

Farrell Road and Gibson Canyon Road Intersection Improvements Project

SOLANO COUNTY, CALIFORNIA

Draft Initial Study with Mitigated Negative Declaration



Prepared for:
Solano Irrigation District



810 Vaca Valley Parkway, Suite 201
Vacaville, CA 95688

October 2020

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**Mitigated Negative Declaration
Regarding Environmental Impact**

Pursuant to: Division 13, Public Resources Code

1. **Notice is Hereby Given** that the project described below has been reviewed pursuant to the provisions of the California Environmental Quality Act of 1970 (Public Resources Code 21100, et seq.) and a determination has been made that it will not have a significant effect upon the environment.
2. **Project Name:** Farrell Road and Gibson Canyon Road Intersection Improvements Project
3. **Description of Project:** The Project proposes to relocate an existing water transmission line, and two distribution lines at the intersection of Farrell Road and Gibson Canyon Road in unincorporated Solano County, California (Figure 1. Project Vicinity and Figure 2. Project Location). The purpose of the project is to relocate the water transmission line where it conflicts with the intersection improvements project to be completed by Solano County.

The portion of the existing 27” concrete cylinder transmission pipeline to be relocated begins approximately 80 feet south of the intersection of Gibson Canyon Road and Farrell Road and extends approximately 160 feet north west under the intersection within existing District easements. The pipeline would be relocated to begin approximately 80 feet south of the intersection and extend approximately 230 feet along the south side of Farrell Road, turn north and run under Farrell Road, then head east approximately 65 feet to connect to the existing main. An existing 10” water main that crosses Gibson Canyon Road just north of the intersection will be relocated approximately 50 feet north of the intersection or approximately 100 feet south of the intersection. Two existing 4 inch water main that run along the east edge of Gibson Canyon Road may be relocated approximately 10 feet west, into the existing paved area. All work will be contained within the area depicted in Figure 3.

Existing utilities will remain active during project construction. Partial or full road closures may be required to relocate the pipelines. Temporary construction easements and utility easements may be needed on a limited basis to accommodate the relocation of the pipeline. Construction is anticipated to last 30 days.

4. **Location of Project:** The project site is located within unincorporated Solano County in close proximity to the City of Vacaville city limits.
5. **Name and Address of Project Proponents:**

Solano Irrigation District
810 Vaca Valley Parkway, Suite 201
Vacaville, CA 95688

6. Mitigation Measures:

AQ-1: Adhere to the following Best Management Practices as recommended by the Yolo-Solano AQMD:

- Water all active construction sites as necessary.
- Haul trucks shall maintain at least 2 feet of freeboard.
- Cover all trucks hauling dirt, sand, or loose materials.
- Cover inactive storage piles.
- Sweep streets if visible soil material is carried out from the construction site.

BIO-1: Prior to initial ground disturbance activities, environmental awareness training will be given to all construction personnel by the Project biologist to brief them on how to recognize local special-status species. If any special-status species is detected, CDFW will be called for guidance before any construction activities are resumed. All personnel will be required to sign a form stating attendance of the environmental awareness training.

BIO-2: If feasible, vegetation removal should be conducted between September 1 and February 15 to avoid impacts on nesting birds. If construction activities, including vegetation removal, are scheduled to occur during the breeding season for migratory birds and raptors (generally between February 1 and August 31), the Project biologist will conduct nesting surveys before the start of construction. The nesting surveys should be conducted within 15 days before the initiation of construction activities (including tree removal) that are scheduled between February 1 and August 31. Surveys for active nests will occur in the Project area and trees within 50-feet of the work area. If no active nests are detected during these surveys, no additional mitigation is required.

If surveys indicate that migratory bird or raptor nests are present in the Project area, a no-disturbance buffer will be established around the sites to avoid disturbance or destruction of the nest site until after the breeding season or until after the Project biologist determines that the young have fledged. The extent of these buffers will be determined by the biologist (in coordination with CDFW) and will depend on the level of noise or construction disturbance, line-of-sight between the nest and disturbance, ambient levels of noise and other disturbances, and other topographic or artificial barriers. These factors will be analyzed to make an appropriate decision on buffer distances. Suitable buffer distances may vary by species.

BIO-3: All natural areas temporarily disturbed during Project construction will be restored onsite to pre-Project conditions or better prior to Project completion. All temporarily affected waters will be re-contoured to preconstruction conditions and seeded with a native seed mix. All hydroseed and plant mixes must consist of a biologist approved plant palette seed mix of native species sourced within the same ecoregion the Project area.

BIO-4: The Project will impact an ephemeral swale, a jurisdictional water of the State and CDFW habitat. The District will consult with CDFW and obtain a 1602 Streambed Alteration Agreement prior to construction.

- BIO-5:** Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.
- BIO-6:** The contractor must not apply rodenticide or herbicide within the BSA during construction.
- BIO-7:** All food-related trash must be disposed of in closed containers and must be removed from the Project Area daily. Construction personnel must not feed or otherwise attract wildlife to the Project area.
- BIO-8:** If wildlife species are encountered during construction, construction will temporarily stop within the area of discovery. Work will not resume in the area of discovery until the animal has left the area on its own accord and unharmed.
- CR-1:** If previously unidentified cultural materials are unearthed during construction, work shall be halted within 100 feet of the area until a qualified archaeologist can assess the significance of the find and develop a plan for documentation and removal of resources, if necessary. This buffer can be reduced or increased, based on the type of discovery. Additional archaeological survey will be needed if project limits are extended beyond the present survey limits.
- CR-2:** Section 5097.94 of the PRC and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide method and means for the appropriate handling of such remains. If human remains are encountered, work should halt within 100 feet of the find and the County Coroner should be notified immediately. Concurrently, an archaeologist should be contacted to assess the find. If the human remains are determined to be of Native American origin, the Coroner must notify the NAHC of the finding within twenty-four hours of positive identification. CEQA details steps to be taken if human burials are of Native American origin.
- GEO-1:** Prior to the start of construction, all construction personnel would receive paleontological sensitivity training, detailing the types of paleontological resources that may be encountered and procedures to follow if a find should occur.
- GEO-2:** If paleontological resources (i.e., fossils) are discovered during ground-disturbing activities, Solano Irrigation District project contact will immediately be notified, and will ensure that their contractors shall stop work in that area and within 100 feet of the find until a qualified paleontologist can assess the significance of the find and develop appropriate treatment measures. Treatment measures will be made in consultation with the Solano Irrigation District and Solano County.

7. A copy of the initial study regarding the environmental effect of this project is on file at:

Solano Irrigation District
810 Vaca Valley Parkway, Suite 201
Vacaville, CA 95688

This study was:

- Adopted as presented.
- Adopted with changes. Specific modifications and supporting reasons are attached.

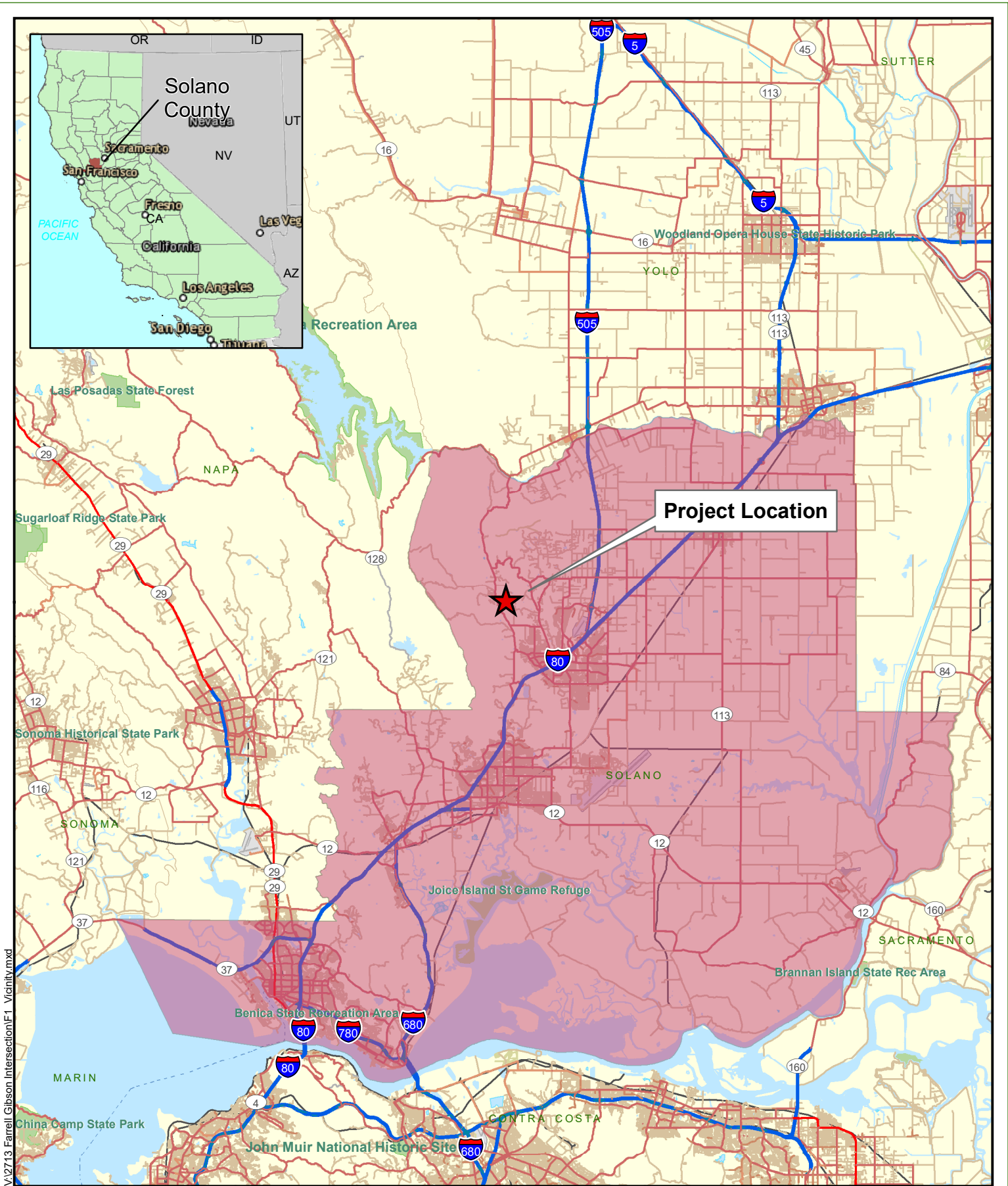
8. *Determination:* On the basis of the Initial Study of Environmental Impact, comments received on the proposal and our own knowledge and independent research:

We find the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION is hereby adopted.

We find that the project COULD have a significant effect on the environment but will not in this case, because of attached mitigation measures described in Item 6 above which are by this reference made of conditions of project approval. A MITIGATED NEGATIVE DECLARATION is hereby adopted.

Cary Keaten, General Manager
Solano Irrigation District

Date: _____



V:\2713 Farrell Gibson Intersection\F1_vicinity.mxd

Source: ESRI 2008; Dokken Engineering 10/21/2020; Created By: astorck



0 5 10 15 Miles

FIGURE 1
Project Vicinity

Farrell and Gibson Canyon Road Intersection Improvements Project
Solano County Irrigation District
Solano County, California



