any gas evaluated. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

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

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

CalEEMod air quality modeling software was run in November 2021 and is contained in Appendix A. The essential conclusions of this Report are as follows:

4.8.1.1 Short-Term Construction-Generated Emissions

Total GHG emissions generated during construction are presented in Table 4-14 below:

Table 4-14. Construction Greenhouse Gas Emissions

Year	Annual Emissions ($MTCO_2e$)
2022	545.2998
Amortized over 30 years	**18.1766**

4.8.1.2 Long-Term Operational Emissions

Project operations, consisting of fuel consumption for operations and maintenance purposes, are not anticipated to be higher than what is currently experienced from farming the Project site.

4.8.1.3 Effects of Climate Change

The sections below detail the methodology of the report and its conclusions.

4.8.2 Impact Analysis

4.8.2.1 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*[21], 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.

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

Less than Significant Impact with Mitigation Incorporated.

4.8.2.2 Short-Term Construction-Generated Emissions

Estimated construction-generated emissions are summarized in Table 4-15. Construction-related emissions would be under the thresholds for land-use development projects, utilizing the threshold of significance established by the Bay Area Air Quality Management District. Impacts would be less than significant.

[21] 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 March 2021.]

Table 4-15. Short-Term Construction-Generated GHG Emissions

Year	Emissions (MT CO_2e)(1)
Total Emissions	*545.2998*
*AB 32 Consistency Threshold for Land-Use Development Projects**	*1,100*
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 November 2021.

Long-Term Operational Emissions

Long term operational emissions are not anticipated to exceed those of current farming operations taking place at the Project site. There would be no additional adverse impact.

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

Less than Significant Impact. The California Air Resources Board prepared in 2017 the *California's 2017 Climate Change Scoping Plan*, which sets forth how the State intends to reduce greenhouse gas emissions to meet the SB 32 goal of 40 percent below the greenhouse gas emissions level of 1990 by 2030. The agricultural sector is anticipated to achieve a 4 to 8 percent reduction as its portion of greenhouse gas emissions. The Project supports State and local plans and policies by reducing greenhouse gases through cessation of agricultural operations at the Project site, which would result in fewer fuels consumed. Impacts to applicable plans, policies, and regulations would be less than significant.

4.9 HAZARDS AND HAZARDOUS MATERIALS

Table 4-16 Hazards and Hazardous Materials Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

4.9.1 Baseline Conditions

The Project site is comprised of 320 acres of farmed agricultural land, historically farming land. The Project involves several phases of construction of groundwater recharge basin facilities. The first phase will involve 80 acres of basins that will be constructed with habitat for migrating birds and a one mile pipeline to connect the basin to existing District facilities along Road 196. The recharge water will be recovered in dry years, for use in the District's efforts to achieve groundwater sustainability. Construction of other basins on the remaining 240 acres will occur during subsequent phases.

4.9.1.1 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 (GC) 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 November 23, 2021, determined that there are no known active hazardous waste generators or hazardous material spill sites within the Project site.

4.9.1.2 Airports

The Porterville Municipal Airport is located approximately 9.5 miles southeast of the project. The Fresno Yosemite International Airport is located approximately 59.9 miles northwest of the project.

4.9.1.3 Emergency Response Plan

The Tulare County Office of Emergency Services coordinates the development and maintenance of the Tulare County Operational Area Master Emergency Services Plan.

4.9.1.4 Sensitive Receptors

There are several rural single-family homes located adjacent to the Project site and one located within the first 80-acre basin site. Sunnyside Union Elementary School, a K–8 elementary school, is located approximately 2.9 miles southeast of the project.

4.9.2 Impact Analysis

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? And;

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

Less than Significant Impact. There would be no transport, use, or disposal of hazardous materials associated with Project construction or operations, with the exception of diesel fuel for construction or routine maintenance equipment. Any potential accidental hazardous materials spills during Project construction or basin maintenance are the responsibility of the contractor and/or District to remediate in accordance with industry best management practices and State and county regulations. Any impacts would therefore be less than significant.

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

No Impact. The Project site is not located within one-quarter mile of an existing or proposed school. Sunnyside Union Elementary School, a K–8 elementary school, is the nearest school and is located approximately 2.9 miles southeast of the project. The Project will not emit hazardous emissions or involve the transport or handling of any hazardous materials within one-quarter mile of a school. There would be no impact.

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

Less than Significant Impact. The Proposed Project does not involve land that is listed as an active hazardous materials site pursuant to Government Code Section 65962.5 and is not included on a list compiled by DTSC. Both the SWQCB's GeoTracker and DTSC's EnviroStor websites were queried on November 23, 2021, for contaminated groundwater or sites in the area. GeoTracker does list one case that is closed within a 2-mile radius of the Project site. The closed site is listed as Michael Woo's Mini Mart (T0610700011) at Cairns Ave and Avenue 196, 1.4 miles southeast of the Project. Approximately 71,000 pounds soil vapor extraction were removed. The case is listed as completed as of August 13, 2014. Any impacts would be less than significant.

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

No Impact. The Porterville Municipal Airport is located approximately 9.5 miles southeast of the project. The Fresno Yosemite International Airport is located approximately 59.9 miles northwest of the project. The Project site is not located within an airport land use plan or within two miles of an airport. There would be no impact.

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

Less than Significant Impact. The construction of recharge basins would not impair or physically interfere with any adopted emergency response or emergency evacuation plan. Construction of the pipeline would occur along County road right of way and would be required to meet County Fire Department and Sheriff Department standards which would ensure any impacts would be less than significant. Therefore, impacts would be less than significant.

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

No Impact. As discussed in further detail in the Wildfire section, the Project would not expose people or structures either directly or indirectly to a significant loss, injury or death involving wildland fires. The Project site is in an agriculturally developed area of Tulare County that is not considered wildlands. In addition, the Project would not conflict with any local, State, or federal standard or regulation governing wildfire. Therefore, there would be no impact.

4.10 HYDROLOGY AND WATER QUALITY

Table 4-17: Hydrology and Water Quality Impacts

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?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

4.10.1 Baseline Conditions

The Project is currently farmed agricultural land located in a rural area of Tulare County, inside the San Joaquin Valley – Kaweah Subbasin. The basin is part of the Tulare Lake Hydrologic Region which stretches from north of Fresno to south of Bakersfield near the Grapevine. The San Joaquin Valley Basin is divided into seven subbasins. The Kaweah Subbasin, where the Project site is located, is approximately 446,000 acres large within Tulare County. The Kaweah subbasin lies between the Kings Groundwater Subbasin on the north, the Tule Groundwater Subbasin on the south, crystalline bedrock of the Sierra Nevada foothills on the east, and the Kings River Conservation District on the west. The subbasin generally comprises lands

in the Kaweah Delta Water Conservation District. Major rivers and streams in the subbasin include the Kaweah and St. Johns Rivers.[22]

4.10.2 Impact Analysis

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

Less than Significant Impact. SWRCB requires that a SWPPP be prepared for projects that disturb one (1) or more acres of soil. A SWPPP involves site planning and scheduling, limiting disturbed soil areas, and determining best management practices to minimize the risk of pollution and sediments being discharged from construction sites. Implementation of the SWPPP will minimize the potential for the Project to substantially alter the existing drainage pattern in a manner that will result in substantial erosion or siltation onsite or offsite. Additionally, there will be no discharge to any surface source. However, by design, there will be percolation discharge to groundwater via the proposed recharge basins. Use of chemicals or surfactants will not be generated through the maintenance or operation of the Project and as such, there will be no discharge directly associated with Project implementation that could impact water quality standards. The Project will not violate any water quality standards and will not impact waste discharge requirements, and the pipeline construction will not entail disturbance of one or more acres of soil. The impact will be less than significant.

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

Less than Significant Impact. The recharge basins that would be constructed on the Project site would recharge groundwater, minimizing the depletion of groundwater resources. The EKGSA holds jurisdiction over the proposed Project area and is responsible for implementing a GSP, and any water brought to the Project site would be accounted for under the GSP. The Project does not include any recovery operations. No additional groundwater would be required compared to baseline conditions; therefore, the impacts would be less than significant. Therefore, the Project would not impede sustainable groundwater management of the basin or decrease groundwater supplies. Impact would be less than significant.

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;

Less than Significant Impact. . In order to minimize the possibility of substantial soil erosion or siltation, the Project would use construction BMP's and be required to complete a SWPPP. SWPPP's include mandated soil erosion control measures, which are developed to prevent significant impacts related to erosion caused by runoff during construction. Therefore, impacts would be less than significant.

[22] San Joaquin Valley Groundwater Basin Kaweah Subbasin. San Joaquin Valley Groundwater Basin Kaweah Subbasin (ca.gov). Accessed November 2021.

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

Less than Significant Impact. The Project would not result in a substantial increase in the rate or amount of surface runoff that would result in flooding on- or off-site. The Project would utilize construction BMP's and complete a SWPPP in order to reduce any potential impacts to the surface runoff changes associated with this Project. Therefore, impacts would be less than significant.

iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less than Significant Impact. The Project would result in water recharge facilities on the 320-acre site and one mile of pipeline conveyance. The Project would not result in the creation or contribution of runoff water that would exceed the capacity of an existing or planned stormwater drainage system. Stormwater would be collected on site in the recharge basin, or percolate through the ground on-site. In addition, The Project would be required to use construction BMP's and complete a SWPPP. As a result, the Project would not have an impact on flood flow. Therefore, there would be no impacts.

iv. impede or redirect flood flows?

No Impact. The Project site is located approximately 3.3 miles north of a 100 Year Flood Zone (DFIRM MAP 0617C1610E). The Project would construct water recharge facilities and would not impede or redirect flood flows. Therefore, there would be no impact.

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

No Impact. The Project area is not at risk of tsunami or within a seiche zone. As shown in Figure 4-2, the Project is not within a 100-year flood zone. Additionally, operation of the recharge facility does not involve hazardous materials. There would be no impact.

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

No Impact. The Project would not conflict with implementation of a water quality control plan or sustainable groundwater management plan. The Project site is located in the San Joaquin Valley – Kaweah Groundwater Subbasin. In addition, the Project site is located within the boundaries of the EKGSA[23]. The EKGSA implements a GSP. The Project would recharge water during wet years and would not be in conflict with the EKGSA or its GSP. Therefore, there would be no impact.

[23] California Department of Water Resources. GSA MAP Viewer. Website: https://sgma.water.ca.gov/webgis/index.jsp?appid=gasmaster&rz=true. Accessed November 2021.

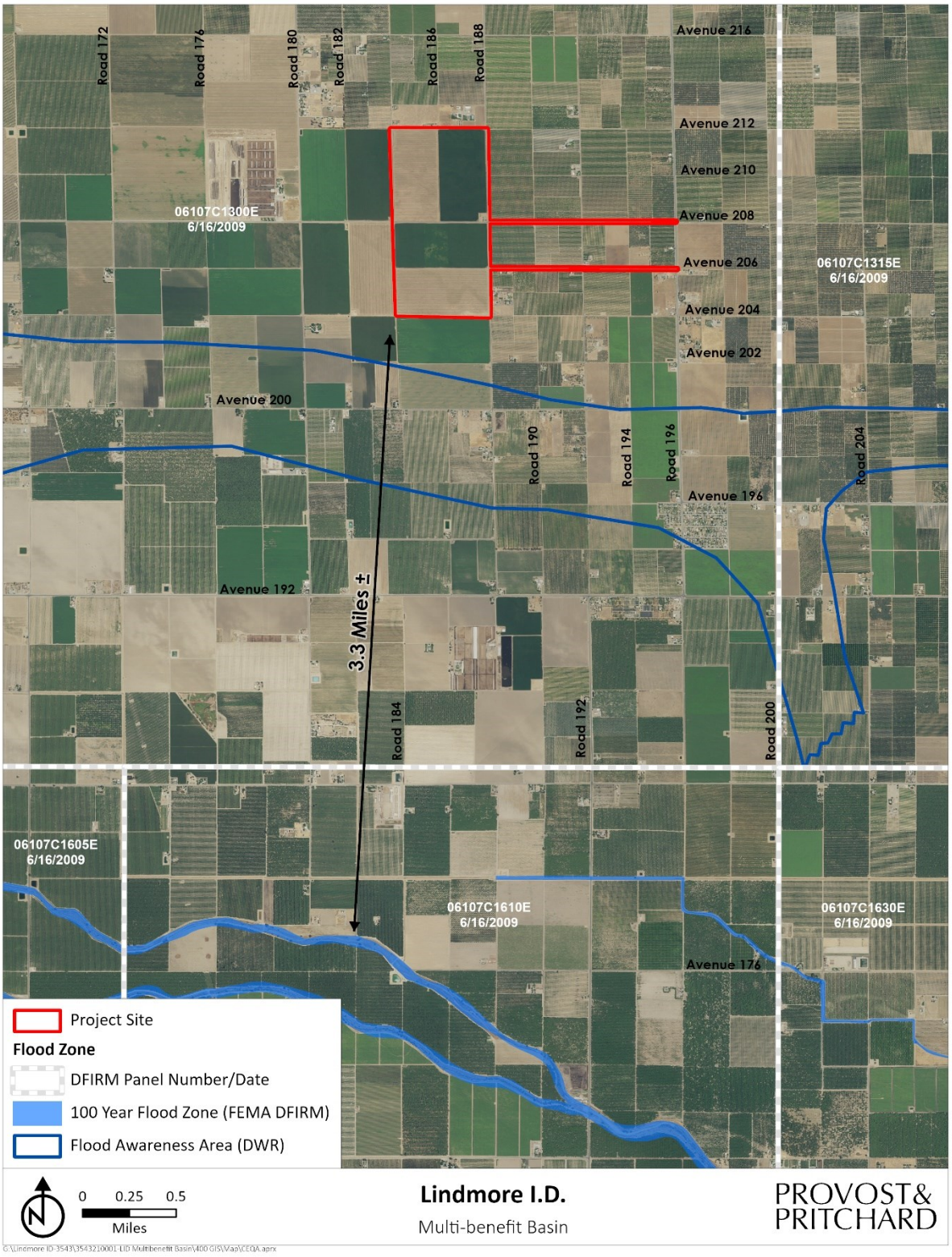

Figure 4-2 Flood Zone Map

4.11 LAND USE AND PLANNING

Table 4-18: Land Use and Planning Impacts

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

4.11.1 Baseline Conditions

The Project site is classified Farmland of Statewide Importance according to the DOC. The Project site is designated as Agriculture by the Tulare County General Plan and is within the AE-20 (Exclusive Agriculture) zone district. Each of the one-mile pipeline options would run on land with two different zoning designations; half a mile is zoned as AE-20 and the other half is zoned as AE-40. Properties adjacent to the Project site are currently actively agriculture as well as ag-related manufacturing. The Project site is not currently within the District boundary but is considered a white area and is part of the Districts Management Area as defined in the East Kaweah Groundwater Sustainability Plan.[24] As part of this Project the District will be annexing the property into their boundary. The proposed Project is located 9.72 miles east of SR 99. Topographically, the Proposed Project area is at an elevation of 338 feet above mean sea level. The closest community is Plainview. No forest or timber land is present at the Project site or in the Project vicinity.

4.11.1.1 General Plan Land Use and Zoning Designations

According to the Land Use Element of the Tulare County General Plan, a water recharge facility is an allowable land use in areas designated as agriculture.

4.11.1.2 On-site Land Use Designations

The Proposed Project site is zoned Exclusive Agriculture by Tulare County, see Figure 2-3**.**

4.11.1.3 Surrounding Land Use Designations

The Tulare County General Plan designates the areas surrounding the Proposed Project site for agricultural uses, see Figure 2-4.

General Plan Land Use Designations and Zone Districts are illustrated in Figure 2-3 and Figure 2-4, respectively.

[24] East Kaweah Groundwater Sustainability Plan. 2020-01 EKGSA GSP Final Signed.pdf (dropbox.com). Page ES-5. Accessed November 2021.

4.11.2 Impact Analysis

a) Would the project physically divide an established community?

No Impact. The Project is located in an agricultural area approximately 13.4 miles southeast of Tulare and 6.3 miles southwest of Lindsay. The Project is 7.7 miles north of the Tule River. Surrounding uses are primarily agricultural uses. The Project would not physically divide an established community. There would be no impact.

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?

Less than Significant Impact. The Project site is zoned Exclusive Agricultural. The Project would not involve the development of new agriculture lands. Any water that is recharged would be used by land that is already in agricultural production. There are a few nearby rural residences surrounding the Project and construction of the Project would not develop new sources of water that would support any new housing or new permanent population growth that would exceed official regional or local population projections in the district service area. The main purpose of the Project is to enhance groundwater levels and achieve sustainability, through groundwater recharge, therefore, no impacts to land use are anticipated.

Additionally, the Project involves the construction of groundwater recharge basin facilities. The first phase will involve 80 acres of basins that will be constructed with habitat for migrating birds. Construction of other basins on the remaining 240 acres will occur during subsequent phases. A recharge facility is an allowed agricultural use and is consistent with the land use within the vicinity of the Project. Therefore, the Proposed Project would not conflict with any applicable plans, policies, or regulations.

4.12 MINERAL RESOURCES

Table 4-19: Mineral Resources Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

4.12.1 Baseline Conditions

The most important minerals of Tulare County's mineral extraction activities focus on aggregate (sand, gravel, and crushed stone), which is primarily used in building materials. These aggregate resources are the most valuable since they are used in Portland cement. Most of these extraction activities appear to occur in the Sierra Foothill Area. Historically, the Kaweah River, Lewis Creek, and the Tule River have provided the main sources of high-quality sand and gravel in Tulare County. The highest quality deposits are located at the Kaweah and Tule Rivers. According to the Tulare County General Plan Background Report, all of the known potential mineral resource locations are mapped within the foothills and/or along major watercourses. Similarly, the only active oil and gas fields are in the foothills along Deer Creek.[25]

The Project site is not delineated on a local land use plan as a locally important mineral resource recovery site.

4.12.2 Impact Analysis

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

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

No Impact. The California Geological Survey Division of Mines and Geology has not classified the Proposed Project site as a Mineral Resource Zone under the Surface Mining and Reclamation Act (SMARA). California's Division of Oil, Gas and Geothermal Resources has no records of active oil or gas wells on the Project site. The closest plugged and dry hole well is Well #1 Earl Kelly located 0.35 miles east of the Project. No known mineral resources are within the Project area. Therefore, construction of the Project would not result in the loss of availability of a known mineral resource since no known mineral resources have been identified in this area.

[25] Tulare County General Plan Background Report. http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf Accessed November 2021.

4.13 NOISE

Table 4-20: Noise Impacts

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

4.13.1 Baseline Conditions

The Project site is situated within a region dominated by agricultural uses, operations which may require diesel-powered equipment or other relatively loud machinery. Rural traffic is also a source of noise in the Project's vicinity. While much of unincorporated Tulare County is composed of discrete small communities and remote rural residences, major noise generators include SR 99 and other highways, airports, and industrial operations.[26] Maximum noise levels generated by farm-related tractors typically range from 77 to 85 dB at a distance of 50 feet from the tractor, depending on the horsepower of the tractor and the operating conditions. Due to the seasonal nature of the agricultural industry, there are often extended periods of time when little to no noise is generated at the Project site, followed by short-term periods of intensive mechanical equipment usage and corresponding noise generation. The Tulare County General Plan identifies the normally acceptable noise range for agricultural land uses between 50 and 75 dB.[27]

There are two residences adjacent to the Project and one located on the Project site. Additional sensitive receptors in the area are Sunnyside Union Elementary School, which is located 2.9 miles southeast of the Project.

[27] Tulare County General Plan. http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20and%20Part%20II/GENERAL%20PLAN%202012.pdf Accessed 6 November 2021.