V:\2713 Farrell Gibson Intersection\F2 Project_Location.mxd

Source: USA Topo Maps Online; Dokken Engineering 10/21/2020; Created By: astorck

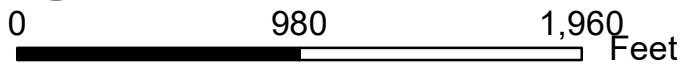
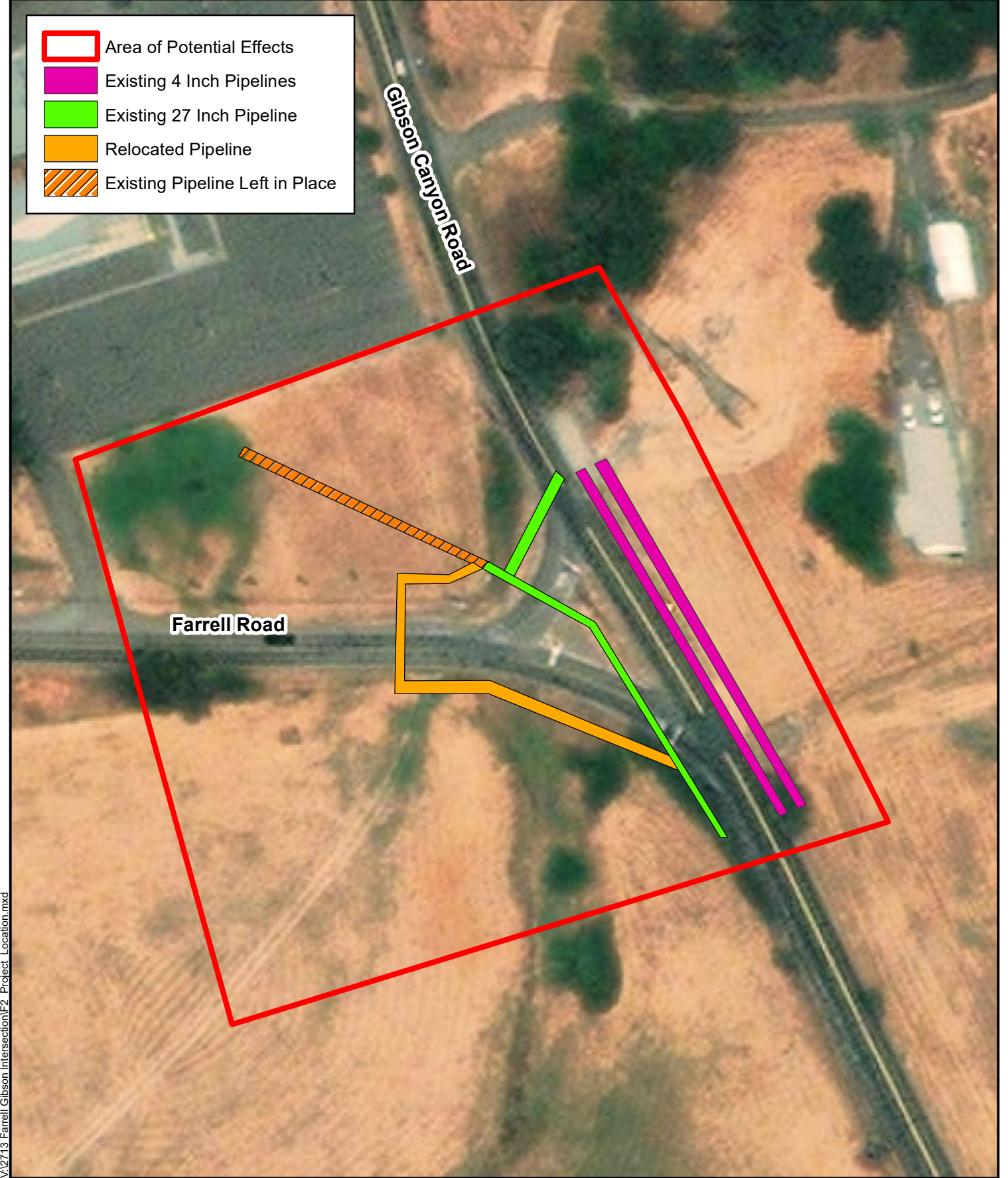


FIGURE 2
Project Location

Farrell and Gibson Canyon Road Intersection Improvement Project
Solano County, California



- Area of Potential Effects
- Existing 4 Inch Pipelines
- Existing 27 Inch Pipeline
- Relocated Pipeline
- Existing Pipeline Left in Place

V:\2713 Farrell Gibson Intersection\F2 Project_Location.mxd

Source: USA Topo Maps Online; Dokken Engineering 10/21/2020; Created By: astorck

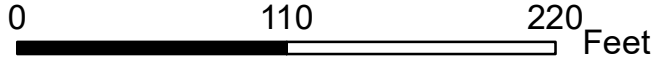


FIGURE 3
Project Features

Farrell and Gibson Canyon Road Intersection Improvement Project
Solano County, California

CEQA Initial Study

1. **Notice is Hereby Given** that the project described below has been reviewed pursuant to the provisions of the California Environmental Quality Act of 1970 (Public Resources Code 21100, et seq.) and a determination has been made that it will not have a significant effect upon the environment.
2. **Project Name:** Farrell Road/Gibson Canyon Road Intersection Improvements Project
9. **Description of Project:** The Project proposes to relocate an existing water transmission line, and two distribution lines at the intersection of Farrell Road and Gibson Canyon Road in unincorporated Solano County, California (Figure 1. Project Vicinity and Figure 2. Project Location). The purpose of the project is to relocate the water transmission line where it conflicts with the intersection improvements project to be completed by Solano County.

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Existing utilities will remain active during project construction. Partial or full road closures may be required to relocate the pipelines. Temporary construction easements and utility easements may be needed on a limited basis to accommodate the relocation of the pipeline. Construction is anticipated to last 30 days.

3. **Lead Agency:** Solano Irrigation District
810 Vaca Valley Parkway, Suite 201
Vacaville, CA 95688
4. **Contact Person:** Nancy McWilliams, Solano Irrigation District
707.455.4018
5. **Project Location:** The project site is located within the Los Potos Landgrant, within unincorporated Solano County, located in the northwestern outskirts of the City of Vacaville, California.
6. **Applicants:** Solano Irrigation District
810 Vaca Valley Parkway, Suite 201
Vacaville, CA 95688
7. **General Plan:** Agricultural and Rural Residential
8. **Zoning:** A-40 and RR-5

9. **Surrounding Land Uses and Setting:** The proposed water line is within an urban setting under Farrell Road and Gibson Canyon Road, adjacent to residential/agricultural land within Solano Irrigation District easements.

10. **Other agencies whose approval is required:** None.

Environmental Checklist

Pursuant to Section 15063, CEQA Guidelines, the Solano Irrigation District has utilized an Environmental Checklist to evaluate the potential environmental effects of the project. The checklist provides a determination of these potential impacts and includes the substantiation developed in support of the conclusions checked on the form.

Environmental Factors Potentially Affected

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

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

Determination

On the basis of this initial evaluation:

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

By:

Cary Keaten, General Manager
Solano Irrigation District

Date: _____

Evaluation of Environmental Impacts

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources the District cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the District has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The District must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or Negative Declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) *Earlier Analysis Used.* Identify and state where they are available for review.
 - b) *Impacts Adequately Addressed.* Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) *Mitigation Measures.* For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) The District is encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

- 7) Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and the District is free to use different formats; however, the District should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) The significance criteria or threshold, if any, used to evaluate each question; and
 - b) The mitigation measure identified, if any, to reduce the impact to less than significance.

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APPENDIX B – NATIVE AMERICAN CONSULTATION OUTREACH LOG
APPENDIX C – FEMA FIRMETTE MAP

CEQA Environmental Checklist

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included either following the applicable section of the checklist or is within the body of the environmental document itself. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

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

Regulatory Settings

CEQA establishes that it is the policy of the state to take all action necessary to provide the people of the state “with...enjoyment of aesthetic, natural, scenic and historic environmental qualities (CA Public Resources Code Section 21001[b]).”

- a) **No Impact.** According to the Solano County General Plan, the nearest scenic resource is Pleasant Valley Road, a scenic roadway, located west of the project area. The project would not result in any effects to Pleasant Valley Road, and the project would not involve above-ground structures that would have adverse impacts to scenic vistas or resources; therefore, no impact would occur.
- b) **No Impact.** According to the California Department of Transportation (Caltrans 2020), the project is not located within a designated state scenic highway. Additionally, the project does not anticipate any substantial damage to trees, rock outcroppings, and there are no historic buildings within the project area; therefore, no impact would occur.
- c) **No Impact.** Overall visual impacts would be considered low, considering viewers (rural residents) will only have a temporary visual disturbance from construction activities. The project would relocate a water transmission line and two distribution lines and would maintain the visual character upon the completion of construction. The project is consistent with current land use, complies with Solano County ordinances, and will not adversely affect any viewer group; therefore, no impact would occur.
- d) **No Impact.** The project would not create a source of glare that would cause a public hazard or annoyance. The project is a relocation of an underground water transmission line and two distribution lines and all work areas would return to previous conditions once temporary construction activities have ceased. The project would not create any new sources of light or glare; therefore, no impact would occur.

Mitigation Measures

None.

II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) **No Impact.** The California Important Farmland Finder of the California Department of Conservation identifies the project area as Other Land that is not used for agricultural activities. Therefore, the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use; therefore, no impact would occur.
- b) **No Impact.** There will be no zoning changes to the properties served by this project; therefore, no impact would occur.
- c) **No Impact.** There are no forest lands or timberlands (or lands zoned as such) in the project study area; therefore, no impact would occur.
- d) **No Impact.** The project would not result in the loss of forest land or farmland, or conversion of forest land or farmland to non-forest/farmland use; therefore, no impact would occur.
- e) **No Impact.** The project would not result in the loss of forest land or farmland, or conversion of forest land or farmland to non-forest/farmland use; therefore, no impact would occur.

Mitigation Measures

None.

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Regulatory Settings

The Clean Air Act (CAA) as amended in 1990 is the federal law that governs air quality. Its counterpart in California is the California Clean Air Act of 1988. These laws set standards for the quantity of pollutants that can reside in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). Standards have been established for six criteria pollutants that have been linked to potential health concerns; the criteria pollutants are: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM), lead (Pb), and sulfur dioxide (SO₂).

Regional level conformity in California is concerned with how well the region is meeting the standards set for CO, NO₂, O₃, and PM. California is in attainment for the other criteria pollutants. At the regional level, Regional Transportation Plans (RTP[s]) are developed that include all of the transportation projects planned for a region over a period of at least 20 years. Based on the projects included in the RTP, an air quality model is run to determine whether or not the implementation of those projects would conform to emission budgets or other tests showing that attainment requirements of the Clean Air Act are met. If the conformity analysis is successful, the regional planning organization, such as the Yolo-Solano Air Quality Management District and the appropriate federal agencies, such as the Federal Highway Administration, make the determination that the RTP is in conformity with the State Implementation Plan for achieving the goals of the Clean Air Act. Otherwise, the projects in the RTP must be modified until conformity

is attained. If the design and scope of the project are the same as described in the RTP, then the project is deemed to meet regional conformity requirements for purposes of project-level analysis.

Federal and State Ambient Air Quality Standards

California and the federal government have established standards for several different pollutants. For some pollutants, separate standards have been set for different measurement periods. Most standards have been set to protect public health. For some pollutants, standards have been based on other values (such as protection of crops, protection of materials, or avoidance of nuisance conditions). The pollutants of greatest concern in the project area are ozone, particulate matter-2.5 microns (PM_{2.5}) and particulate matter-10 microns (PM₁₀). Table 3 shows the state and federal standards for a variety of pollutants.

State Regulations

Responsibility for achieving California's air quality standards, which are more stringent than federal standards, is placed on the California Air Resources Board (CARB) and local air districts and is to be achieved through district-level air quality management plans that will be incorporated into the SIP. In California, the EPA has delegated authority to prepare SIPs to the CARB, which, in turn, has delegated that authority to individual air districts.

The CARB has traditionally established state air quality standards, maintaining oversight authority in air quality planning, developing programs for reducing emissions from motor vehicles, developing air emission inventories, collecting air quality and meteorological data, and approving state implementation plans.

Responsibilities of air districts include overseeing stationary source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required by CEQA.

The California CAA of 1988 substantially added to the authority and responsibilities of air districts. The California CAA designates air districts as lead air quality planning agencies, requires air districts to prepare air quality plans, and grants air districts authority to implement transportation control measures. The California CAA focuses on attainment of the state ambient air quality standards, which, for certain pollutants and averaging periods, are more stringent than the comparable federal standards.

The California CAA requires designation of attainment and nonattainment areas with respect to state ambient air quality standards. The California CAA also requires that local and regional air districts expeditiously adopt and prepare an air quality attainment plan if the district violates state air quality standards for CO, SO₂, NO₂, or ozone. These Clean Air Plans are specifically designed to attain these standards and must be designed to achieve an annual 5% reduction in district-wide emissions of each nonattainment pollutant or its precursors. Where an air district is unable to achieve a 5% annual reduction, the adoption of "all feasible measures" on an expeditious schedule is acceptable as an alternative strategy (Health and Safety Code Section 40914(b)(2)). No locally prepared attainment plans are required for areas that violate the state PM₁₀ standards.

The California CAA requires that the state air quality standards be met as expeditiously as practicable but, unlike the federal CAA, does not set precise attainment deadlines. Instead, the act established increasingly stringent requirements for areas that will require more time to achieve the standards.

CARB's Air Quality and Land Use Handbook: A Community Health Perspective (2005) provides ARB recommendations for the siting of new sensitive land uses (including residences) near freeways, distribution centers, ports, refineries, chrome plating facilities, dry cleaners, and gasoline stations. The handbook recommends that new development be placed at distances from such facilities.

- a) **No Impact.** A project is considered to conflict with or obstruct implementation of regional air quality plans if it would be inconsistent with the emissions inventories contained in the regional air quality plans. Emission inventories are developed based on projected increases in population growth and vehicle miles traveled (VMT) within the region. The project would not result in an increase in population or VMT. Therefore, no impact would occur.
- b) **Less than Significant.** The proposed project would relocate an existing underground water transmission pipeline and two distribution lines. Construction activities would result in short-term and intermittent increases in criteria pollutants; however, these would be temporary and would not result in a cumulatively considerable net increase of any criteria pollutant. Additionally, no long-term operational impacts to net increases of criteria pollutants would occur; therefore, impacts would be considered less than significant.
- c) **Less than Significant with Mitigation.** The closest sensitive receptors are several residences and a church located within 0.25-miles from the project site; however, construction would be short-term and intermittent. The project would not result in substantial, long-term quantities of pollutant concentrations that would affect the surrounding rural residents. Fugitive dust may potentially be generated from the excavation and movement of construction equipment along the unpaved areas on the project site. Adherence to Best Management Practices (BMPs), as recommended by the Yolo-Solano AQMD and described below in **AQ-1**, would be implemented to minimize temporary impacts to air quality; therefore, impacts are considered less than significant.
- d) **Less than Significant.** The project site is located within a low-density rural residential area and would not produce sufficient quantities of objectionable odors during construction that would affect the surrounding rural residents; therefore, impacts are considered less than significant.

Mitigation Measures

Implementation of the following measures will reduce any air quality impacts resulting from construction activities:

AQ-1: Adhere to the following Best Management Practices as recommended by the Yolo-Solano AQMD:

- Water all active construction sites as necessary.
- Haul trucks shall maintain at least 2 feet of freeboard.
- Cover all trucks hauling dirt, sand, or loose materials.
- Cover inactive storage piles.
- Sweep streets if visible soil material is carried out from the construction site.

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

Regulatory Settings

Federal Regulations

National Environmental Policy Act

NEPA provides an interdisciplinary framework for environmental planning by Federal agencies and contains action-forcing procedures to ensure that Federal agency decision makers take environmental factors into account. NEPA applies whenever a Federal agency proposes an action, grants a permit, or agrees to fund or otherwise authorize any other entity to undertake an action that could possibly affect environmental resources. Caltrans, under delegation from the FHWA, is the NEPA lead agency for this project.

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 (16 U.S.C. section 1531 et seq.) provides for the conservation of endangered and threatened species listed pursuant to Section 4 of the Act (16 U.S.C. section 1533) and the ecosystems upon which they depend. These species and resources have been identified by USFWS or National Marine Fisheries Service (NMFS).

Clean Water Act

The Clean Water Act (CWA) was enacted as an amendment to the Federal Water Pollutant Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to waters of the U.S. CWA serves as the primary Federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. CWA empowers the U.S. Environmental Protection Agency (EPA) to set national water quality standards and effluent limitations, and includes programs addressing both point-source and non-point-source pollution. Point-source pollution originates or enters surface waters at a single, discrete location, such as an outfall structure or an excavation or construction site. Non-point-source pollution originates over a broader area and includes urban contaminants in storm water runoff and sediment loading from upstream areas. CWA operates on the principle that all discharges into the nation's waters are unlawful unless they are specifically authorized by a permit; permit review is CWA's primary regulatory tool. This project will require a CWA Section 402 National Pollutant Discharge Elimination System (NPDES) Permit regulated by the EPA.

The United States Army Corps of Engineers (USACE) regulates discharges of dredged or fill material into waters of the U. S. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. USACE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be indirect (through a nexus identified in USACE regulations).

The Regional Water Quality Control Board (RWQCB) has jurisdiction under Section 401 of the CWA and regulates any activity which may result in a discharge to surface waters. Typically, the areas subject to jurisdiction of the RWQCB coincide with those of USACE (i.e., waters of the U.S. including any wetlands). The RWQCB also asserts authority over "waters of the State" under waste discharge requirements pursuant to the Porter-Cologne Water Quality Control Act.

Executive Order 13112: Prevention and Control of Invasive Species

Executive Order (EO) 13112 (signed February 3, 1999) directs all Federal agencies to prevent and control introductions of invasive species in a cost-effective and environmentally sound manner. The EO and directives from the FHWA require consideration of invasive species in NEPA

analyses, including their identification and distribution, their potential impacts, and measures to prevent or eradicate them.

Executive Order 13186: Migratory Bird Treaty Act

EO 13186 (signed January 10, 2001) directs each Federal agency taking actions that could adversely affect migratory bird populations to work with USFWS to develop a Memorandum of Understanding that will promote the conservation of migratory bird populations. Protocols developed under the Memorandum of Understanding will include the following agency responsibilities:

- Avoid and minimize, to the maximum extent practicable, adverse impacts on migratory bird resources when conducting agency actions;
- Restore and enhance habitat of migratory birds, as practicable; and
- Prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

The EO is designed to assist Federal agencies in their efforts to comply with the Migratory Bird Treaty Act (MBTA) (50 Code of Federal Regulations [CFR] 10 and 21) and does not constitute any legal authorization to take migratory birds. Take is defined under the MBTA as “the action of or attempt to pursue, hunt, shoot, capture, collect, or kill” (50 CFR 10.12) and specifies intentional take (i.e., take that is the purpose of the activity in question) and unintentional take (i.e., take that results from, but is not the purpose of, the activity in question).

State Regulations

California Environmental Quality Act

California State law created to inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities and to work to reduce these negative environmental impacts. The County of Stanislaus is the CEQA lead agency for this project.

California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game (CFG) Code Section 2050 et seq.) requires the CDFW to establish a list of endangered and threatened species (Section 2070) and to prohibit the incidental taking of any such listed species except as allowed by the Act (Sections 2080-2089). In addition, CESA prohibits take of candidate species (under consideration for listing).

CESA also requires the CDFW to comply with CEQA (Pub. Resources Code Section 21000 et seq.) when evaluating incidental take permit applications (CFG Code Section 2081(b) and California Code Regulations, Title 14, section 783.0 et seq.), and the potential impacts the project or activity for which the application was submitted may have on the environment. CDFW’s CEQA obligations include consultation with other public agencies which have jurisdiction over the project or activity [California Code Regulations, Title 14, Section 783.5(d)(3)]. CDFW cannot issue an incidental take permit if issuance would jeopardize the continued existence of the species [CFG Code Section 2081(c); California Code Regulations, Title 14, Section 783.4(b)].

Section 1602: Streambed Alteration Agreement

Under CFG Code 1602, public agencies are required to notify CDFW before undertaking any project that will divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Preliminary notification and project review generally occur during the environmental process. When an existing fish or wildlife resource may be substantially adversely

affected, CDFW is required to propose reasonable project changes to protect the resources. These modifications are formalized in a Streambed Alteration Agreement that becomes part of the plans, specifications, and bid documents for the project.

Section 3503 and 3503.5: Bird and Raptors

CFG Code Section 3503 prohibits the destruction of bird nests and Section 3503.5 prohibits the killing of raptor species and destruction of raptor nests. Trees and shrubs are present in and adjacent to the study area and could contain nesting sites.

Section 3513: Migratory Birds

CFG Code Section 3513 prohibits the take or possession of any migratory non-game bird as designated in the MBTA or any part of such migratory non-game bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Affected Environment

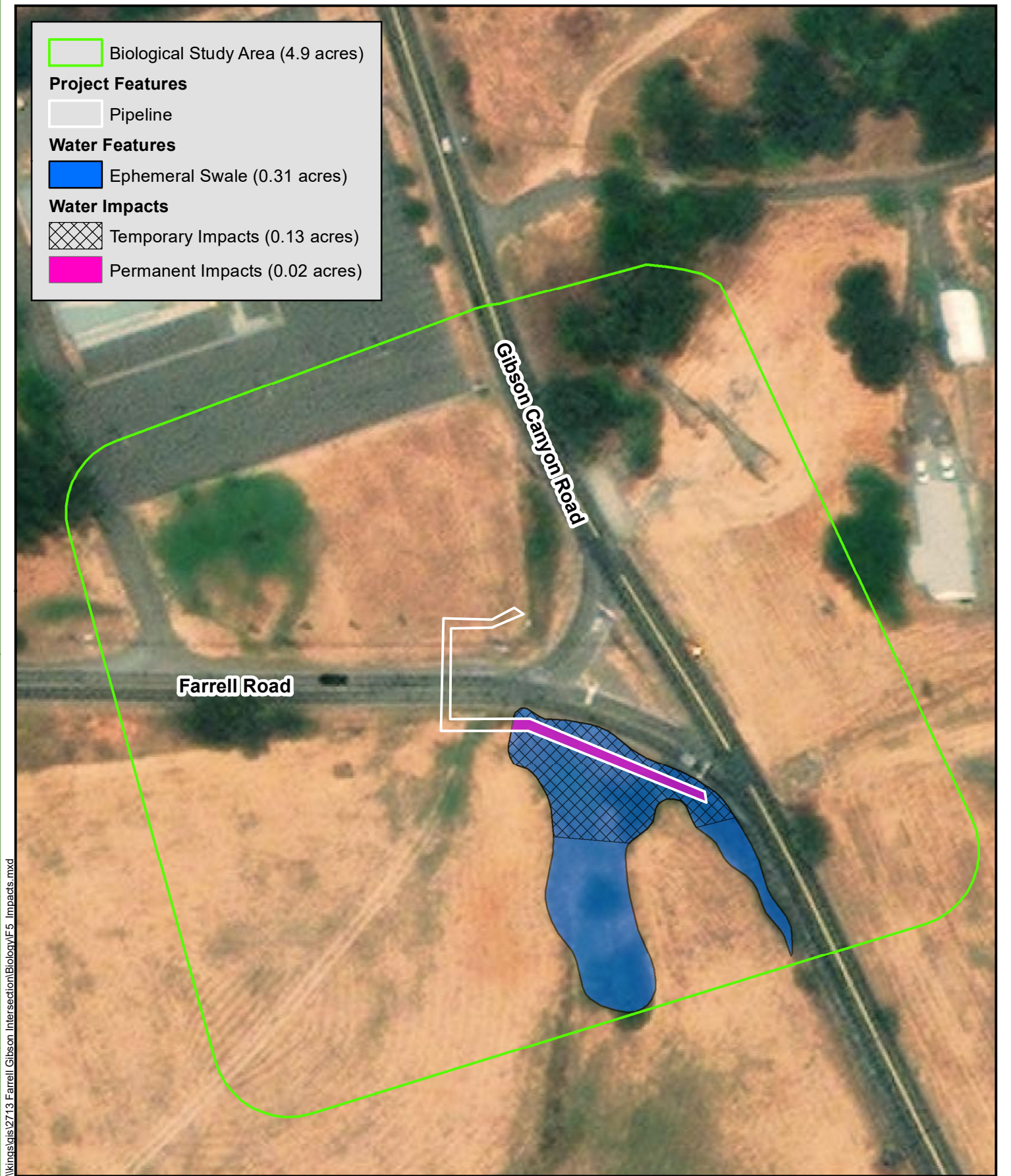
Prior to field work, literature research was conducted through the USFWS Information for Planning and Conservation (IPaC) Species List Generator (USFWS 2020), California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) (CDFW 2020), the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Plants (CNPS 2020), and National Marine Fisheries Service (NMFS) West Coast Region Species List (NMFS 2020) to identify habitats and special-status species having the potential to occur within the project Biological Study Area (BSA).

Field surveys were conducted on July 23, 2020 by Dokken Engineering biologist Scott Salembier. The purpose of the survey was to identify habitat types, map jurisdictional waters and assess habitat suitability for rare or special status species. Field methods included walking meandering transects throughout the BSA and observing plants and wildlife and mapping the extent of both jurisdictional waters of the United States and State of California.

Prior to field surveys, the BSA was defined as the proposed project impact area and a 50-foot buffer including all staging, construction easements, access roads and temporary impact areas. The BSA encompasses approximately 4.9 acres and includes 0.31 acre of an ephemeral swale, a jurisdictional Water of the State.

The BSA is located in an unincorporated area of Solano County, within the Greater Valley floristic region and ecological Sacramento Valley subsection (Jepson eFlora 2020). The topography within the BSA is generally flat, with the project area located at approximately 305-370 feet above mean sea level. The BSA is dominated by urban roadway and grassland/farmland between Farrell Road and Gibson Canyon Road, but also contains an ephemeral swale directly connected to Ulatis Creek to the west. Land use within the BSA is Rural Residential and Urban Residential (Solano County 2015). Dominant land cover and vegetative communities within the BSA consist of roadway, grassland/farmland, ephemeral swale and riparian corridor.

- a) **Less than Significant with Mitigation Incorporated.** A search of USFWS, CDFW, and CNPS databases indicated 2 special-status animal species have the potential to occur within the BSA (Appendix A). The 2 special-status species that have the potential to be present within the BSA include Swainson's hawk (*Buteo swainsoni*) and white-tailed kite (*Elanus leucurus*).