Table 4-21. 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

4.13.2 Impact Analysis

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

Less than Significant Impact. Project operation would not generate significant noise; however, Project construction will generate temporary noise, mostly from trucks. Other construction equipment could include scrapers, backhoes, and drilling rigs. Noise from construction activities would not exceed Tulare County Noise Element standards of 60 dBA. The Project is located within agricultural lands, accustomed to noise generated by farm equipment and industrial machinery. As construction noise would be temporary, lasting 3-4 months with the first phase of the Project. Subsequent phases will be completed in approximately six months of active construction time. Maintenance to the site would take place as needed. Impacts due to noise would be less than significant.

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

Less than Significant Impact. The Project will not generate ground borne vibration or noise greater than existing conditions as it takes place in an area of existing agricultural operations. The first phase of construction will last 3-4 months, subsequent phases will be complete in six months of active construction time. All phases will require excavation and grading. Project operations would not involve ground borne vibration or noise. Impacts will be less than significant.

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

No Impact. The Porterville Municipal Airport is located approximately 9.5 miles southeast of the Project, and the Fresno Yosemite International Airport is located approximately 59.9 miles northwest of the project. As the Project is not located within an airport land use plan or two miles of an airport, there would be no impact.

4.14 POPULATION AND HOUSING

Table 4-22: Population and Housing Impacts

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 Sample, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

4.14.1 Baseline Conditions

Strathmore is the nearest community and is considered a census-designated place in Tulare County. According to the 2020 U.S. Census it has a population of 2830 people.[28] The U.S. Census estimates approximately 3.78 persons per household. The proposed Project site is currently 320 acres of farmed agricultural land. The Project is surrounded by farmland, with a residence located on the site. The rural residence will remain on the site, basins being constructed around it will be built in such a way that normal access to the residence will be maintained.

4.14.2 Impact Analysis

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

No Impact. The Project would not induce substantial unplanned population growth in an area, either directly or indirectly. The Project would construct groundwater recharge basins in phases. The Project is located in an unincorporated part of Tulare County and would not result in the displacement of residents, inability of new housing to be built in the area or result in the construction of new housing as a result of the recharge facility. Therefore, there would be no impact.

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

No Impact. The Project would not displace any of the existing people or homes in the area. Project activities would not alter housing or the existing community in a way that would result in the need for new housing to be constructed elsewhere. The residence that is on the 320-acre project site will remain

[28] U.S. Census Bureau. https://data.census.gov/cedsci/table?q=Strathmore,%20CA&tid=DECENNIALPL2020.P1. Accessed 10/21/2021.

intact and Project basins will be designed in such a way that the residence will not be impacted. Therefore, there would be no impact.

4.15 PUBLIC SERVICES

Table 4-23: Public Services

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

4.15.1 Baseline Conditions

The Project is surrounded by agricultural land, and two nearby rural residences. The nearest services to the Project site are as described below:

- Fire Protection: Tulare County Fire Department Battalion 2 - Strathmore Fire Station 16 approximately 6.2 miles southwest of the project and the Lindsay Fire Department is also 6.2 miles northeast of the project
- Police Protection: The Lindsay Police Department is the approximately 6.3 miles northeast of the project
- Schools: Sunnyside Elementary School is 2.9 miles southeast of the project
- Parks: Plainview Neighborhood Park is 3 miles southeast of the project
- Landfills: Teapot Dome Landfill is 12.5 miles southeast of the project

4.15.2 Impact Analysis

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

No Impact. The Project will not require new or altered public facilities in order to maintain acceptable service ratios, response times, or other performance objectives for public services. The Project involves the construction and operation of recharge basins so it will have no impact on the listed public services.

4.16 RECREATION

Table 4-24: Recreation Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

4.16.1 Baseline Conditions

There are no parks/recreational facilities near the Project site. Plainview Neighborhood Park is approximately three miles southeast of the project. The Park features playground equipment including slides, a sliding pole, and steps. The playground equipment has shade and half a basketball court.[29] Visitors can access the park 24 hours a day.

4.16.2 Impact Analysis

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

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

No Impact. The Project would construct water recharge facilities and would not construct homes or induce population growth. Therefore, the Project would not increase the use of existing parks or require the construction of any new recreational facilities. There would be no impact.

[29] Tulare County General Plan 2030. Plainview Community Plan. http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/120Part%20III%20Community%20Plans%201%20of%207/010Plainview/GPA%2017-009%20PLAINVIEW%20COMMUNITY%20PLAN.pdf Accessed 10/21/2021.

4.17 TRANSPORTATION

Table 4-25: Transportation Impacts

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

4.17.1 Baseline Conditions

The Project site is bounded by Road 188, Road 184, Avenue 204 and Avenue 212, it is an area dominated by agriculture/farmland uses. It is not in an area the experiences high traffic volumes. Public roads in the area are maintained by the County. The closest community is Plainview.

4.17.2 Impact Analysis

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

Less than Significant Impact. Tulare County General Plan accounts for regional movement and development throughout their respective planning area. During construction, Project-generated traffic would temporarily increase truck volumes in the area. However, Project-generated truck trips would be temporary, occurring during construction phases. The first phase, the 80-acre recharge basin will be constructed over three-four months. Subsequent phases would occur at a later time, with active construction time being approximately five to six months. Operational traffic will consist of as-needed maintenance trips. There would not be a permanent adverse effect to existing roadways in the area. Therefore, the Project would not conflict with any plan, ordinance, or policy regarding circulation. Any impacts would be less than significant.

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

Less than Significant Impact. Temporary vehicle trips would be necessary for the construction of the Project phases; however, operation and maintenance activities are not anticipated to increase significantly as a result of implementing the Project. Temporary construction trips would not result in a substantial increase in vehicle miles travelled and therefore would be consistent with the CEQA Guidelines Section 15064.3(b). Impacts would be less than significant.

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

No Impact. The Project does not increase hazards due to any of its design features, nor does it create incompatible uses with the existing traffic operations. Construction activities would largely occur within and next to, proposed site with intermittent trucks entering and exiting the property. The site would be designed to allow for adequate maneuvering of such vehicles to enter and exit the site in a forward motion. Therefore, there would be no impact.

d) Would the project result in inadequate emergency access?

No Impact. Construction activities would not result in any physical changes to the transportation system or traffic operation that would potentially affect emergency access. Once construction activities are complete, no long-term sources of Project traffic would occur that would interfere with emergency access. There would be no impact.

4.18 TRIBAL CULTURAL RESOURCES IMPACTS

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☒	☐	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

4.18.1 Baseline Conditions

Public Resources Code Section 21080.3.1, et seq. (codification of AB 52, 2013-14) requires that a lead agency, within 14 days of determining that it would undertake a project, must notify in writing any California Native American Tribe traditionally and culturally affiliated with the geographic area of the project if that Tribe has previously requested notification about projects in that geographic area. The notice must briefly describe the project and inquire whether the Tribe wishes to initiate request formal consultation. Tribes have 30 days from receipt of notification to request formal consultation. The lead agency then has 30 days to initiate the consultation, which then continues until the parties come to an agreement regarding necessary mitigation or agree that no mitigation is needed, or one or both parties determine that negotiation occurred in good faith, but no agreement would be made. The Tule River Indian Reservation is located approximately 15 miles to the east.

4.18.1.1 Records Search

A records search from the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS), located at California State University, Bakersfield was conducted in November 2021. The SSJVIC records search includes a review of all recorded archaeological

and built-environment resources as well as a review of cultural resource reports on file. In addition, the California Points of Historical Interest (SPHI), the California Historical Landmarks (SHL), the California Register of Historical Resources (CAL REG), the National Register of Historic Places (NRHP), and the California State Built Environment Resources Directory (BERD) listings were reviewed for the above referenced APE and an additional one-half mile radius. Due to the sensitive nature of cultural resources, archaeological site locations are not released. (**Appendix C**).

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

4.18.1.2 Native American Outreach

The Native American Heritage Commission (NAHC) in Sacramento was also contacted in October 2021. They were provided with a brief description of the Project and a map showing its location and requested that the NAHC perform a search of the Sacred Lands File to determine if any Native American resources have been recorded in the immediate APE. The NAHC identifies, catalogs, and protects Native American cultural resources -- ancient places of special religious or social significance to Native Americans and known ancient graves and cemeteries of Native Americans on private and public lands in California. The NAHC is also charged with ensuring California Native American tribes' accessibility to ancient Native American cultural resources on public lands, overseeing the treatment and disposition of inadvertently discovered Native American human remains and burial items, and administering the California Native American Graves Protection and Repatriation Act (CalNAGPRA), among many other powers and duties. NAHC provide a current list of Native American Tribal contacts to notify of the project. The ten tribal representatives identified by NAHC were contacted in writing via United States Postal Service in a letter mailed December 10, 2021, informing each Tribe of the Project.

1. Big Sandy Rancheria of Western Mono Indians, Elizabeth D. Kipp, Chairperson
2. Santa Rosa Rancheria Tachi Yokut Tribe, Leo Sisco, Chairperson
3. Tule River Indian Tribe, Neil Peyron, Chairperson
4. Tule River Indian Tribe, Kerri Vera, Environmental Department
5. Tule River Indian Tribe, Joey Garfield, Tribal Archaeologist
6. Wuksache Indian Tribe/Eshom Valley Band, Kenneth Woodrow, Chairperson

4.18.2 Impact Assessment

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

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

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

Less than Significant Impacts with Mitigation Incorporated. Lindmore Irrigation District has not received any letters from Native American Tribe pursuant to PRC § 21080.3.1 (AB 52) officially requesting notification of Projects within their geographic area of traditional and cultural affiliation. Less than significant impacts, with mitigation incorporated, to tribal resources are expected for this project. Mitigation Measures CUL-1 and CUL-2, described above in **Section 4.5** Cultural Resources, are recommended in the event cultural materials or human remains are unearthed during excavation or construction.

4.18.3 Mitigation

TCR-1 See CUL-1 in **Section 4.5**

TCR-2 See CUL-2 in **Section 4.5**

4.19 UTILITIES AND SERVICE SYSTEMS

Table 4-26: Utilities and Service Systems Impacts

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

4.19.1 Baseline Conditions

4.19.2 Water Supply

The Project site is located within the Kaweah Subbasin of the San Joaquin Valley Groundwater Basin, as defined by the California Department of Water Resources Groundwater Bulletin 118. Groundwater overdraft and declines in groundwater basin storage are recurring problems in Tulare County. Measures for ensuring the continued availability of groundwater have been identified and planned in several areas of the county. The measures include groundwater conservation and recharge and supplementing or replacing groundwater sources for irrigation with surface water.

4.19.3 Wastewater Collection and Treatment

The City of Porterville Wastewater Treatment Facility is the closest wastewater facility, located 12.2 miles southeast of the project. However, no wastewater will be generated during Project construction or operation.

4.19.4 Landfills

The closest Landfill to the Project is Teapot Dome Landfill, located 9.97 miles South of the project. However, no solid waste will be generated during Project construction or operation. Additionally, excavated material will be balanced on site.

4.19.5 Impact Analysis

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

No Impact. The Project will not require construction of new or relocation or expansion of existing facilities for water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunications. There would be no impact.

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

No Impact. The Project consists of several phases of construction of groundwater recharge basin facilities. The first phase will involve 80 acres of recharge basins that will be constructed with habitat for migrating birds. The recharged water will be recovered in dry years, for use in the district efforts to achieve groundwater sustainability. Construction of other basins on the remaining 240 acres will occur during subsequent phases. Project operation is passive and would not reduce the area's available water supply under any scenario. There would be no impact.

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

No Impact. The Project does not require wastewater treatment, so analysis of capacity is not warranted. There would be no impact.

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

No Impact. The Project would not generate solid waste. Therefore, it would not 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. There would be no impact.

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

No Impact. The Project will comply with all federal, State, and local standards, policies, and goals. There would be no impact.

4.20 WILDFIRE

Table 4-27: Wildfire Impacts

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?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrollable spread of wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

4.20.1 Baseline Conditions

The Project is located in Tulare County near the community of Plainview. The Project site is in relatively flat Agricultural area of the Central San Joaquin Valley. The site is currently actively farmed, and the pipeline will be placed within road right of way.

No habitable structures are being constructed as part of the Project, and the Project is not considered to be population growth inducing. The Project is not located in or near State Responsibility Areas (SRA) or lands classified as very high fire hazard severity zones. The nearest Stare Responsibility Area is six miles Northeast of the project. [30]

4.20.2 Impact Analysis

a) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

[30] State Responsibility Area. https://www.arcgis.com/apps/mapviewer/index.html?layers=5ac1dae3cb2544629a845d9a19e83991. Accessed November 2021.

b) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. The Project is not located in or near a State Responsibility Area or land classified as very high fire hazard severity. Therefore, further analysis of the Project's potential impacts regarding wildfire are not warranted. There would be no impacts.

4.21 CEQA MANDATORY FINDINGS OF SIGNIFICANCE

Table 4-28: CEQA Mandatory Findings of Significance

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

4.21.1 Statement of Findings

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

Less Than Significant Impact with Mitigation Incorporated. The analysis conducted in this IS/MND 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, cultural resources, and tribal cultural resources from the construction and operation of the Proposed Project will be less than significant with the incorporation of the mitigation measures discussed in Chapter 5 . 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.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when

viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant Impact. CEQA Guidelines Section 15064(i) States that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. The Project would include the construction of 320-acres of recharge basins over several phases. No additional roads would be constructed as a result of the Project, nor would any additional public services be required. The Project is not expected to result in direct or indirect population growth. Therefore, implementation of the Project would not result in significant cumulative impacts and all potential impacts would be reduced to less than significant through the implementation of mitigation measures and basic regulatory requirements incorporated into future Project design.

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

Less Than Significant Impact. The Project would include the construction of water recharge basins over multiple phases. The Project in and of itself would not create a significant hazard to the public or the environment. 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.

CHAPTER 5 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 Project in the County of Tulare. The MMRP lists mitigation measures recommended in the IS/MND for the Project and identifies monitoring and reporting requirements to be adopted by the District.

Table 5-1 Mitigation, Monitoring, and Reporting Program presents the mitigation measures identified for the 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 5-1 Mitigation, Monitoring, and Reporting Program** 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 Lead and Responsible Agencies to ensure that individual mitigation measures have been complied with and monitored

Table 5-1 Mitigation, Monitoring, and Reporting Program

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
Biological Resources						
BIO-1	**(Avoidance):** The Project's construction activities would occur, if feasible, between September 16 and January 31 (outside of nesting bird season) in an effort to avoid impacts to nesting birds.	Prior to Construction	Prior to the start of any new construction phase.	LID with the assistance of a qualified biologist.		
BIO-2	**(Pre-construction Surveys):** For nesting birds, if activities must occur within nesting bird season (February 1 to September 15), a qualified biologist would conduct pre-construction surveys for Swainson's hawk nests onsite and within a 0.5-mile radius. This survey would be conducted in accordance with the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley or current guidance. The pre-construction survey would also provide a presence/absence survey for all other nesting birds within the APE and an additional 50 feet, no more than 7 days prior to the start of construction. All raptor nests would be considered "active" upon the nest-building stage. A pre-construction survey will also be required for the San Joaquin kit fox and in accordance with the United States Fish and Wildlife Service (USFWS) Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior To Or During Ground Disturbance, January 2011, or current guidance.	For nesting birds: If construction activities and/or vegetation removal must occur between February 1 and August 31, then within 10 days prior to the start of work. For San Joaquin kit fox: Within 30 days prior to the start of construction, a pre-construction survey for San Joaquin kit fox shall be conducted on and within 200 feet of proposed work areas	For nesting birds: February 1-September 15. For San Joaquin kit fox: Daily during construction or ground disturbing activities.	LID with the assistance of a qualified biologist.		
BIO-3	**(Establish Buffers):** On discovery of any active nests or dens near work areas, the biologist would determine appropriate construction setback distances based on applicable CDFW and/or USFWS guidelines and/or the biology of the species in question. Construction buffers would be identified with flagging, fencing, or other easily visible means, and would be maintained until the biologist has	Prior to the start of construction.	Prior to the start of construction.	LID with the assistance of a qualified biologist.		

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	determined that the nestlings have fledged, dens are inactive, and/or based on a direction from a qualified biologist on next steps.					
Cultural Resources						
CUL-1	(Archaeological Remains): Should archaeological remains or artifacts be unearthed during any stage of project activities, work in the area of discovery shall cease until the area is evaluated by a qualified archaeologist. If mitigation is warranted, the project proponent shall abide by recommendations of the archaeologist.	During ground disturbing activities and in the event potential archaeological artifacts or resources are uncovered	Daily during ground disturbing activities	LID with assistance of a qualified cultural subconsultant.		
CUL-2	(Human Remains): In the event that any human remains are discovered on the Project site, the Tulare County Coroner must be notified of the discovery (California Health and Safety Code, Section 7050.5) and all activities in the immediate area of the find or in any nearby area reasonably suspected to overlie adjacent human remains must cease until appropriate and lawful measures have been implemented. If the Coroner determines that the remains are not recent, but rather of Native American origin, the Coroner shall notify the Native American Heritage Commission (NAHC) in Sacramento within 24 hours to permit the NAHC to determine the Most Likely Descendent of the deceased Native American.	During ground disturbing activities and in the event human remains are uncovered	Daily during ground disturbing activities	LID with assistance of a qualified cultural subconsultant.		

Appendix A: CalEEMod Output Files

Lindmore Multibenefit Basin

Tulare County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	362.00	Acre	362.00	15,768,720.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	51
Climate Zone	3			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Ground disturbance includes 320 acres of basins and two pipeline alignment options.

Construction Phase - Project will be phased, with total active construction time being 10 months.

Trips and VMT - Project will construct 320 acres of basins, and one mile of pipeline.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	6,200.00	20.00
tblConstructionPhase	NumDays	400.00	5.00
tblConstructionPhase	NumDays	620.00	160.00
tblConstructionPhase	NumDays	440.00	14.00
tblConstructionPhase	NumDays	240.00	20.00
tblConstructionPhase	PhaseEndDate	10/3/2050	12/12/2022
tblConstructionPhase	PhaseEndDate	9/11/2023	3/7/2022
tblConstructionPhase	PhaseEndDate	12/28/2026	11/14/2022
tblConstructionPhase	PhaseEndDate	6/10/2052	12/30/2022
tblConstructionPhase	PhaseEndDate	8/12/2024	4/4/2022
tblConstructionPhase	PhaseStartDate	12/29/2026	11/15/2022
tblConstructionPhase	PhaseStartDate	8/13/2024	4/5/2022
tblConstructionPhase	PhaseStartDate	10/4/2050	12/13/2022
tblConstructionPhase	PhaseStartDate	9/12/2023	3/8/2022
tblGrading	AcresOfGrading	400.00	1,550.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripNumber	2,584.00	20.00
tblTripsAndVMT	WorkerTripNumber	6,623.00	20.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2022	0.3655	3.7647	2.9215	6.1600e-003	1.5118	0.1623	1.6741	0.4602	0.1495	0.6097	0.0000	541.1712	541.1712	0.1651	0.0000	545.2998
Maximum	**0.3655**	**3.7647**	**2.9215**	**6.1600e-003**	**1.5118**	**0.1623**	**1.6741**	**0.4602**	**0.1495**	**0.6097**	**0.0000**	**541.1712**	**541.1712**	**0.1651**	**0.0000**	**545.2998**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2022	0.3655	3.7647	2.9215	6.1600e-003	0.6954	0.1623	0.8577	0.2111	0.1495	0.3606	0.0000	541.1706	541.1706	0.1651	0.0000	545.2991
Maximum	**0.3655**	**3.7647**	**2.9215**	**6.1600e-003**	**0.6954**	**0.1623**	**0.8577**	**0.2111**	**0.1495**	**0.3606**	**0.0000**	**541.1706**	**541.1706**	**0.1651**	**0.0000**	**545.2991**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**54.00**	**0.00**	**48.76**	**54.12**	**0.00**	**40.85**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2022	5-31-2022	1.3040	1.3040
2	6-1-2022	8-31-2022	1.4017	1.4017
3	9-1-2022	9-30-2022	0.4571	0.4571
		Highest	1.4017	1.4017