- Biological Study Area (4.9 acres)
- Project Features**
- Pipeline
- Water Features**
- Ephemeral Swale (0.31 acres)
- Water Impacts**
- Temporary Impacts (0.13 acres)
- Permanent Impacts (0.02 acres)

\\kings\gis\2713 Farrell Gibson Intersection\Biology\F5 Impacts.mxd

Source: USA Topo Maps Online; Dokken Engineering 10/21/2020; Created By: hsheldon

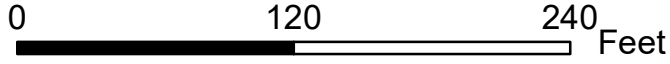


FIGURE 4
Water Impacts Map

Farrell and Gibson Canyon Road Intersection Improvement Project
Solano County, California

Special Status Species Discussions

Swainson's Hawk

The Swainson's hawk is state listed as threatened. Swainson's hawk migrates annually from wintering areas in South America to breeding locations in northwestern Canada, the western US, and Mexico. In California, Swainson's hawks nest throughout the Sacramento Valley in large trees in riparian habitats and in isolated trees in or adjacent to agricultural fields. The breeding season extends from late March through late August, with peak activity from late May through July (England et al. 1997). In the Sacramento Valley, Swainson's hawks forage in large, open agricultural habitats, including alfalfa and hay fields (CDFW 2006). The breeding population in California has declined by an estimated 91% since 1900; this decline is attributed to the loss of riparian nesting habitats and the conversion of native grassland and woodland habitats to agriculture and urban development (CDFW 2006).

The BSA and adjacent land offers potentially suitable foraging habitat for Swainson's hawk. Furthermore, there are large trees bordering the northern and eastern edge of the BSA that are potentially suitable for nesting. The species was not observed within the BSA during the July 23, 2020 biological survey. However, due to the presence of potentially suitable nesting habitat and nearby suitable foraging habitat, as well as local, recent CNDDDB occurrences, the species is considered to have a low to moderate potential of occurring within the BSA.

The Project will not impact potentially suitable Swainson's hawk foraging or nesting habitat. The water transmission line is proposed to run underground and will not permanently obstruct potentially suitable grassland/farmland foraging habitat. Furthermore, no trees are anticipated for removal under this alternative. However, due to the proximity of the Project to potentially suitable nesting trees, avoid and minimization measure BIO-1 through BIO-2 will be incorporated into the Project to ensure no active Swainson's hawk, or other protected migratory bird nest sites are disturbed by the Project.

White-tailed Kite

The white-tailed kite is a fully protected species under CFG Code Section 3511. The species has a restricted distribution in the US, occurring only in California and western Oregon and along the Texas coast (American Ornithologists' Union 1983). The species is fairly common in California's Central Valley margins with scattered oaks and river bottomlands. White-tailed kites nest in riparian and oak woodlands and forage in nearby grasslands, pastures, agricultural fields, and wetlands. They use nearby treetops for perching and nesting sites. Voles and mice are common prey species.

The BSA does contain potentially suitable foraging and nesting habitat for the white-tailed kite. Potentially suitable large nesting trees are present within the riparian corridor and border of the northern and eastern edge of the BSA. The species was not observed within the BSA during the July 23, 2020 biological survey. However, due to the presence of suitable foraging and nesting habitat and due to the recent, local CNDDDB and eBird occurrences, the species has a low to moderate potential of occurring within the BSA.

The Project will not impact potentially suitable white-tailed kite foraging or nesting habitat. The water transmission line is proposed to run underground and will not permanently obstruct potentially suitable grassland/farmland foraging habitat. Furthermore, no trees are anticipated for removal under this alternative. However, due to the proximity of the Project to potentially suitable nesting trees, avoid and minimization measure BIO-1 and BIO-2 will be incorporated into the Project to ensure no active white-tailed kite, or other protected migratory bird nest sites are disturbed by the Project.

- b) **Less than Significant with Mitigation Incorporated.** Natural communities of special concern within the BSA include an ephemeral swale. The ephemeral swale is within the southern portion of the BSA and intersects the proposed alignment of the water transmission line. This swale directly connects to Ulati Creek approximately 0.15 mile west of the BSA. This ephemeral swale is within the Lower Sacramento watershed. This water feature is considered a jurisdictional Water of the State and CDFW jurisdictional habitat.

The alignment of the transmission line would result in permanent and temporary impacts to the ephemeral swale, a Water of the State and CDFW natural community of special concern. With the minimum area available for excavation, the proposed 8-inch pipeline would require excavation of an approximately 5-foot deep, approximately 2-foot wide trench through the swale to ensure the pipeline is sufficiently below the original grade. Approximately 0.02 acre of permanent impacts and 0.13 acre of temporary impacts would occur within the ephemeral swale. With the implementation of measures BIO-3 through BIO-8 all potential impacts would be avoided and minimized to the greatest extent practicable. Additionally, with the implementation of measure BIO-3, all temporary impact areas within the BSA would be returned to pre-construction contours and conditions.

- c) **Less than Significant Impact with Mitigation Incorporated.** A preliminary jurisdictional delineation was conducted July 23, 2020 to identify jurisdictional waters of the United States and State of California within the BSA. Potential jurisdictional waters within the BSA were assessed. Surveys of potential jurisdictional waters were confirmed using aerial imagery and field verification, and followed the guidelines provided in the 2008 USACE Arid West OHWM delineation manual (USACE 2008a). The OHWM was mapped using observations gathered during the biological survey, conducted on July 23, 2020, including, channel width, substrate, depth of channel, sediment changes and vegetation changes. During delineation efforts, no federally protected wetlands were determined to exist within or adjacent to the project area; however, one feature, an ephemeral swale, a jurisdictional Water of the State and CDFW habitat would be permanently impacted as a result of the transmission line. With implementation of BIO-4, the District will consult with CDFW and obtain a 1602 Streambed Alteration Agreement prior to construction.
- d) **No Impact.** The project area is located through a rural agricultural area, and according to CDFW (CDFW 2020), there are no California Essential Habitat Connectivity areas within the BSA; therefore, the project would have no impact.
- e) **No Impact.** The project would not conflict with any local policies or ordinances protecting biological resources. Therefore, no impact would occur.
- f) **No Impact.** Currently, there are no conflicts with local or state conservation plans. Therefore, no impact would occur.

Mitigation Measures

- BIO-1:** Prior to initial ground disturbance activities, environmental awareness training will be given to all construction personnel by the Project biologist to brief them on how to recognize local special-status species. If any special-status species is detected, CDFW will be called for guidance before any construction activities are resumed. All personnel will be required to sign a form stating attendance of the environmental awareness training.
- BIO-2:** If feasible, vegetation removal should be conducted between September 1 and February 15 to avoid impacts on nesting birds. If construction activities, including vegetation removal, are scheduled to occur during the breeding season for migratory birds and raptors (generally between February 1 and August 31), the Project biologist will conduct nesting surveys before the start of construction. The nesting surveys should be conducted within 15 days before the initiation of construction activities (including tree removal) that are scheduled between February 1 and August 31. Surveys for active nests will occur in the Project area and trees within 50-feet of the work area. If no active nests are detected during these surveys, no additional mitigation is required.
- If surveys indicate that migratory bird or raptor nests are present in the Project area, a no-disturbance buffer will be established around the sites to avoid disturbance or destruction of the nest site until after the breeding season or until after the Project biologist determines that the young have fledged. The extent of these buffers will be determined by the biologist (in coordination with CDFW) and will depend on the level of noise or construction disturbance, line-of-sight between the nest and disturbance, ambient levels of noise and other disturbances, and other topographic or artificial barriers. These factors will be analyzed to make an appropriate decision on buffer distances. Suitable buffer distances may vary by species.
- BIO-3:** All natural areas temporarily disturbed during Project construction will be restored onsite to pre-Project conditions or better prior to Project completion. All temporarily affected waters will be re-contoured to preconstruction conditions and seeded with a native seed mix. All hydroseed and plant mixes must consist of a biologist approved plant palette seed mix of native species sourced within the same ecoregion the Project area.
- BIO-4:** The Project will impact an ephemeral swale, a jurisdictional water of the State and CDFW habitat. The District will consult with CDFW and obtain a 1602 Streambed Alteration Agreement prior to construction.
- BIO-5:** Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.
- BIO-6:** The contractor must not apply rodenticide or herbicide within the BSA during construction.
- BIO-7:** All food-related trash must be disposed of in closed containers and must be removed from the Project Area daily. Construction personnel must not feed or otherwise attract wildlife to the Project area.

BIO-8: If wildlife species are encountered during construction, construction will temporarily stop within the area of discovery. Work will not resume in the area of discovery until the animal has left the area on its own accord and unharmed.

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

Regulatory Setting

The CEQA Guidelines Section 15064.5(a), and the Public Resources Code (PRC) 5024(a)(b) and (d) require consideration of potential project impacts to "unique" archaeological sites that do not qualify as historical resources. The statutory requirements for unique archaeological sites that do not qualify as historical resources are established in PRC Section 21083.2. These two PRC sections operate independently to ensure that significant potential impacts on historical and archaeological resources are considered as part of a CEQA project's environmental analysis. Historical resources, as defined in the CEQA regulations, include:

- Cultural resources listed in or eligible for listing in the California Register of Historical Resources (California Register);
- Cultural resources included in a local register of historical resources;
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in one of several historic themes important to California history and development.

Under CEQA, a project may have a significant effect on the environment if the project could result in a substantial adverse change in the significance of a historical resource, meaning the physical demolition, destruction, relocation, or alteration of the resource would be materially impaired. This would include any action that would demolish or adversely alter the physical characteristics of a historical resource that convey its historic significance and qualify it for inclusion in the California Register or in a local register or survey that meets the requirements of PRC Section 5020.1(l) and 5024.1(g). PRC Section 5024 also requires state agencies to identify and protect state-owned resources that meet National Register of Historic Place (National Register) listing criteria. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the SHPO before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible

for registration as California Historical Landmarks. Also, CEQA and CEQA Guidelines recommend provisions be made for the accidental discovery of archaeological sites, historical resources, or Native American human remains during construction (PRC Section 21083.2(i) CCR Section 15064.5[d and f]).

Affected Environment

The Area of Potential Effects (APE) was established as the area of direct and indirect effects, encompassing approximately 3.1 acres. The APE is identical to the project area, as depicted in Figure 3. The APE, which encapsulates the entire intersection in addition to adjacent areas east of Gibson Canyon Road and both north and south of Farrell Road, is purposely broad to provide ample optional space for material and/or equipment staging areas. The area of direct project impact (i.e. ground disturbing) is significantly smaller in overall scale, involving a 2 ft. wide, 4 ft. deep trench extending from just south of—then crossing under—Farrell Road to facilitate pipe relocation / installation. Conforming to the prescribed depth of ground disturbance associated with pipe relocation, the vertical APE for the Project extends to a maximum depth of 4 ft. below the ground surface. Staging areas will be utilized to park rubber-tired vehicles and equipment as necessary and/or temporarily stage construction materials. Such activities are not anticipated to incur surface disturbance.

Efforts to identify cultural resources in the APE included background research, a search of previously recorded archaeological site records and cultural resource identification reports on file at the California Historical Resources Information System Northwest Information Center (NWIC), a search of the Sacred Lands File with the Native American Heritage Commission, efforts to coordinate with Native American representatives, and a pedestrian surface survey.

Records Search

On August 20, 2020, Dokken Engineering (Dokken) received the results of a records search (NWIC File No.: 17-2980) conducted at the Northwest Information Center (NWIC). The search accessed the California Historical Resources Information System for any previously known or recorded cultural resources. The search included a review of all known archaeological sites, studies, and isolates within a one-mile radius of the project area. Additionally, Dokken also reviewed the following sources:

- The *National Register of Historic Places* (Historic Properties Directory, California Office of Historic Preservation 2002);
- The *California Register of Historic Places* (Historic Properties Directory, California Office of Historic Preservation 2002);
- The *California Historical Landmarks* (California Office of Historic Preservation 1996);
- The *California Points of Historical Interest* (California Office of Historic Preservation 1992);
- The *California Inventory of Historic Resources* (California Department of Parks and Recreation 1976);
- And other pertinent historical inventories including relevant historic maps (USGS Vacaville 1908; Wolfskill 1917; Sacramento 1947; Allendale 1953; Vacaville 1953; Sacramento 1956 and 1957; Allendale 1968, 1973, 1978; and General Land Office plats (1859).

The results of these efforts indicate that there are no historical resources as defined by PRC Section 15064.5 of the CEQA guidelines located within or adjacent the APE. Two previously recorded historic resources and two prehistoric archaeological sites have been documented in

association with 16 distinct cultural resource investigations that have been conducted within one mile of the Project between 1977 and 2017. None of these previous investigations were undertaken within or adjacent the current project APE.

Field Surveys

On August 4, 2020, Dokken archaeologist John Fogerty conducted a pedestrian surface survey of the entire APE. The surface survey was conducted via controlled transects spaced at no greater than 5 m. (16 ft.) intervals over the entire APE. Surface visibility within the APE was variable, ranging from poor (90-100% occlusion) in areas hosting surface obscuring crops or ruderal vegetation to good (<75% occlusion) in lightly vegetated areas with more open surface exposures. Particular attention was paid to de-vegetated surface exposures, as well as rodent burrows, cut banks, and other exposed areas where the presence of artifacts, archaeological features, or anthropogenic soils are more likely to be observed. No artifacts, archaeological features, or anthropogenic soils were observed within or adjacent to the APE as a result of the pedestrian surveys.