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	1.3485	3.0000e-005	3.3300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.4700e-003	6.4700e-003	2.0000e-005	0.0000	6.8900e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.3485**	**3.0000e-005**	**3.3300e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**6.4700e-003**	**6.4700e-003**	**2.0000e-005**	**0.0000**	**6.8900e-003**

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	1.3485	3.0000e-005	3.3300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.4700e-003	6.4700e-003	2.0000e-005	0.0000	6.8900e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.3485**	**3.0000e-005**	**3.3300e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**6.4700e-003**	**6.4700e-003**	**2.0000e-005**	**0.0000**	**6.8900e-003**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2022	3/7/2022	5	5	
2	Site Preparation	Site Preparation	3/8/2022	4/4/2022	5	20	
3	Grading	Grading	4/5/2022	11/14/2022	5	160	
4	Building Construction	Building Construction	11/15/2022	12/12/2022	5	20	
5	Paving	Paving	12/13/2022	12/30/2022	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1550

Acres of Paving: 362

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

OffRoad Equipment

Lindmore Multibenefit Basin - Tulare County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	20.00	20.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

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	6.6000e-003	0.0643	0.0515	1.0000e-004		3.1100e-003	3.1100e-003		2.8900e-003	2.8900e-003	0.0000	8.4976	8.4976	2.3900e-003	0.0000	8.5572
Total	**6.6000e-003**	**0.0643**	**0.0515**	**1.0000e-004**		**3.1100e-003**	**3.1100e-003**		**2.8900e-003**	**2.8900e-003**	**0.0000**	**8.4976**	**8.4976**	**2.3900e-003**	**0.0000**	**8.5572**

3.2 Demolition - 2022

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	2.1000e-004	1.4000e-004	1.4200e-003	0.0000	4.6000e-004	0.0000	4.7000e-004	1.2000e-004	0.0000	1.3000e-004	0.0000	0.3690	0.3690	1.0000e-005	0.0000	0.3692
Total	**2.1000e-004**	**1.4000e-004**	**1.4200e-003**	**0.0000**	**4.6000e-004**	**0.0000**	**4.7000e-004**	**1.2000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.3690**	**0.3690**	**1.0000e-005**	**0.0000**	**0.3692**

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	6.6000e-003	0.0643	0.0515	1.0000e-004		3.1100e-003	3.1100e-003		2.8900e-003	2.8900e-003	0.0000	8.4976	8.4976	2.3900e-003	0.0000	8.5572
Total	**6.6000e-003**	**0.0643**	**0.0515**	**1.0000e-004**		**3.1100e-003**	**3.1100e-003**		**2.8900e-003**	**2.8900e-003**	**0.0000**	**8.4976**	**8.4976**	**2.3900e-003**	**0.0000**	**8.5572**

3.2 Demolition - 2022

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	2.1000e-004	1.4000e-004	1.4200e-003	0.0000	4.6000e-004	0.0000	4.7000e-004	1.2000e-004	0.0000	1.3000e-004	0.0000	0.3690	0.3690	1.0000e-005	0.0000	0.3692
Total	**2.1000e-004**	**1.4000e-004**	**1.4200e-003**	**0.0000**	**4.6000e-004**	**0.0000**	**4.7000e-004**	**1.2000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.3690**	**0.3690**	**1.0000e-005**	**0.0000**	**0.3692**

3.3 Site Preparation - 2022

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					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0317	0.3308	0.1970	3.8000e-004		0.0161	0.0161		0.0148	0.0148	0.0000	33.4394	33.4394	0.0108	0.0000	33.7098
Total	**0.0317**	**0.3308**	**0.1970**	**3.8000e-004**	**0.1807**	**0.0161**	**0.1968**	**0.0993**	**0.0148**	**0.1142**	**0.0000**	**33.4394**	**33.4394**	**0.0108**	**0.0000**	**33.7098**

3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-003	6.6000e-004	6.8100e-003	2.0000e-005	2.2300e-003	1.0000e-005	2.2400e-003	5.9000e-004	1.0000e-005	6.1000e-004	0.0000	1.7711	1.7711	4.0000e-005	0.0000	1.7723
Total	**1.0000e-003**	**6.6000e-004**	**6.8100e-003**	**2.0000e-005**	**2.2300e-003**	**1.0000e-005**	**2.2400e-003**	**5.9000e-004**	**1.0000e-005**	**6.1000e-004**	**0.0000**	**1.7711**	**1.7711**	**4.0000e-005**	**0.0000**	**1.7723**

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					0.0813	0.0000	0.0813	0.0447	0.0000	0.0447	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0317	0.3308	0.1970	3.8000e-004		0.0161	0.0161		0.0148	0.0148	0.0000	33.4394	33.4394	0.0108	0.0000	33.7097
Total	**0.0317**	**0.3308**	**0.1970**	**3.8000e-004**	**0.0813**	**0.0161**	**0.0974**	**0.0447**	**0.0148**	**0.0595**	**0.0000**	**33.4394**	**33.4394**	**0.0108**	**0.0000**	**33.7097**

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-003	6.6000e-004	6.8100e-003	2.0000e-005	2.2300e-003	1.0000e-005	2.2400e-003	5.9000e-004	1.0000e-005	6.1000e-004	0.0000	1.7711	1.7711	4.0000e-005	0.0000	1.7723
Total	**1.0000e-003**	**6.6000e-004**	**6.8100e-003**	**2.0000e-005**	**2.2300e-003**	**1.0000e-005**	**2.2400e-003**	**5.9000e-004**	**1.0000e-005**	**6.1000e-004**	**0.0000**	**1.7711**	**1.7711**	**4.0000e-005**	**0.0000**	**1.7723**

3.4 Grading - 2022

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					1.3037	0.0000	1.3037	0.3536	0.0000	0.3536	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2900	3.1075	2.3233	4.9700e-003		0.1308	0.1308		0.1203	0.1203	0.0000	436.2768	436.2768	0.1411	0.0000	439.8043
Total	**0.2900**	**3.1075**	**2.3233**	**4.9700e-003**	**1.3037**	**0.1308**	**1.4344**	**0.3536**	**0.1203**	**0.4739**	**0.0000**	**436.2768**	**436.2768**	**0.1411**	**0.0000**	**439.8043**

3.4 Grading - 2022

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	8.9200e-003	5.9000e-003	0.0605	1.7000e-004	0.0198	1.2000e-004	0.0199	5.2700e-003	1.1000e-004	5.3800e-003	0.0000	15.7433	15.7433	4.0000e-004	0.0000	15.7533
Total	**8.9200e-003**	**5.9000e-003**	**0.0605**	**1.7000e-004**	**0.0198**	**1.2000e-004**	**0.0199**	**5.2700e-003**	**1.1000e-004**	**5.3800e-003**	**0.0000**	**15.7433**	**15.7433**	**4.0000e-004**	**0.0000**	**15.7533**

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					0.5866	0.0000	0.5866	0.1591	0.0000	0.1591	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2900	3.1075	2.3233	4.9700e-003		0.1308	0.1308		0.1203	0.1203	0.0000	436.2763	436.2763	0.1411	0.0000	439.8038
Total	**0.2900**	**3.1075**	**2.3233**	**4.9700e-003**	**0.5866**	**0.1308**	**0.7174**	**0.1591**	**0.1203**	**0.2794**	**0.0000**	**436.2763**	**436.2763**	**0.1411**	**0.0000**	**439.8038**

3.4 Grading - 2022

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	8.9200e-003	5.9000e-003	0.0605	1.7000e-004	0.0198	1.2000e-004	0.0199	5.2700e-003	1.1000e-004	5.3800e-003	0.0000	15.7433	15.7433	4.0000e-004	0.0000	15.7533
Total	**8.9200e-003**	**5.9000e-003**	**0.0605**	**1.7000e-004**	**0.0198**	**1.2000e-004**	**0.0199**	**5.2700e-003**	**1.1000e-004**	**5.3800e-003**	**0.0000**	**15.7433**	**15.7433**	**4.0000e-004**	**0.0000**	**15.7533**

3.5 Building Construction - 2022

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	0.0171	0.1562	0.1636	2.7000e-004		8.0900e-003	8.0900e-003		7.6100e-003	7.6100e-003	0.0000	23.1725	23.1725	5.5500e-003	0.0000	23.3113
Total	**0.0171**	**0.1562**	**0.1636**	**2.7000e-004**		**8.0900e-003**	**8.0900e-003**		**7.6100e-003**	**7.6100e-003**	**0.0000**	**23.1725**	**23.1725**	**5.5500e-003**	**0.0000**	**23.3113**

3.5 Building Construction - 2022

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	5.6000e-004	0.0203	3.7300e-003	5.0000e-005	1.2000e-003	5.0000e-005	1.2500e-003	3.5000e-004	5.0000e-005	4.0000e-004	0.0000	4.8811	4.8811	2.2000e-004	0.0000	4.8867
Worker	1.1100e-003	7.4000e-004	7.5600e-003	2.0000e-005	2.4800e-003	2.0000e-005	2.4900e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9679	1.9679	5.0000e-005	0.0000	1.9692
Total	**1.6700e-003**	**0.0210**	**0.0113**	**7.0000e-005**	**3.6800e-003**	**7.0000e-005**	**3.7400e-003**	**1.0100e-003**	**6.0000e-005**	**1.0700e-003**	**0.0000**	**6.8490**	**6.8490**	**2.7000e-004**	**0.0000**	**6.8559**