The pedestrian survey determined that much of the APE, and the direct area of impact in particular, has been subject to extensive surface disturbance and modification resulting from construction and/or maintenance of both Farrell and Gibson Valley Road, extant subsurface utility installation and/or some measure of prior disturbance in association with terraforming and agricultural activity.

Archaeological Sensitivity

The Project abuts the western foot of the English Hills along the inner eastern margin of Vaca Valley, approximately 1,000 ft. northeast of Ulati Creek. Soils present in the APE are composed largely of deep, well-drained Rincon series soils formed in alluvium from sedimentary rocks, manifesting primarily as old alluvial fans and stream terraces. Based on the occurrence of known resources in the vicinity, topographic considerations, and extant geoarchaeological information, the Project falls within an area of high sensitivity for prehistoric archaeological sites.

While the archaeological sensitivity of the area is considered to be high, virtually all of the vertical APE has been subject to past ground disturbance associated with roadway development, utility installation, and/or agricultural activity, with the deepest and most extensive of these disturbances being associated with the paralleling roadway and subsurface utility corridors. These prior and ongoing surface disturbances frequently have two effects: 1) exposure of subsurface archaeological deposits via the disturbance itself, rendering resources easier to identify during pedestrian surface survey, and 2) diminishing the potential that such resources would retain the integrity to qualify as a historical resource under §15064.5. Given these considerations, the likelihood of the project encountering archaeological resources during implementation is low.

Native American Consultation

On July 17, 2020, Dokken sent a letter and maps depicting the Project vicinity to the Native American Heritage Commission (NAHC), requesting a review the Sacred Lands File (SLF) for any Native American cultural resources that might be affected by the proposed Project. On July 21, 2020, Cultural Resources Analyst Sarah Fonseca communicated via e-mail that a search of the SLF was negative. Additionally, on July 31, 2020, initial consultation letters seeking information regarding any known cultural resources in the Project area were mailed to the Native American tribal representatives who have previously submitted in writing to the Solano Irrigation District a request to be notified of projects within their traditionally and culturally affiliated area.

Correspondence was sent via certified mail to the following individuals and organizations (Appendix B):

- Kesner Flores, Representative of Wintun/Patwin
- Chairperson Leland Kinter, Yocha Dehe Wintun Nation
- Native Cultural Renewal Committee, Yocha Dehe Wintun Nation
- Chairperson Charlie Wright, Cortina Band of Indians
- Antonio Ruiz Jr., Wilton Rancheria

Kesner Flores, Representative of Wintun/Patwin. The notification letter was mailed July 31, 2020. To date, no response has been received.

Chairperson Leland Kinter and Native Cultural Renewal Committee, Yocha Dehe Wintun Nation. The notification letters dated July 31, 2020 was received on August 3, 2020. No response was received within 30 days of letter receipt, or to date.

Chairperson Charlie Wright, Cortina Band of Indians. The notification letter dated March 19, 2020 was received on August 10, 2020. No response was received within 30 days of letter receipt, or to date.

Antonio Ruiz, Jr., Cultural Resources Officer, Wilton Rancheria. The notification letter was mailed July 31, 2020. To date, no response has been received.

Discussion

- a) **No Impact.** Efforts to identify potential historical resources in the Project area include background research, a search of site records and survey reports on file at the NWIC at Sonoma State University, efforts to coordinate with Native American representatives, and a pedestrian ground surface inventory. The APE was defined to encompass permanent Project features and areas of potential ground disturbance during construction. No historical resources, as defined in §15064.5 were identified within or adjacent the APE; therefore, there would be no impact to a historical resource, pursuant to §15064.5
- b) **Less than Significant with Mitigation.** As noted above, no historic resources as defined in §15064.5 were identified within or adjacent the APE. However, given the archaeological sensitivity of the area, there remains a possibility that previously unknown archaeological resources could be encountered during subsurface construction activities. Implementation of Mitigation Measures **CR-1** through **CR-2** (as detailed below) would ensure that inadvertently discovered resources that may be eligible for listing on the California Register of Historical Resources are identified and important information regarding any such resources is recovered. Collectively, these mitigation measures would reduce potential impacts to previously unidentified subsurface cultural resources to a *less-than-significant* level.
- c) **Less than Significant with Mitigation.** No human remains (including those interred outside of dedicated cemeteries) have been identified within or adjacent the APE. In the event human remains are encountered as a result of project construction activity, the implementation of Mitigation Measure CR-2 (below) would reduce this impact to a *less-than-significant* level.

Mitigation Measures

- CR-1:** If previously unidentified cultural materials are unearthed during construction, work shall be halted within 100 feet of the area until a qualified archaeologist can assess the significance of the find and develop a plan for documentation and removal of resources, if necessary. This buffer can be reduced or increased, based on the type of discovery. Additional archaeological survey will be needed if project limits are extended beyond the present survey limits.
- CR-2:** Section 5097.94 of the PRC and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide method and means for the appropriate handling of such remains. If human remains are encountered, work should halt within 100 feet of the find and the County Coroner should be notified immediately. Concurrently, an archaeologist should be contacted to assess the find. If the human remains are determined to be of Native American origin, the Coroner must notify the NAHC of the finding within twenty-four hours of positive identification. CEQA details steps to be taken if human burials are of Native American origin.

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

Regulatory Setting

The Solano County General Plan, Chapter 4 – Resources, discusses energy resources and the conservation and use of energy resources within Solano County. According to the General Plan, fossil fuels, primarily in the form of gasoline and natural gas, currently produce the majority of energy consumption within the County. However, it is likely that environmental regulations, climate change strategies, national security requirements, and the depletion of the earth’s oil reserves may cause fossil fuels to become a substantially more expensive and less viable fuel source. While fossil fuels are currently an important part of Solano’s energy sources, alternatives to this type of energy are key to ensuring energy resources for the future. The General Plan states the County is committed to reducing consumption of fossil fuels and investing in energy-efficient technologies. The General Plan establishes guidelines in the form of policies, implementation programs, funding, physical improvement and capital projects, development review, ongoing planning efforts, and public outreach and education in order to achieve the general plan goals for efficient use of energy resources within the County.

- a) **No Impact.** The proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Therefore, no impact would occur.
- b) **No Impact.** The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, no impact would occur.

Mitigation Measures

None.

VII. GEOLOGY AND SOILS: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Regulatory Background

For geological and topographic features, a key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects “outstanding examples of major geological features.” Topographic and geologic features are also protected under the CEQA.

This section also discusses geology, soils, and seismic concerns as they related to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures.

Executive Order (EO) 12699, Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction, required newly constructed buildings to meet standards for seismic safety set by the National Earthquake Hazard Reduction Program. However, EO 12699 applies only to construction of new buildings that are to be used or intended for sheltering persons or property and therefore is not applicable to the proposed action.

For the purpose of this document, an impact is considered significant if it allows a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards.

- a) **No Impact.** The project would not expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving rupture of a known fault, strong seismic ground shaking, seismic-related ground failure, or landslides. The project is not located within an Alquist Priolo Earthquake Fault Zone. The nearest seismic source is the Vaca Fault, a Late Quaternary fault that has not experienced fault displacement in over 700,000 years. Therefore, according to the California Department of Conservation (CDC), there is a very low risk of rupture, seismic ground shaking, and seismic-related ground failure, and the project would not contribute to an exposure of such risk.

Landslides usually occur in locations with steep slopes and unstable soils. According to the CDC California Geological Survey Seismic Hazards Zonation Program (CDC 2015) the project area is not within a known area of landslide concern. The majority of the project area is situated on flat or very gently sloping topography where the potential for slope failure is minimal to low. The project would also have no impact related to seismic-related failure, including liquefaction, because the potential is believed to be slight at this predominantly flat, low-seismicity site. The project is not on a geologic unit or soil that is unstable or that would become unstable as a result of the project. On- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse is not anticipated. The project would result in no impact.

- b) **Less than Significant.** The construction of the project and construction access has potential to cause impacts of soil erosion or loss of topsoil; however, ground disturbance would be less than 1 acre and would not require a SWPPP or General Construction Permit. Potential impacts to soils would be minimized through standard BMPs, soil stabilization measures, and covered within the County’s General Construction MS4 Permit. Therefore, impacts would be considered less than significant.
- c) **No Impact.** Refer to discussion a). The project will not be located on soil that is known to be unstable or would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. Therefore, no impact would occur.

- d) **No Impact.** The Natural Resources Conservation Service (NRCS) Soil Map (NRCS 2020) identifies soils within the project area as mainly Rincon clay loam (2 to 9 percent slopes) with Brentwood clay loam (0 to 2 percent slopes) adjacent to the west of the project site and Dibble-Los Osos clay loams (30 to 50 percent slopes, eroded) adjacent to the west of the site. None of these soil types are considered expansive; therefore, no impact would occur.
- e) **No Impact.** No septic tanks or alternative wastewater disposal systems are part of the project; therefore, no impact would occur.
- f) **Less than Significant with Mitigation.** A literature review was performed to determine whether paleontological resources have been previously identified in the project area and to identify the overall paleontological sensitivity of the project area. According to the Solano County 2008 General Plan Draft EIR, the project area lies within the Pleistocene Alluvium and is highly sensitive with regard to paleontological resources. Though there are no known occurrences of paleontological resources within or adjacent to the project area, with any project requiring ground disturbance within a potentially sensitive area, there is always the possibility that unknown paleontological resources may be unearthed during construction. With the implementation of mitigation measures GEO-1 and GEO-2, project impacts regarding direct or indirect impacts to paleontological resources would be less than significant with mitigation.

Mitigation Measures

GEO-1: Prior to the start of construction, all construction personnel would receive a paleontological sensitivity training, detailing the types of paleontological resources that may be encountered and procedures to follow if a find should occur.

GEO-2: If paleontological resources (i.e., fossils) are discovered during ground-disturbing activities, Solano Irrigation District project contact will immediately be notified, and will ensure that their contractors shall stop work in that area and within 100 feet of the find until a qualified paleontologist can assess the significance of the find and develop appropriate treatment measures. Treatment measures will be made in consultation with the Solano Irrigation District and Solano County.

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

Regulatory Setting

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization’s Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas (GHG) emissions reduction, climate change research and policy have increased dramatically in recent years. These efforts are primarily concerned with the emissions of GHG related to human activity that include CO₂, CH₄, NO_x, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, HFC-23 (fluoroform), HFC-134a (s, s, s, 2 –tetrafluoroethane), and HFC-152a (difluoroethane).

In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and pro-active approach to dealing with greenhouse gas emissions and climate change at the state level. AB 1493 requires the California Air Resource Board (CARB) to develop and implement regulations to reduce automobile and light truck greenhouse gas emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year; however, in order to enact the standards California needed a waiver from the EPA. The waiver was denied by the EPA in December 2007 and efforts to overturn the decision had been unsuccessful (see *California v. Environmental Protection Agency*, 9th Cir. Jul. 25, 2008, No. 08-70011). On January 26, 2009, it was announced that EPA would reconsider their decision regarding the denial of California’s waiver. On May 18, 2009, President Obama announced the enactment of a 35.5 mpg fuel economy standard for automobiles and light duty trucks which took effect in 2012. On June 30, 2009 EPA granted California the waiver. California is expected to enforce its standards for 2009 to 2011 and then look to the federal government to implement equivalent standards for 2012 to 2016. The granting of the waiver will also allow California to implement even stronger standards in the future.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California’s GHG emissions to 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80 percent below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that CARB create a plan, which includes market mechanisms, and implement rules to achieve “real, quantifiable, cost-effective reductions of greenhouse gases.” Executive Order S-

20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team. With Executive Order S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this executive order, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by 2020.

Climate change and GHG reduction is also a concern at the federal level; however, at this time, no legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change. California, in conjunction with several environmental organizations and several other states, sued to force the EPA to regulate GHG as a pollutant under the Clean Air Act (Massachusetts vs. [EPA] et al., 549 U.S. 497 (2007)). The court ruled that GHG does fit within the Clean Air Act's definition of a pollutant, and that the EPA does have the authority to regulate GHG. Despite the Supreme Court ruling, there are no promulgated federal regulations to date limiting GHG emissions. [1]

On December 7, 2009, the EPA Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases--carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆)--in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the EPA's greenhouse gas emission standards for light-duty vehicles, which were jointly by EPA and the Department of Transportation's National Highway Safety Administration on September 15, 2009.

According to Recommendations by the Association of Environmental Professionals on *How to Analyze GHG Emissions and Global Climate Change in CEQA Documents* (March 5, 2007), an individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may participate in a potential impact through its incremental contribution combined with the contributions of all other sources of GHG. In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable." See CEQA Guidelines sections 15064(i)(1) and 15130. To make this determination the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects in order to make this determination is a difficult if not impossible task.

As part of its supporting documentation for the Draft Climate Change Scoping Plan, the California Air Resource Board (CARB) released an updated version of the GHG inventory for California (July 11, 2018).