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	0.0171	0.1562	0.1636	2.7000e-004		8.0900e-003	8.0900e-003		7.6100e-003	7.6100e-003	0.0000	23.1725	23.1725	5.5500e-003	0.0000	23.3113
Total	**0.0171**	**0.1562**	**0.1636**	**2.7000e-004**		**8.0900e-003**	**8.0900e-003**		**7.6100e-003**	**7.6100e-003**	**0.0000**	**23.1725**	**23.1725**	**5.5500e-003**	**0.0000**	**23.3113**

3.5 Building Construction - 2022

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	5.6000e-004	0.0203	3.7300e-003	5.0000e-005	1.2000e-003	5.0000e-005	1.2500e-003	3.5000e-004	5.0000e-005	4.0000e-004	0.0000	4.8811	4.8811	2.2000e-004	0.0000	4.8867
Worker	1.1100e-003	7.4000e-004	7.5600e-003	2.0000e-005	2.4800e-003	2.0000e-005	2.4900e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9679	1.9679	5.0000e-005	0.0000	1.9692
Total	**1.6700e-003**	**0.0210**	**0.0113**	**7.0000e-005**	**3.6800e-003**	**7.0000e-005**	**3.7400e-003**	**1.0100e-003**	**6.0000e-005**	**1.0700e-003**	**0.0000**	**6.8490**	**6.8490**	**2.7000e-004**	**0.0000**	**6.8559**

3.6 Paving - 2022

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	7.7200e-003	0.0779	0.1021	1.6000e-004		3.9800e-003	3.9800e-003		3.6600e-003	3.6600e-003	0.0000	14.0193	14.0193	4.5300e-003	0.0000	14.1326
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.7200e-003**	**0.0779**	**0.1021**	**1.6000e-004**		**3.9800e-003**	**3.9800e-003**		**3.6600e-003**	**3.6600e-003**	**0.0000**	**14.0193**	**14.0193**	**4.5300e-003**	**0.0000**	**14.1326**

3.6 Paving - 2022

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	5.9000e-004	3.9000e-004	3.9700e-003	1.0000e-005	1.3000e-003	1.0000e-005	1.3100e-003	3.5000e-004	1.0000e-005	3.5000e-004	0.0000	1.0332	1.0332	3.0000e-005	0.0000	1.0338
Total	**5.9000e-004**	**3.9000e-004**	**3.9700e-003**	**1.0000e-005**	**1.3000e-003**	**1.0000e-005**	**1.3100e-003**	**3.5000e-004**	**1.0000e-005**	**3.5000e-004**	**0.0000**	**1.0332**	**1.0332**	**3.0000e-005**	**0.0000**	**1.0338**

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	7.7200e-003	0.0779	0.1021	1.6000e-004		3.9800e-003	3.9800e-003		3.6600e-003	3.6600e-003	0.0000	14.0193	14.0193	4.5300e-003	0.0000	14.1326
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.7200e-003**	**0.0779**	**0.1021**	**1.6000e-004**		**3.9800e-003**	**3.9800e-003**		**3.6600e-003**	**3.6600e-003**	**0.0000**	**14.0193**	**14.0193**	**4.5300e-003**	**0.0000**	**14.1326**

3.6 Paving - 2022

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	5.9000e-004	3.9000e-004	3.9700e-003	1.0000e-005	1.3000e-003	1.0000e-005	1.3100e-003	3.5000e-004	1.0000e-005	3.5000e-004	0.0000	1.0332	1.0332	3.0000e-005	0.0000	1.0338
Total	**5.9000e-004**	**3.9000e-004**	**3.9700e-003**	**1.0000e-005**	**1.3000e-003**	**1.0000e-005**	**1.3100e-003**	**3.5000e-004**	**1.0000e-005**	**3.5000e-004**	**0.0000**	**1.0332**	**1.0332**	**3.0000e-005**	**0.0000**	**1.0338**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

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

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.525564	0.032657	0.173666	0.133675	0.020482	0.005111	0.020758	0.078919	0.001825	0.001263	0.004259	0.001112	0.000710

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas 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					
Other Non-Asphalt Surfaces	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**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas 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					
Other Non-Asphalt Surfaces	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**	**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			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

	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	1.3485	3.0000e-005	3.3300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.4700e-003	6.4700e-003	2.0000e-005	0.0000	6.8900e-003
Unmitigated	1.3485	3.0000e-005	3.3300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.4700e-003	6.4700e-003	2.0000e-005	0.0000	6.8900e-003

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	0.3289					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0193					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.1000e-004	3.0000e-005	3.3300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.4700e-003	6.4700e-003	2.0000e-005	0.0000	6.8900e-003
Total	**1.3485**	**3.0000e-005**	**3.3300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**6.4700e-003**	**6.4700e-003**	**2.0000e-005**	**0.0000**	**6.8900e-003**

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	0.3289					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0193					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.1000e-004	3.0000e-005	3.3300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.4700e-003	6.4700e-003	2.0000e-005	0.0000	6.8900e-003
Total	**1.3485**	**3.0000e-005**	**3.3300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**6.4700e-003**	**6.4700e-003**	**2.0000e-005**	**0.0000**	**6.8900e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

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

7.2 Water by Land Use

Unmitigated

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

7.2 Water by Land Use

Mitigated

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

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

8.2 Waste by Land Use

Unmitigated

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

Mitigated

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

9.0 Operational Offroad

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

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 Resources Information

Lindmore Irrigation District

Multibenefit Basin Project

Biological Resources Information

California Natural Diversity Database (CNDDB) Report – Nine Quad Element Search

- A thorough search of the CNDDB for published accounts of special status plant and animal species was conducted for the Cairns Corner 7.5-minute quadrangles that contains the Project site in its entirety, and for the eight surrounding quadrangles: Visalia, Exeter, Rocky Hill, Lindsay, Porterville, Woodville, Tipton, and Tulare.
- Report ran on October 2, 2021.
    - 22 special status animal species have been documented in the Area of Potential Effect (APE).
    - With mitigation measures outlined in Chapter 4, potential impacts would be reduced to less than significant.
    - 14 special status plant species have been documented in the Project.
        - Mitigation is not warranted for special status plants due to ongoing disturbance and/or absence of suitable habitat.

IPaC System - Explore Locations Resources

- Report ran on November 17, 2021.
- There are no critical habitats in the Project APE.

Natural Resource Conservation Services - Custom Soil Resource Report

- Report ran November 17, 2021.
    - Soils in the Project APE include Exeter loam, Flamen loam and Quonal-Lewis Association soils.

California Natural Diversity Database Report – 9 Quad Element Search

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Cairns Corner (3611922) OR Visalia (3611933) OR Exeter (3611932) OR Rocky Hill (3611931) OR Lindsay (3611921) OR Porterville (3611911) OR Woodville (3611912) OR Tipton (3611913) OR Tulare (3611923))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
alkali-sink goldfields *Lasthenia chrysantha*	PDAST5L030	None	None	G2	S2	1B.1
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
An andrenid bee *Andrena macswaini*	IIHYM35130	None	None	G2	S2	
blunt-nosed leopard lizard *Gambelia sila*	ARACF07010	Endangered	Endangered	G1	S1	FP
brittlescale *Atriplex depressa*	PDCHE042L0	None	None	G2	S2	1B.2
calico monkeyflower *Diplacus pictus*	PDSCR1B240	None	None	G2	S2	1B.2
California alkali grass *Puccinellia simplex*	PMPOA53110	None	None	G3	S2	1B.2
California jewelflower *Caulanthus californicus*	PDBRA31010	Endangered	Endangered	G1	S1	1B.1
California satintail *Imperata brevifolia*	PMPOA3D020	None	None	G4	S3	2B.1
Crotch bumble bee *Bombus crotchii*	IIHYM24480	None	None	G3G4	S1S2	
Earlimart orache *Atriplex cordulata var. erecticaulis*	PDCHE042V0	None	None	G3T1	S1	1B.2
foothill yellow-legged frog *Rana boylii*	AAABH01050	None	Endangered	G3	S3	SSC
Great Valley Valley Oak Riparian Forest *Great Valley Valley Oak Riparian Forest*	CTT61430CA	None	None	G1	S1.1	
Hopping's blister beetle *Lytta hoppingi*	IICOL4C010	None	None	G1G2	S1S2	
lesser saltscale *Atriplex minuscula*	PDCHE042M0	None	None	G2	S2	1B.1
loggerhead shrike *Lanius ludovicianus*	ABPBR01030	None	None	G4	S4	SSC
molestan blister beetle *Lytta molesta*	IICOL4C030	None	None	G2	S2	
Moody's gnaphosid spider *Talanites moodyae*	ILARA98020	None	None	G1G2	S1S2	
Morrison's blister beetle *Lytta morrisoni*	IICOL4C040	None	None	G1G2	S1S2	

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
Northern California legless lizard *Anniella pulchra*	ARACC01020	None	None	G3	S3	SSC
Northern Claypan Vernal Pool *Northern Claypan Vernal Pool*	CTT44120CA	None	None	G1	S1.1	
pallid bat *Antrozous pallidus*	AMACC10010	None	None	G4	S3	SSC
recurved larkspur *Delphinium recurvatum*	PDRAN0B1J0	None	None	G2?	S2?	1B.2
San Joaquin adobe sunburst *Pseudobahia peirsonii*	PDAST7P030	Threatened	Endangered	G1	S1	1B.1
San Joaquin kit fox *Vulpes macrotis mutica*	AMAJA03041	Endangered	Threatened	G4T2	S2	
spiny-sepaled button-celery *Eryngium spinosepalum*	PDAPI0Z0Y0	None	None	G2	S2	1B.2
Springville clarkia *Clarkia springvillensis*	PDONA05120	Threatened	Endangered	G2	S2	1B.2
striped adobe-lily *Fritillaria striata*	PMLIL0V0K0	None	Threatened	G1	S1	1B.1
subtle orache *Atriplex subtilis*	PDCHE042T0	None	None	G1	S1	1B.2
Swainson's hawk *Buteo swainsoni*	ABNKC19070	None	Threatened	G5	S3	
Tipton kangaroo rat *Dipodomys nitratoides nitratoides*	AMAFD03152	Endangered	Endangered	G3T1T2	S1S2	
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	IICOL48011	Threatened	None	G3T2	S3	
Valley Sacaton Grassland *Valley Sacaton Grassland*	CTT42120CA	None	None	G1	S1.1	
vernal pool fairy shrimp *Branchinecta lynchi*	ICBRA03030	Threatened	None	G3	S3	
western mastiff bat *Eumops perotis californicus*	AMACD02011	None	None	G4G5T4	S3S4	SSC
western pond turtle *Emys marmorata*	ARAAD02030	None	None	G3G4	S3	SSC
western spadefoot *Spea hammondii*	AAABF02020	None	None	G2G3	S3	SSC
western yellow-billed cuckoo *Coccyzus americanus occidentalis*	ABNRB02022	Threatened	Endangered	G5T2T3	S1	