- a) **Less than Significant.** Construction activities required for the project would generate greenhouse gas emissions; however, emission generated by the project would be short-term in duration and are not anticipated to result in adverse or long-term impacts. The emission of greenhouse gases during construction and operation of the proposed project would be negligible and therefore less than significant.
- b) **No Impact.** Implementation of the proposed project would not conflict with or obstruct implementation of any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Construction and operation of the proposed project would be implemented consistent with applicable regulatory standards and requirements, including consistency with all applicable Yolo-Solano Air Quality Management District rules and thresholds. Therefore, no impact would result from development of the Proposed project.

Mitigation Measures

None.

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

Regulatory Setting

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health, and land use.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976, and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during project construction.

- a) **Less Than Significant.** The project would involve the use of heavy equipment for the grading, hauling, and handling of materials. Use of this equipment may require the use of fuels and other common materials that have hazardous properties (e.g., fuels are flammable). These materials would be used in accordance with all applicable laws and regulations and, if used properly, would not pose a hazard to people, animals, or plants. All refueling of construction vehicles and equipment would occur within the designated areas for the project. The use of hazardous materials would be temporary, and the project would not include a permanent use or source of hazardous materials; therefore, impacts would be less than significant.
- b) **No Impact.** The project is a water transmission line and distribution lines relocation and would not create a significant hazard to the public or the environment. There are no current or historical clean-up sites or hazardous waste facilities in proximity to the project area. The closest occurrence is approximately 2 miles south of the project area (EnviroStor, 2020).
- c) **No Impact.** Orchard Elementary School is 0.5 miles from the project site and would not be exposed to any hazardous emissions or materials. Therefore, no impact would occur.
- d) **No Impact.** After conducting a literature search with state hazardous waste sites (GeoTracker 2020; Envirostor 2020), the project area is not located on a hazardous waste site and would not create a significant hazard to the public or environment. Therefore, no impact would occur.
- e) **No Impact.** The project is not located within two miles of a public airport. The nearest airport is the Nut Tree Airport located approximately 3 miles east of the project area; therefore, no impact would occur.
- f) **No Impact.** The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; therefore, no impact would occur.
- g) **No Impact.** The project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, and no wildlands are adjacent to or within the project area; therefore, no impact would occur.

Mitigation Measures

None.

X. HYDROLOGY AND WATER QUALITY: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Regulatory Setting

Section 401 of the Clean Water Act (CWA) requires water quality certification from the State Water Resources Control Board (SWRCB) or from a Regional Water Quality Control Board (RWQCB) when the project requires a CWA Section 404 permit. Section 404 of the CWA requires a permit from the U.S. Army Corps of Engineers (Corps) to discharge dredged or fill material into waters of the United States.

Along with CWA Section 401, CWA Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) permit for the discharge of any pollutant into waters of the United States. The federal Environmental Protection Agency has delegated administration of the NPDES program to the SWRCB and nine RWQCBs. The SWRCB and RWQCB also regulate other waste discharges to land within California through the issuance of waste discharge requirements under authority of the Porter-Cologne Water Quality Act.

The SWRCB has developed and issued a statewide NPDES permit to regulate storm water discharges from construction activities of both large and small construction projects. The permit requires the preparation of a storm water pollution prevention plan (SWPPP) for proposed construction activities of greater than 5 acres in size. A SWPPP is an operational plan that identifies and describes the BMPs to be implemented at the construction site to control pollution of stormwater runoff. Since March 10, 2003, small construction sites (those involving disturbance of less than 5 acres of soil) have also required an NPDES permit as part of Phase II of EPA's NPDES Storm Water Program. Phase II is intended to further reduce adverse impacts on water quality and aquatic habitat by instituting the use of BMPs on previously unregulated sources of stormwater discharges that have the greatest likelihood of causing continued environmental degradation

Solano County has prepared a Storm Water Management Program (SWMP) to meet the requirements of the SWRCB and the statewide NPDES permit. The SWMP consists of six minimum control measures established by the SWRCB for Phase II storm water discharges. Each control measure contains BMPs necessary for proper storm water management. The BMPs then contain specific tasks to meet the objective of that control measure. The SWMP is intended to be an adaptive document and when necessary, new, required, or old management practices can be deleted or added as necessary.

Affected Environment

One hydrologic resource, a drainage canal, is present within the BSA. Water flow within this channel only occurs in immediate response to a rain event and connects to Ulatis Creek approximately 0.15 mile west of the project area. The drainage canal and Ulatis Creek are both within the Lower Sacramento watershed. The drainage canal is considered a Water of the U.S. and Water of the State.

- a) **Less than Significant.** The project will disturb less than one acre of soil; therefore, a Construction Storm Water General Permit is not required. Potential impacts to soils would be minimized through soil stabilization measures covered within the Solano County General Construction MS4 Permit. Impacts would be less than significant.
- b) **No Impact.** The project area is situated over the Solano sub-basin within the Sacramento Valley Basin. The proposed project is relocating an existing non-potable and potable water

lines and would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge; therefore, no impact would occur.

- c) **(i) Less than Significant.** The project is a relocation of underground water transmission and distribution lines and all work areas would return to previous conditions once temporary construction activities have ceased. The site will be returned to pre-construction conditions and would not substantially alter existing drainage patterns or cause impacts related to substantial erosion or siltation. The project will conform with standard BMPs and current regulations; therefore, project impacts will be less than significant.

(ii), (iii), and (iv) No Impact. The project is a relocation of underground water transmission and distribution lines and all work areas would return to previous conditions once temporary construction activities have ceased. The project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. The project would not contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems. The project would not impede or redirect flood flows. Therefore, no impact would occur.

- d) **No Impact.** The project area is not within any tsunami, or seiche zones. The project is located within flood hazard Zone X (Appendix C), which is an area of minimal flood hazards. The project is an underground water transmission line and would be constructed during the dry season. Therefore, no impact would occur.

- e) **No Impact.** The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan; therefore, no impact would occur.

Mitigation Measures

None.

XI. LAND USE AND PLANNING: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

The project is located in an unincorporated part of Solano County. According to Solano County General Plan (Solano County 2008), Land Use, the project area is Rural Residential with Urban Residential adjacent to the south (Figure LU-1. Solano County General Plan Land Use Diagram).

- a) **No Impact.** The project is a water transmission line and distribution lines relocation and would not divide an established community; therefore, no impact would occur.
- b) **Less than Significant.** The project would not conflict with applicable land use plans, policies, or regulations of an agency; therefore, no impact would occur.

Mitigation Measures

None.

XII. MINERAL RESOURCES: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

According to the Solano County General Plan (Solano County 2008) minerals found within the County include: mercury, sand and gravel, clay, stone products, calcium, and sulfur. Known mineral resource zones are located to the northeast of Vallejo, to the south and southeast of Green Valley, in areas south and east of Travis Air Force Base, and in pockets located within both Vacaville and Fairfield. A Mineral Resource Zone (MRZ-3) is immediately adjacent of the project site to the southeast. MRZ-3 are areas containing mineral deposits, the significance of which cannot be evaluated from available data (Figure RS-4. Solano County General Plan Mineral Resources).

- a) **Less than Significant Impact.** The project is a relocation of an existing water transmission line and two distribution lines from an area that has already been disturbed. Project activities are not anticipated to result in the loss of availability of a known mineral resource and any impact would be less than significant.
- b) **No Impact.** The project site is immediately adjacent to the MRZ-3 area containing mineral deposits, which the significance cannot be evaluated from available data. A Stone Mine is directly east of the project site, but out of the project area within the MRZ-3. Therefore, the project would not result in the loss of a locally-important mineral resource recovery site and no impact would occur.

Mitigation Measures

None.

XIII. NOISE: 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

The noise environment is influenced by Gibson Canyon Road and adjacent rural residential streets. Rural residential use is the dominant noise source at the project site.

- a) **Less than Significant.** The construction activities would only occur during weekday work hours in accordance with Section 28.1-50 of the Solano County Noise Ordinance and would not generate noise in excess of the nearby roadway; therefore, impacts would be considered less than significant.
- b) **Less than Significant.** The temporary groundborne vibration and noise of the construction activities would be in accordance Section 28.1-50 of the Solano County Noise Ordinance and would not be excessive to the nearest occupied structures; therefore, impacts would be considered less than significant.
- c) **No Impact.** The project is not located within the vicinity of a private airstrip or an airport land use plan; therefore, no impact would occur.

Mitigation Measures

None.

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

Regulatory Setting

CEQA also requires the analysis of a project's potential to induce growth. CEQA guidelines, Section 15126.2(d), require that environmental documents "...discuss the ways in which the project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment..."

- a) **No Impact.** The project is a relocation of a water transmission line and up to three distribution lines and would not induce substantial population growth in the area. Therefore, the proposed project would not induce substantial population growth in the area, and no impact would occur.
- b) **No Impact.** The project would not displace any number of existing people or housing; therefore, no impact would occur.

Mitigation Measures

None.

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

- a) **No Impact.** The project is a relocation of an existing water transmission line and up to three distribution lines and would not result in substantial adverse physical impacts associated with the provision or need of new or physically altered governmental facilities, which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection, police protection, schools, parks, or other public facilities. The project would not cause the additional provision or need for new or physically altered fire protection, police protection, school, parks or other public facilities; therefore, no impact would occur.

Mitigation Measures

None.

XVI. RECREATION:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) **No Impact.** The project would not increase the use of existing neighborhood and/or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; therefore, no impact would occur.

b) **No Impact.** The project does not include recreational facilities or require the construction or expansion of recreational facilities; therefore, no impact would occur.

Mitigation Measures

None.

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

- a) **Less Than Significant.** The project is not a transportation project and would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. A minor increase in traffic on Gibson Canyon Road for construction of the project would occur; however, the work is anticipated to last only 30 days and would not result in a permanent impact to circulation. Therefore, impacts are considered less than significant.
- b) **No Impact.** The project is a relocation of water lines and would not conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). Therefore, no impact would occur.
- c) **No Impact.** The project would not result in any impacts related to increased hazards from geometric design features or incompatible uses; therefore, no impact would occur.
- d) **Less than Significant Impact.** Project construction is anticipated to last only 30 days with full or partial road closures as necessary. A full or partial road closure could affect emergency access from the south to rural residential areas or an evacuation route travelling south. However, a Vacaville Fire Protection Station on Cantelow Road (north of the project site) would maintain access to rural homes along Gibson Canyon Road and Cantelow Road would serve as an evacuation route to the north of the rural residential area. Therefore, the impact would be less than significant.

Mitigation Measures

None.

<p>XVIII. TRIBAL CULTURAL RESOURCES:</p> <p>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:</p>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Regulatory Setting

Effective July 1, 2015, CEQA was revised to include early consultation with California Native American tribes and consideration of tribal cultural resources (TCRs). These changes were enacted through Assembly Bill 52 (AB 52). By including TCRs early in the CEQA process, AB 52 intends to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to TCRs. CEQA now establishes that a “project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment” (PRC § 21084.2).

To help determine whether a project may have such an adverse effect, the PRC requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the determination of whether a negative declaration,

mitigated negative declaration, or environmental impact report is required for a project (PRC § 21080.3.1). Consultation must consist of the lead agency providing formal notification, in writing, to the tribes that have requested notification or proposed projects within their traditionally and culturally affiliated area. AB 52 stipulates that the Native American Heritage Commission (NAHC) shall assist the lead agency in identifying the California Native American tribes that are traditionally and culturally affiliated within the project area. If the tribe wishes to engage in consultation on the project, the tribe must respond to the lead agency within 30 days of receipt of the formal notification. Once the lead agency receives the tribe's request to consult, the lead agency must then begin the consultation process within 30 days. If a lead agency determines that a project may cause a substantial adverse change to TCRs, the lead agency must consider measures to mitigate that impact. Consultation concludes when either: 1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a TCR, or 2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC § 21080.3.2). Under existing law, environmental documents must not include information about the locations of an archaeological site or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records act. TCRs are also exempt from disclosure. The term "tribal cultural resource" refers to sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources
- Included in a local register of historical resources as defined in subdivision (k) of California Public Resources Code (PRC) Section 5020.1
- A resource determined by a California lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of the PRC Section 5024.1.

Affected Environment

On July 17, 2020, Dokken sent a letter and maps depicting the Project vicinity to the Native American Heritage Commission (NAHC), requesting a review the Sacred Lands File (SLF) for any Native American cultural resources that might be affected by the proposed Project. On July 21, 2020, Cultural Resources Analyst Sarah Fonseca communicated via e-mail that a search of the SLF was negative.

To help determine whether the Project may have an effect, PRC Section 21080.3.1 requires the CEQA lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. On July 31, 2020 initial consultation letters were mailed to the Native American tribal representatives who have previously submitted in writing to the Solano Irrigation District a request to be notified of projects within their traditionally and culturally affiliated area, pursuant to PRC Section 21080.3.1. Seeking any information regarding known traditional cultural properties, TCRs, or other cultural resources of significance, these notification letters provided a summary of the proposed project, attendant map figures, and invited any comments or concerns the tribal representatives might have about the Project. Correspondence was sent via certified mail to the following individuals and organizations (Appendix B):

- Kesner Flores, Representative of Wintun/Patwin
- Chairperson Leland Kinter, Yocha Dehe Wintun Nation

- Native Cultural Renewal Committee, Yocha Dehe Wintun Nation
- Chairperson Charlie Wright, Cortina Band of Indians
- Antonio Ruiz Jr., Wilton Rancheria

Kesner Flores, Representative of Wintun/Patwin. The notification letter was mailed July 31, 2020. To date, no response has been received.

Chairperson Leland Kinter and Native Cultural Renewal Committee, Yocha Dehe Wintun Nation. The notification letters dated July 31, 2020 was received on August 3, 2020. No response was received within 30 days of letter receipt, or to date.

Chairperson Charlie Wright, Cortina Band of Indians. The notification letter dated March 19, 2020 was received on August 10, 2020. No response was received within 30 days of letter receipt, or to date.

Antonio Ruiz, Jr., Cultural Resources Officer, Wilton Rancheria. The notification letter was mailed July 31, 2020. To date, no response has been received.

As discussed in **Section V (Cultural Resources)**, a records search conducted at the NWIC, supplemental background research including reviews of historic maps, an SLF search with the NAHC, coordination with Native American representatives, and an intensive archaeological survey of the Project APE failed to identify any TCRs that could be impacted by Project implementation. Further, despite the Project being located in an area generally considered to be of high archaeological sensitivity, the mature and extent of previous ground disturbance within the Project's area of direct impact, the likelihood of the project encountering archaeological resources during implementation is low.

- a) **Less than Significant Impact.** The project is not anticipated to cause a substantial adverse change in the significance of a TCR listed or eligible for listing in the California Register of Historical Resources, or in a local register of historic resources as defined by the Public Resource Code section 21074. No cultural resources were identified during the visual survey, record search and Native American consultation. No impacts to archaeological resources are anticipated as a result of the project. However, with any project involving ground disturbance, there is a possibility that cultural resources may be unearthed during construction. This impact would be considered potentially significant. Implementation of measures CR-1 through CR-2 would reduce this impact to a less than significant level.
- b) **Less than Significant with Mitigation.** The project is not anticipated to cause substantial adverse change to a TCR pursuant to criteria set forth by the Public Resource Code section 5024.1. No cultural resources were identified during the visual survey, record search and Native American consultation. No impacts to archaeological resources are anticipated as a result of the project. Implementation of measures CR-1 and CR-2 would help reduce any impacts resulting from unforeseen discovery of any TCR during construction.

Mitigation Measures

Measures **CR-1** and **CR-2** within section **V. Cultural Resources** will be implemented for any impacts relating to Tribal Cultural Resources.

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

- a) **Less than Significant.** The project is a relocation of existing water transmission and distribution lines; however, the relocation project would not cause significant environmental effects. Therefore, the impacts of the relocation would be less than significant.
- b) **Less than Significant.** The project would result in existing water lines being relocated with the existing utilities remaining active during project construction that is anticipated to last 30 days. Therefore, the impact would be less than significant.
- c) **No Impact.** The project would not include the construction of any wastewater-generating uses. The project would not increase population in the project vicinity. There would be no

additional wastewater flows as a result of the proposed project, and the project would not result in the need for new or expanded wastewater facilities; therefore, no impact would occur.

- d) **No Impact.** The Project would not generate solid waste during operation, and solid waste generated during construction would not be 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; therefore, no impact would occur.
- e) **No Impact.** Construction of the proposed project would result in minor amounts of solid waste that would be disposed of offsite. The project would comply with all federal, state, and local management and reduction statutes and regulations related to solid waste; therefore, no impact would occur.

Mitigation Measures

None.

XX. WILDFIRE: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

Based on maps produced by the California Department of Forestry and Fire Protection (CalFire 2007), the Project area is within a “Moderate” Fire Hazard Severity Zone in a State Responsibility Area (SRA). An SRA is the area of the state where the State of California is financially responsible for the prevention and suppression of wildfires. SRAs do not include lands within city boundaries or in federal ownership.

- a) **Less than Significant.** The project would be constructed within a rural residential area over the course of 30 days and may require full or partial road closure. The Vacaville Fire Protection Station on Cantelow Road (north of the project site) would maintain access to rural homes along Gibson Canyon Road and Cantelow Road would serve as an evacuation route to the north of the rural residential area.
- b) **No Impact.** Project activities would not exacerbate wildfire risks due to slope, prevailing winds and other factors; therefore, no impact would occur.

- c) **No Impact.** The project is a relocation of water transmission and distribution lines and would not result in any installation or maintenance or associated infrastructure that may exacerbate fire risk or that may result in ongoing impacts to the environment; therefore, no impact would occur.
- d) **No Impact.** Construction of the project would not expose people or structures to significant risks of downslope or downstream flooding, landslide or post-fire slope instability; therefore, no impact would occur.

XIX. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) **Less than Significant with Mitigation.** The project will utilize measures listed within Section IV and V to minimize and avoid potential impacts to Swainson’s hawk and cultural resources. Construction would not have a cumulatively considerable contribution to the decline of Swainson’s hawk habitat in the region. There are no known historic resources within the project area.
- b) **No Impact.** The project would relocate an underground water transmission line as part of the County’s intersection improvement project and is not part of future relocation projects; therefore, no impact would occur.
- c) **No Impact.** No substantial adverse effects on human beings, either directly or indirectly, are anticipated; therefore, no impact would occur.

Mitigation Measures

Please see individual sections for related measures.

List of Preparers

The following is a list of persons who participated in the Initial Study or prepared technical studies for this project.

Dokken Engineering

John Fogerty, Associate Environmental Planner / Archaeologist. B.S. Anthropology; Contribution: Cultural Resources section preparation.

Amy Bakker, Associate Environmental Planner. B.A. in Environmental Studies; Contribution: Environmental Document preparation.

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Appendix A CNDDDB, CNPS, and USFWS Special Status Species List

*The database used to provide updates to the Online Inventory is under construction. [View updates and changes made since May 2019 here.](#)

Plant List

47 matches found. [Click on scientific name for details](#)

Search Criteria

Found in Quads 3812251, 3812158, 3812157, 3812241, 3812148, 3812147, 3812231 3812138 and 3812137;

[Modify Search Criteria](#) [Export to Excel](#) [Modify Columns](#) [Modify Sort](#) [Display Photos](#)

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Arabis modesta	modest rockcress	Brassicaceae	perennial herb	Mar-Jul	4.3	S3	G3
Astragalus tener var. ferrisiae	Ferris' milk-vetch	Fabaceae	annual herb	Apr-May	1B.1	S1	G2T1
Astragalus tener var. tener	alkali milk-vetch	Fabaceae	annual herb	Mar-Jun	1B.2	S1	G2T1
Atriplex cordulata var. cordulata	heartscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S2	G3T2
Atriplex depressa	brittlescale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S2	G2
Atriplex persistens	vernal pool smallscale	Chenopodiaceae	annual herb	Jun, Aug, Sep, Oct	1B.2	S2	G2
Calochortus pulchellus	Mt. Diablo fairy-lantern	Liliaceae	perennial bulbiferous herb	Apr-Jun	1B.2	S2	G2
Centromadia parryi ssp. parryi	pappose tarplant	Asteraceae	annual herb	May-Nov	1B.2	S2	G3T2
Centromadia parryi ssp. rudis	Parry's rough tarplant	Asteraceae	annual herb	May-Oct	4.2	S3	G3T3
Chloropyron molle ssp. hispidum	hispid bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Sep	1B.1	S1	G2T1
Cicuta maculata var. bolanderi	Bolander's water-hemlock	Apiaceae	perennial herb	Jul-Sep	2B.1	S2?	G5T4T5
Delphinium recurvatum	recurved larkspur	Ranunculaceae	perennial herb	Mar-Jun	1B.2	S2?	G2?
Downingia pusilla	dwarf downingia	Campanulaceae	annual herb	Mar-May	2B.2	S2	GU
Extriplex joaquinana	San Joaquin spearscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S2	G2
Fritillaria liliacea	fragrant fritillary	Liliaceae	perennial bulbiferous herb	Feb-Apr	1B.2	S2	G2

<u>Fritillaria pluriflora</u>	adobe-lily	Liliaceae	perennial bulbiferous herb	Feb-Apr	1B.2	S2S3	G2G3
<u>Gilia capitata ssp. tomentosa</u>	woolly-headed gilia	Polemoniaceae	annual herb	May-Jul	1B.1	S1	G5T1
<u>Gratiola heterosepala</u>	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	Apr-Aug	1B.2	S2	G2
<u>Hesperolinon breweri</u>	Brewer's western flax	Linaceae	annual herb	May-Jul	1B.2	S2	G2
<u>Hibiscus lasiocarpus var. occidentalis</u>	woolly rose-mallow	Malvaceae	perennial rhizomatous herb (emergent)	Jun-Sep	1B.2	S3	G5T3
<u>Isocoma arguta</u>	Carquinez goldenbush	Asteraceae	perennial shrub	Aug-Dec	1B.1	S1	G1
<u>Lasthenia conjugens</u>	Contra Costa goldfields	Asteraceae	annual herb	Mar-Jun	1B.1	S1	G1
<u>Lasthenia ferrisiae</u>	Ferris' goldfields	Asteraceae	annual herb	Feb-May	4.2	S3	G3
<u>Lasthenia glabrata ssp. coulteri</u>	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	1B.1	S2	G4T2
<u>Lathyrus jepsonii var. jepsonii</u>	Delta tule pea	Fabaceae	perennial herb	May-Jul(Aug-Sep)	1B.2	S2	G5T2
<u>Layia septentrionalis</u>	Colusa layia	Asteraceae	annual herb	Apr-May	1B.2	S2	G2
<u>Legenere limosa</u>	legenere	Campanulaceae	annual herb	Apr-Jun	1B.1	S2	G2
<u>Lepidium latipes var. heckardii</u>	Heckard's pepper-grass	Brassicaceae	annual herb	Mar-May	1B.2	S1	G4T1
<u>Leptosiphon jepsonii</u>	Jepson's leptosiphon	Polemoniaceae	annual herb	Mar-May	1B.2	S2S3	G2G3
<u>Lilaeopsis masonii</u>	Mason's lilaeopsis	Apiaceae	perennial rhizomatous herb	Apr-Nov	1B.1	S2	G2
<u>Limosella australis</u>	Delta mudwort	Scrophulariaceae	perennial stoloniferous herb	May-Aug	2B.1	S2	G4G5
<u>Malacothamnus helleri</u>	Heller's bush-mallow	Malvaceae	perennial deciduous shrub	May-Jul	3.3	S3	G3Q
<u>Myosurus minimus ssp. apus</u>	little mousetail	Ranunculaceae	annual herb	Mar-Jun	3.1	S2	G5T2Q
<u>Navarretia leucocephala ssp. bakeri</u>	Baker's navarretia	Polemoniaceae	annual herb	Apr-Jul	1B.1	S2	G4T2
<u>Neostapfia colusana</u>	Colusa grass	Poaceae	annual herb	May-Aug	1B.1	S1	G1
<u>Orcuttia inaequalis</u>	San Joaquin Valley Orcutt grass	Poaceae	annual herb	Apr-Sep	1B.1	S1	G1
<u>Perideridia gairdneri ssp. gairdneri</u>	Gairdner's yampah	Apiaceae	perennial herb	Jun-Oct	4.2	S3S4	G5T3T4
<u>Plagiobothrys hystriculus</u>	bearded popcornflower	Boraginaceae	annual herb	Apr-May	1B.1	S2	G2
<u>Puccinellia simplex</u>	California alkali grass	Poaceae	annual herb	Mar-May	1B.2	S2	G3
<u>Ranunculus lobbii</u>	Lobb's aquatic buttercup	Ranunculaceae	annual herb (aquatic)	Feb-May	4.2	S3	G4
<u>Sidalcea keckii</u>	Keck's checkerbloom	Malvaceae	annual herb	Apr-May(Jun)	1B.1	S2	G2
<u>Stuckenia filiformis ssp. alpina</u>	slender-leaved pondweed	Potamogetonaceae	perennial rhizomatous herb (aquatic)	May-Jul	2B.2	S2S3	G5T5

Symphyotrichum lentum	Suisun Marsh aster	Asteraceae	perennial rhizomatous herb	(Apr)May-Nov	1B.2	S2	G2
Trifolium amoenum	two-fork clover	Fabaceae	annual herb	Apr-Jun	1B.1	S1	G1
Trifolium hydrophilum	saline clover	Fabaceae	annual herb	Apr-Jun	1B.2	S2	G2
Tuctoria mucronata	Crampton's tuctoria or Solano grass	Poaceae	annual herb	Apr-Aug	1B.1	S1	G1
Viburnum ellipticum	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	May-Jun	2B.3	S3?	G4G5

Suggested Citation

California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org> [accessed 25 September 2020].