Record Count: 39

IPaC System - Explore Locations Resources

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: November 17, 2021
Consultation Code: 08ESMF00-2022-SLI-0393
Event Code: 08ESMF00-2022-E-01188
Project Name: Lindmore Irrigation District Project

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

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, 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: 08ESMF00-2022-SLI-0393
Event Code: Some(08ESMF00-2022-E-01188)
Project Name: Lindmore Irrigation District Project
Project Type: WATER QUALITY MODIFICATION
Project Description: The Lindmore Irrigation District acquired approximately 320 acres of property at the southwest corner of Avenue 212 and Road 188 in Lindsay CA to provide for sustainable management of surface and groundwater. The Project involves several phases of construction of groundwater recharge basin facilities. The first phase will involve 80 acres of basins that will be constructed with habitat for migrating birds

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@36.167207250000004,-119.14846221749423,14z

Counties: Tulare County, California

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 Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

Mammals

NAME	STATUS
San Joaquin Kit Fox *Vulpes macrotis mutica* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2873	Endangered
Tipton Kangaroo Rat *Dipodomys nitratoides nitratoides* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7247	Endangered

Reptiles

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

There is **final** critical habitat for this species. The location of the critical habitat is not available.
Species profile: https://ecos.fws.gov/ecp/species/2891

California Tiger Salamander *Ambystoma californiense*	Threatened

Population: U.S.A. (Central CA DPS)
There is **final** critical habitat for this species. The location of the critical habitat is not available.
Species profile: https://ecos.fws.gov/ecp/species/2076

Fishes

NAME	STATUS
Delta Smelt *Hypomesus transpacificus*	Threatened

There is **final** critical habitat for this species. The location of the critical habitat is not available.
Species profile: https://ecos.fws.gov/ecp/species/321

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp *Branchinecta lynchi*	Threatened

There is **final** critical habitat for this species. The location of the critical habitat is not available.
Species profile: https://ecos.fws.gov/ecp/species/498

Critical habitats

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

Natural Resource Conservation Services - Custom Soil Resource Report

United States Department of Agriculture

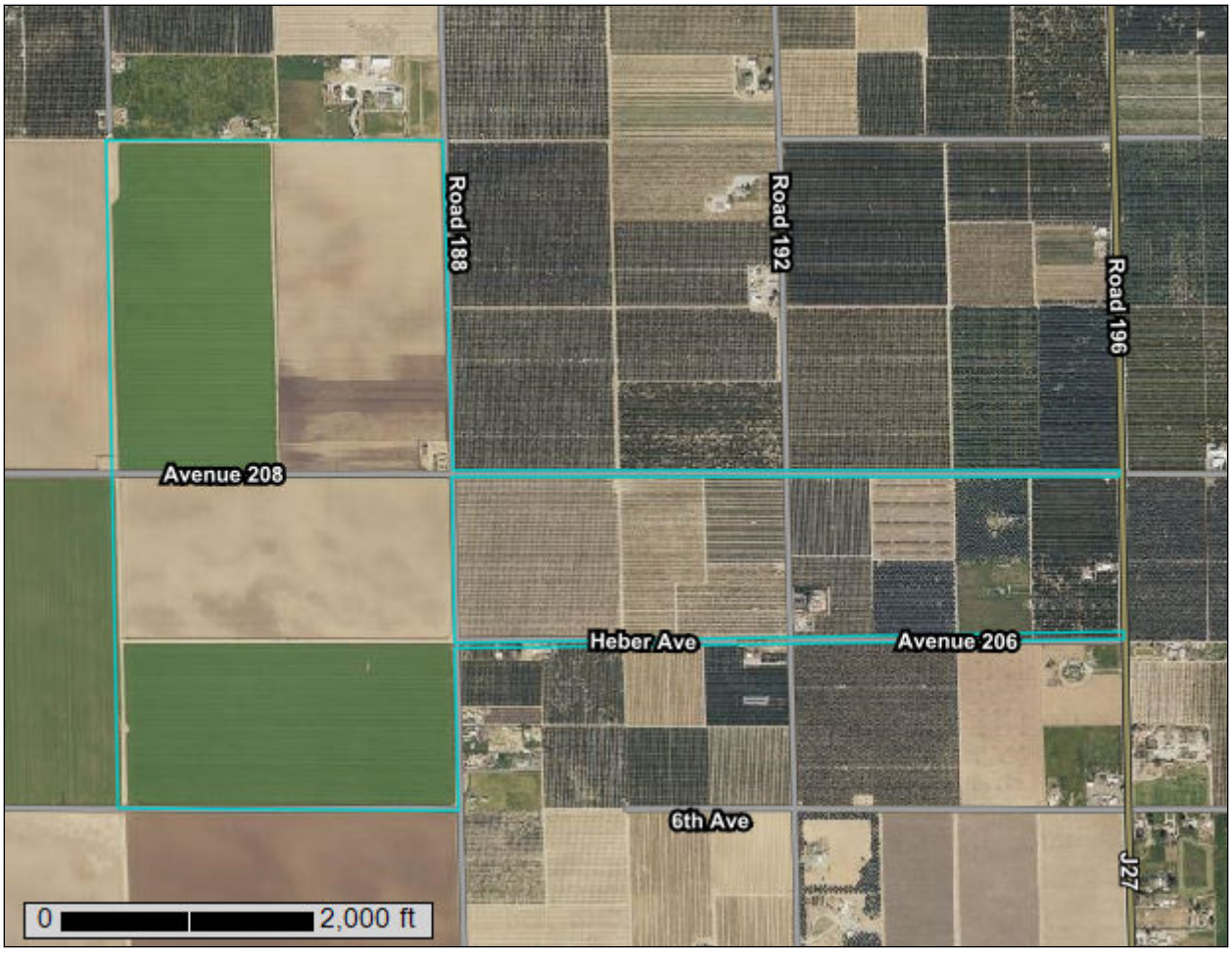
NRCS

Natural Resources Conservation Service

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

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

Lindmore Irrigation District Project



November 17, 2021

Preface

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

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

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

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

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

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

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

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Contents

How Soil Surveys Are Made

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

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

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

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

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

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

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

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

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

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

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

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

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

Soil Map

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

Custom Soil Resource Report
Soil Map

Map Scale: 1:13,600 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 200 400 800 1200

Feet: 0 500 1000 2000 3000

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

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: Tulare County, Western Part, California
Survey Area Data: Version 15, Sep 3, 2021

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

Date(s) aerial images were photographed: Mar 17, 2019—Mar 24, 2019

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
114	Exeter loam, 0 to 2 percent slopes	33.0	9.8%
116	Flamen loam, 0 to 2 percent slopes	13.8	4.1%
132	Quonal-Lewis association, 0 to 2 percent slopes	290.1	86.1%
Totals for Area of Interest		**336.9**	**100.0%**

Map Unit Descriptions

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

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

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

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

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

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

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

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

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

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

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

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

Tulare County, Western Part, California

114—Exeter loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hp4j
Elevation: 250 to 570 feet
Mean annual precipitation: 8 to 12 inches
Mean annual air temperature: 63 to 64 degrees F
Frost-free period: 250 to 300 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Exeter, 0-2% slopes, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Exeter, 0-2% Slopes

Setting

Landform: Fan remnants
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granitic rock sources

Typical profile

Ap - 0 to 9 inches: loam
Bt1 - 9 to 26 inches: sandy clay loam
Bt2 - 26 to 28 inches: clay loam
Btqm - 28 to 46 inches: indurated
2Bt - 46 to 72 inches: stratified very gravelly loamy coarse sand to gravelly loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 40 inches to duripan
Drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.01 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Very rare
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.4 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: C
Ecological site: R017XY902CA - Duripan Vernal Pools
Hydric soil rating: No

Minor Components

Hanford
Percent of map unit: 4 percent
Landform: Alluvial fans, flood plains
Hydric soil rating: No

Colpien
Percent of map unit: 3 percent
Landform: Fan remnants
Hydric soil rating: No

San joaquin
Percent of map unit: 3 percent
Landform: Fan remnants
Hydric soil rating: No

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

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

Unnamed, ponded
Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

116—Flamen loam, 0 to 2 percent slopes

Map Unit Setting
National map unit symbol: hp4l
Elevation: 260 to 550 feet
Mean annual precipitation: 8 to 12 inches
Mean annual air temperature: 63 to 64 degrees F
Frost-free period: 250 to 300 days
Farmland classification: Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

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

Description of Flamen

Setting

Landform: Fan remnants
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granitic rock sources

Typical profile

Ap1 - 0 to 17 inches: loam
Ap2 - 17 to 28 inches: loam
Btk - 28 to 43 inches: loam
2Btkqm - 43 to 72 inches: cemented

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 40 to 60 inches to duripan
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Very rare
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 12.0
Available water supply, 0 to 60 inches: Moderate (about 6.6 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Ecological site: R017XY902CA - Duripan Vernal Pools
Hydric soil rating: No