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Contributors

[The Calflora Database](#)
[The California Lichen Society](#)
[California Natural Diversity Database](#)
[The Jepson Flora Project](#)
[The Consortium of California Herbaria](#)
[CalPhotos](#)

Questions and Comments

rareplants@cnps.org



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



Query Criteria: Quad (Mt. Vaca (3812241) OR Allendale (3812148) OR Elmira (3812138) OR Fairfield North (3812231))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
adobe-lily <i>Fritillaria pluriflora</i>	PMLIL0V0F0	None	None	G2G3	S2S3	1B.2
alkali milk-vetch <i>Astragalus tener var. tener</i>	PDFAB0F8R1	None	None	G2T1	S1	1B.2
American badger <i>Taxidea taxus</i>	AMAJF04010	None	None	G5	S3	SSC
Baker's navarretia <i>Navarretia leucocephala ssp. bakeri</i>	PDPLM0C0E1	None	None	G4T2	S2	1B.1
bearded popcornflower <i>Plagiobothrys hystriculus</i>	PDBOR0V0H0	None	None	G2	S2	1B.1
black-crowned night heron <i>Nycticorax nycticorax</i>	ABNGA11010	None	None	G5	S4	
Brewer's western flax <i>Hesperolinon breweri</i>	PDLIN01030	None	None	G2	S2	1B.2
brittlescale <i>Atriplex depressa</i>	PDCHE042L0	None	None	G2	S2	1B.2
burrowing owl <i>Athene cunicularia</i>	ABNSB10010	None	None	G4	S3	SSC
California alkali grass <i>Puccinellia simplex</i>	PMPOA53110	None	None	G3	S2	1B.2
California linderiella <i>Linderiella occidentalis</i>	ICBRA06010	None	None	G2G3	S2S3	
California tiger salamander <i>Ambystoma californiense</i>	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
Carquinez goldenbush <i>Isocoma arguta</i>	PDAST57050	None	None	G1	S1	1B.1
Conservancy fairy shrimp <i>Branchinecta conservatio</i>	ICBRA03010	Endangered	None	G2	S2	
Contra Costa goldfields <i>Lasthenia conjugens</i>	PDAST5L040	Endangered	None	G1	S1	1B.1
Coulter's goldfields <i>Lasthenia glabrata ssp. coulteri</i>	PDAST5L0A1	None	None	G4T2	S2	1B.1
Crotch bumble bee <i>Bombus crotchii</i>	IIHYM24480	None	Candidate Endangered	G3G4	S1S2	
Delta green ground beetle <i>Elaphrus viridis</i>	IICOL36010	Threatened	None	G1	S1	
dwarf downingia <i>Downingia pusilla</i>	PDCAM060C0	None	None	GU	S2	2B.2



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



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
foothill yellow-legged frog <i>Rana boylei</i>	AAABH01050	None	Endangered	G3	S3	SSC
grasshopper sparrow <i>Ammodramus savannarum</i>	ABPBXA0020	None	None	G5	S3	SSC
heartscale <i>Atriplex cordulata</i> var. <i>cordulata</i>	PDCHE040B0	None	None	G3T2	S2	1B.2
hispid salty bird's-beak <i>Chloropyron molle</i> ssp. <i>hispidum</i>	PDSCR0J0D1	None	None	G2T1	S1	1B.1
Keck's checkerbloom <i>Sidalcea keckii</i>	PDMAL110D0	Endangered	None	G2	S2	1B.1
legenere <i>Legenere limosa</i>	PDCAM0C010	None	None	G2	S2	1B.1
midvalley fairy shrimp <i>Branchinecta mesovallensis</i>	ICBRA03150	None	None	G2	S2S3	
monarch - California overwintering population <i>Danaus plexippus</i> pop. 1	IILEPP2012	None	None	G4T2T3	S2S3	
Northern Claypan Vernal Pool <i>Northern Claypan Vernal Pool</i>	CTT44120CA	None	None	G1	S1.1	
oval-leaved viburnum <i>Viburnum ellipticum</i>	PDCPR07080	None	None	G4G5	S3?	2B.3
pappose tarplant <i>Centromadia parryi</i> ssp. <i>parryi</i>	PDAST4R0P2	None	None	G3T2	S2	1B.2
recurved larkspur <i>Delphinium recurvatum</i>	PDRAN0B1J0	None	None	G2?	S2?	1B.2
Ricksecker's water scavenger beetle <i>Hydrochara rickseckeri</i>	IICOL5V010	None	None	G2?	S2?	
saline clover <i>Trifolium hydrophilum</i>	PDFAB400R5	None	None	G2	S2	1B.2
San Joaquin spearscale <i>Extriplex joaquinana</i>	PDCHE041F3	None	None	G2	S2	1B.2
San Joaquin Valley Orcutt grass <i>Orcuttia inaequalis</i>	PMPOA4G060	Threatened	Endangered	G1	S1	1B.1
slender-leaved pondweed <i>Stuckenia filiformis</i> ssp. <i>alpina</i>	PMPOT03091	None	None	G5T5	S2S3	2B.2
snowy egret <i>Egretta thula</i>	ABNGA06030	None	None	G5	S4	
Suisun Marsh aster <i>Symphyotrichum lentum</i>	PDASTE8470	None	None	G2	S2	1B.2
Suisun shrew <i>Sorex ornatus sinuosus</i>	AMABA01103	None	None	G5T1T2Q	S1S2	SSC
Swainson's hawk <i>Buteo swainsoni</i>	ABNKC19070	None	Threatened	G5	S3	



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



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	AMACC08010	None	None	G3G4	S2	SSC
tricolored blackbird <i>Agelaius tricolor</i>	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
two-fork clover <i>Trifolium amoenum</i>	PDFAB40040	Endangered	None	G1	S1	1B.1
valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	IICOL48011	Threatened	None	G3T2	S2	
Valley Needlegrass Grassland <i>Valley Needlegrass Grassland</i>	CTT42110CA	None	None	G3	S3.1	
vernal pool fairy shrimp <i>Branchinecta lynchi</i>	ICBRA03030	Threatened	None	G3	S3	
vernal pool tadpole shrimp <i>Lepidurus packardii</i>	ICBRA10010	Endangered	None	G4	S3S4	
western bumble bee <i>Bombus occidentalis</i>	IIHYM24250	None	Candidate Endangered	G2G3	S1	
western pond turtle <i>Emys marmorata</i>	ARAAD02030	None	None	G3G4	S3	SSC
white-tailed kite <i>Elanus leucurus</i>	ABNKC06010	None	None	G5	S3S4	FP
Wilbur Springs shorebug <i>Saldula usingeri</i>	IIHEM07010	None	None	G1	S1	
yellow-breasted chat <i>Icteria virens</i>	ABPBX24010	None	None	G5	S3	SSC

Record Count: 52



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:
Consultation Code: 08ESMF00-2020-SLI-2983
Event Code: 08ESMF00-2020-E-09223
Project Name: Farrell Gibson Intersection

September 25, 2020

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

To Whom It May Concern:

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

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

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

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

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

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

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

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

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

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

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

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

This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2020-SLI-2983

Event Code: 08ESMF00-2020-E-09223

Project Name: Farrell Gibson Intersection

Project Type: AGRICULTURE

Project Description: Water line.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/38.37905917660619N121.99832540904553W>



Counties: Solano, CA

Endangered Species Act Species

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

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

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

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

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

Reptiles

NAME	STATUS
Giant Garter Snake <i>Thamnophis gigas</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891 Species survey guidelines: https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (Central CA DPS) There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

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

Insects

NAME	STATUS
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7850 Habitat assessment guidelines: https://ecos.fws.gov/ipac/guideline/assessment/population/436/office/11420.pdf	Threatened

Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

Critical habitats

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

Appendix B Native American Outreach Log

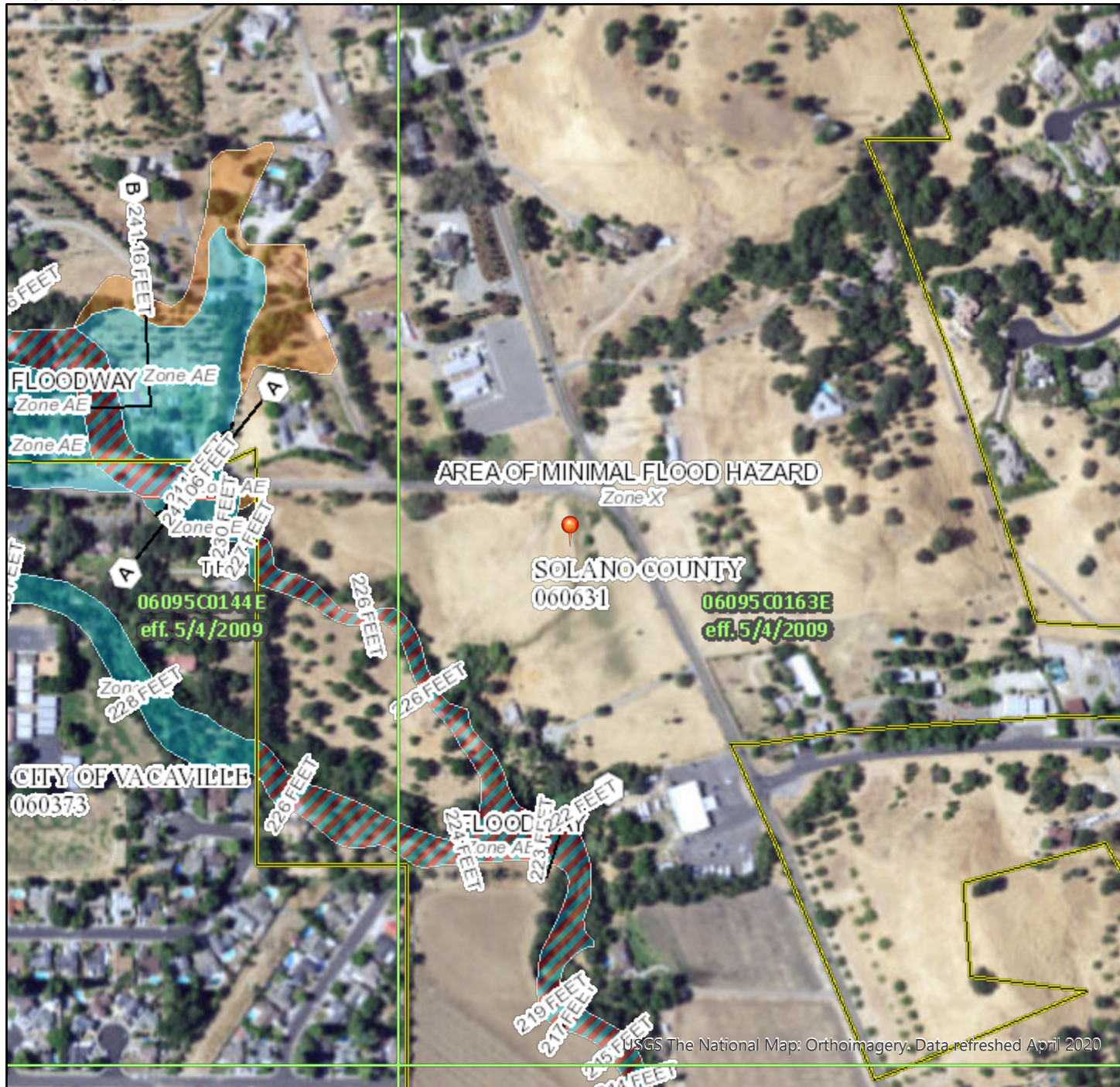
Farrell Road/Gibson Canyon Road Intersection Improvements Project, California
Native American Consultation Log

Affiliation	Name	Contact Date	Contact Type	Response	
Wilton Rancheria Cultural Preservation Department	Antonio Ruiz Jr.	7/31/2020	Letter	Delivered 8/3/20. As of 9/25/20, there has been no response.	
			e-mail		
			Telephone		
				Letter	
				e-mail	
				Telephone	
Cortina Band of Indians	Charlie Wright	7/31/2020	Letter	delivered 8/10/20. As of 9/25/20, there has been no response.	
			e-mail		
			Telephone		
	Kesner Flores	7/31/2020		Letter	
				e-mail	
				Telephone	
Yocha Dehe Wintun Nation	Native Cultural Renewal Committee	7/31/2020	Letter	delivered 8/3/20. As of 9/25/20, there has been no response.	
			e-mail		
			Telephone		
	Leland Kinter	7/31/2020		Letter	delivered 8/3/20. As of 9/25/20, there has been no response.
				e-mail	
				Telephone	
NAHC		7/17/2020	Letter	On July 21, 2020, Cultural Resources Analyst Sarah Fonseca communicated via e-mail that Sacred Lands File were negative	

National Flood Hazard Layer FIRMMette



122°0'13"W 38°22'58"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X

OTHER AREAS OF FLOOD HAZARD		Area with Flood Risk due to Levee Zone D
		NO SCREEN Area of Minimal Flood Hazard Zone X

OTHER AREAS		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D

GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall

OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance
		17.5 Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
OTHER FEATURES		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature

MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/24/2020 at 6:34 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