Minor Components

Exeter

Percent of map unit: 3 percent
Landform: Fan remnants
Hydric soil rating: No

San joaquin

Percent of map unit: 3 percent
Landform: Fan remnants
Hydric soil rating: No

Hanford

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

Calgro

Percent of map unit: 2 percent

Landform: Fan remnants
Hydric soil rating: No

Colpien

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

Centerville

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

Unnamed, ponded

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

132—Quonal-Lewis association, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hp53
Elevation: 280 to 400 feet
Mean annual precipitation: 9 to 12 inches
Mean annual air temperature: 63 to 64 degrees F
Frost-free period: 250 to 300 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Quonal and similar soils: 70 percent
Lewis and similar soils: 15 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Quonal

Setting

Landform: Fan remnants
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Formed by the chemical and mechanical alteration of the lewis series which originally formed in alluvium from mixed rock sources

Typical profile

Ap1 - 0 to 7 inches: silty clay
Ap2 - 7 to 16 inches: gravelly clay
Ap3 - 16 to 41 inches: gravelly clay
2Bkqmb - 41 to 44 inches: duripan
2Bkb - 44 to 62 inches: stratified sandy loam to silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 40 to 60 inches to duripan
Drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.01 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Very rare
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 5 percent
Maximum salinity: Nonsaline to moderately saline (0.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 50.0
Available water supply, 0 to 60 inches: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D
Ecological site: R017XY902CA - Duripan Vernal Pools
Hydric soil rating: No

Description of Lewis

Setting

Landform: Fan remnants
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed

Typical profile

A - 0 to 5 inches: silty clay loam
Btkn - 5 to 25 inches: clay
2Bkqm - 25 to 39 inches: cemented
3Bkq - 39 to 60 inches: stratified sandy loam to clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 2 to 6 inches to natric; 20 to 40 inches to duripan
Drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.01 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Very rare
Frequency of ponding: None
Calcium carbonate, maximum content: 8 percent
Maximum salinity: Moderately saline to strongly saline (8.0 to 40.0 mmhos/cm)
Sodium adsorption ratio, maximum: 100.0
Available water supply, 0 to 60 inches: Very low (about 0.9 inches)

Interpretive groups

Land capability classification (irrigated): 6s

Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Exeter
Percent of map unit: 4 percent
Landform: Fan remnants
Hydric soil rating: No

Colpien
Percent of map unit: 3 percent
Landform: Fan remnants
Hydric soil rating: No

Flamen
Percent of map unit: 3 percent
Landform: Fan remnants
Hydric soil rating: No

Tujunga
Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

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

Unnamed, ponded
Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

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Appendix C: Cultural Resources Information

Lindmore Irrigation District

Multi-Benefit Basin Project

Cultural Resources Information

Southern San Joaquin Valley Information Center, CSU Bakersfield, California Historical Resources Information System: Record Search 21-422, dated November 8, 2021.

- There have been no previous cultural resource studies conducted within the project area or within the one-half mile radius.
- There are no recorded resources within the project area, or within the 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, California Inventory of Historic Resources, or the California State Historic Landmarks.

Native American Heritage Commission (NAHC): Sacred Lands File & Native American Contacts List Request, dated December 9, 2021.

- A Record Search of the NAHC Sacred Lands File was completed for the Area of Potential Effect (APE) with negative results.
- A list of six tribal contacts was provided, and letters to the six tribal contacts were then mailed out December 10, 2021.
- No additional responses or additional cultural information were received by Lindmore Irrigation District.

AB 52 Consultation pursuant to Public Resource Code Section 21080.3.1

- Lindmore Irrigation District has not received any request letters from any Native American Tribes pursuant to Public Resource Code Section 21080.3.3 AB 52.

CHRIS – Record Search Results

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

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

To: Jacqueline Lancaster
Provost & Pritchard Consulting Group
130 N. Garden St.
Visalia, CA 93291

Record Search 21-422

Date: November 08, 2021

Re: Lindmore Irrigation District Multi-Benefit Basin Project

County: Tulare

Map(s): Cairns Corner 7.5'

CULTURAL RESOURCES RECORDS SEARCH

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

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

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

According to the information in our files, there has been no cultural resource studies in the Project Area, or in the one-half mile radius.

Record Search 21-421

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

There are no recorded resources within the project area, or within the 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, California Inventory of Historic Resources, or the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand this project includes several phases of construction, including equipment mobilization, earthwork for excavation of recharge/regulation basins, and construction of basin perimeter berms of no greater than six feet in external height. Further, we understand the project site is vacant. Because none of this project area has been previously studied for cultural resources, it is unknown if any are present. As such, prior to ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey 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 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:

Jeremy E David, Assistant Coordinator **Date**: November 8, 2021

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

NAHC – Sacred Lands File Search Results

NATIVE AMERICAN HERITAGE COMMISSION

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

December 9, 2021

Jackie Lancaster
Provost & Pritchard

Via Email to: jlancaster@ppeng.com

Re: Lindmore Irrigation District Multi-Benefit Basin Project, Tulare County

Dear Ms. Lancaster:

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

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

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

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

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Tulare County
12/9/2021

Big Sandy Rancheria of Western Mono Indians
Elizabeth Kipp, Chairperson
P.O. Box 337 — Western Mono
Auberry, CA, 93602
Phone: (559) 374 - 0066
Fax: (559) 374-0055
lkipp@bsrnation.com

Santa Rosa Rancheria Tachi Yokut Tribe
Leo Sisco, Chairperson
P.O. Box 8 — Southern Valley
Lemoore, CA, 93245 — Yokut
Phone: (559) 924 - 1278
Fax: (559) 924-3583

Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589 — Yokut
Porterville, CA, 93258
Phone: (559) 781 - 4271
Fax: (559) 781-4610
neil.peyron@tulerivertribe-nsn.gov

Tule River Indian Tribe
Kerri Vera, Environmental Department
P. O. Box 589 — Yokut
Porterville, CA, 93258
Phone: (559) 783 - 8892
Fax: (559) 783-8932
kerri.vera@tulerivertribe-nsn.gov

Tule River Indian Tribe
Joey Garfield, Tribal Archaeologist
P. O. Box 589 — Yokut
Porterville, CA, 93258
Phone: (559) 783 - 8892
Fax: (559) 783-8932
joey.garfield@tulerivertribe-nsn.gov

Wuksache Indian Tribe/Eshom Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct. — Foothill Yokut
Salinas, CA, 93906 — Mono
Phone: (831) 443 - 9702
kwood8934@aol.com

This list is current only as of the date of this document. 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 Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Lindmore Irrigation District Multi-Benefit Basin Project, Tulare County.

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PROVOST& PRITCHARD
CONSULTING GROUP
An Employee Owned Company

455 W. Fir Avenue
Clovis, CA 93611-0242
Tel: (559) 449-2700
Fax: (559) 449-2715
www.ppeng.com

December 10, 2021

Wuksache Indian Tribe/Eshom
Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct.
Salinas, CA, 93906

Subject: **Notification for the Lindmore Irrigation District Multi Benefit Basin Project, Tulare County, CA.**

Dear Mr. Sisco:

Provost and Pritchard Consulting Group, is providing cultural resources services in support of the Lindmore Irrigation District Multi Benefit Basin Project.

The proposed Project involves the construction of a groundwater recharge basin facility with habitat for migrating birds on the first 80 acres of basins. The recharge water will be for use in the Lindmore Irrigation District (LID) efforts to sustainably manage surface water and groundwater for the benefit of District lands. Additionally, future construction of basins on the remaining 240 acres will occur during later phases. The 320 acres of proposed basins (APNs 198-100-008, 198-100-007, 198-100-006, and 198-110-002) are located at the southwest corner of Avenue 212 and Road in southwest Tulare County, southwest of the City of Lindsay near the Census Designated Place of Plainview. . These properties have historically been farmed and are currently fallowed. There are two potential tie-in locations of a 1-mile 36-inch diameter pipeline, placed a minimum of 36 inches below ground, and trench depth of approximately 6-8 feet deep, and approximately 7 to 8 feet wide. It is likely that the pipeline can be placed with the County right of way under a Longitudinal Encroachment Permit, from The County of Tulare. Should the pipeline be placed on private property, an easement with the landowner will be put in place.

Pipeline alternatives:

- Option 1: On Road 20 from Road 118 to Road 196;
- Option 2: On Heber Ave from Road 188 to Road 196.

The selected pipeline would tie into District facilities in Road 196. As it is unknown at this time which pipeline route will be selected, for the purposes of this document both options are being evaluated.

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) 636-1166, email (jlancaster@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,

Jacqueline Lancaster, Project Administrator

encl.: Topo Map, APE Map

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Santa Rosa Rancheria Tachi
Yokut Tribe
Leo Sisco, Chairperson
P.O. Box 8
Lemoore, CA, 93245

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December 10, 2021

Big Sandy Rancheria of
Western Mono Indians
Elizabeth Kipp, Chairperson
P.O. Box 337
Auberry, CA, 93602

Subject: Notification for the Lindmore Irrigation District Multi Benefit Basin Project, Tulare County, CA.

Dear Ms. Kipp:

Provost and Pritchard Consulting Group, is providing cultural resources services in support of the Lindmore Irrigation District Multi Benefit Basin Project.

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Tule River Indian Tribe
Joey Garfield, Tribal Archaeologist
P. O. Box 589
Porterville, CA, 93258

Subject: **Notification for the Lindmore Irrigation District Multi Benefit Basin Project, Tulare County, CA.**

Dear Mr. Garfield:

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Tule River Indian Tribe
Kerri Vera, Environmental
Department
P. O. Box 589
Porterville, CA, 93258

Subject: Notification for the Lindmore Irrigation District Multi Benefit Basin Project, Tulare County, CA.

Dear Ms. Vera:

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Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589
Porterville, CA 93258

Subject: **Notification for the Lindmore Irrigation District Multi Benefit Basin Project, Tulare County, CA.**

Dear Mr. Peyron:

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