

Dondero Crossing of Potter Creek Project
SAN JOAQUIN, CALIFORNIA

**Final Draft Initial Study with Proposed
Mitigated Negative Declaration**



**Prepared by:
Stockton East Water District**



6767 East Main Street
Stockton, CA 95215
September 2019

The Draft Initial Study with Proposed Mitigated Negative Declaration was circulated for public comment from March 17th, 2021 to April 17th, 2021. All comments received during the circulation period have been reviewed and addressed by the District and included within Appendix B of the final document. Any changes made to the final document as a result of public comments are notated in a track changes sidebar.

NOTICE OF INTENT

TO ADOPT A MITIGATED NEGATIVE DECLARATION FOR THE PROPOSED DONDERO CROSSING OF POTTER CREEK PROJECT

Notice is Hereby Given that an Initial Study/Mitigated Negative Declaration (IS/MND) is available for public review for the Dondero Crossing of Potter Creek project described below pursuant to the provisions of the California Environmental Quality Act of 1970 (Public Resources Code 21100, et seq.)

Project Description and Location

Stockton East Water District (District) is proposing to construct a crossing over Potter Creek for the Dondero Family. The constructed facilities will consist of an installed low water culvert crossings consisting of precast box culverts with wing wall foundations. The crossing will be up to 20 feet wide and have a length of 30 feet long. The crossing will arrive on site as multiple precast box culvert sections, each approximately 15 feet long. The full crossing width and length will be accomplished by securing multiple sections of precast box culverts together and adjacent to each other.

The proposed project is located east of the city of Stockton, south of Copperopolis Rd. and west of Drais Rd.

Document Review and Availability

The public comment period will extend from March 17, 2021 to April 17, 2021. Copies of the IS/MND are available for public review at the Stockton East Water District, 6767 East Main Street, Stockton, CA 95215, 8:00 AM to 5:00 PM, Monday through Friday.

This IS/MND can also be reviewed and/or downloaded from the Stockton East Water District website at the following link: www.sewd.net.

During the public review period, written comments on the IS/MND may be provided to:

Darrel Evensen, District Engineer
Stockton East Water District
6767 East Main Street
Stockton, CA 95215
209.948.0537
devensen@sewd.net

PROPOSED MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

1. Project Name: *Dondero Crossing of Potter Creek*

2. Description of Project: Stockton East Water District (District) proposes to construct a crossing over Potter Creek for the Dondero family. The constructed facilities will provide a low water crossing consisting of precast box culverts with wing wall foundations. The crossing will be up to 20 feet wide and have a length of 30 feet long. The crossing will arrive on site as multiple precast box culvert sections, each approximately 15 feet long. The full crossing width and length will be accomplished by securing multiple sections of precast box culverts together and adjacent to each other.

3. Project Location: The proposed project is located in the east area of San Joaquin County, south of Copperopolis Rd. and west of Drais Rd.

4. Date: March 17, 2021

5. Lead Agency: Stockton East Water District

6. Name and Address of Applicant: Stockton East Water District
6767 East Main Street
Stockton, CA 95215

7. Contact Person: Darrel Evensen, District Engineer, 209.948.0537

8. Declaration:

Stockton East Water District has determined that there is no substantial evidence that the above project, as mitigated, may have a significant effect on the environment and proposes that a Mitigated Negative Declaration be adopted. The determination is based on the attached Initial Study and the following findings:

- a) *The project will not degrade environmental quality, substantially reduce habitat, cause a wildlife population to drop below self-sustaining levels, reduce the number or restrict the range of special-status species, or eliminate important examples of California history or prehistory.*
- b) *The project does not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals.*
- c) *The project will not have impacts that are individually limited, but cumulatively considerable.*
- d) *The project will not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.*

- e) *No substantial evidence exists that the project will have a negative or adverse effect on the environment.*
- f) *The project incorporates all applicable mitigation measures identified in the Initial Study.*
- g) *This Mitigated Negative Declaration reflects the independent judgment of the lead agency.*

Written comments on the Initial Study and proposed Mitigated Negative Declaration shall be submitted no later than 5 PM on April 17, 2021.

Submit comments to:
Darrel Evensen
District Engineer
Stockton East Water District
6767 East Main Street
Stockton, CA 95215

Posting Period:
March 17, 2021 to April 17, 2021

Initial Study approved by:

Dated: _____

Scot A. Moody, General Manager
Stockton East Water District

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INTRODUCTION

This Initial Study and Mitigated Negative Declaration (IS/MND) evaluates the environmental effects of the proposed Dondero Crossing of Potter Creek Project. The proposed project is to provide the Dondero family access to land severed by the Stockton East Water District's (District's) New Hogan Conveyance project. The constructed facility will provide a low water culvert crossing.

This IS/MND was prepared to satisfy the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] 21000 et seq.) and State CEQA Guidelines (14 California Codes of Regulations [CCR] 15000 et seq.). The District) is the lead agency for this proposed Project under CEQA.

1.1 Purpose of this Document

CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects. An MND, which requires inclusion of an IS, is a public document used by the decision-making lead agency to determine whether a project may have a significant adverse impact on the environment. If the agency finds that the proposed Project may have a significant adverse impact on the environment, but that the impacts will be clearly reduced to a less-than-significant level through implementation of specific mitigation measures, an MND shall be prepared.

This IS/MND is a public information document that describes the proposed Project, existing environmental setting at the Project site, and potential environmental impacts of construction and operation of the proposed Project. It is intended to inform the public and decision-makers of the proposed Project's compliance with CEQA and State CEQA Guidelines.

1.2 Tiering

CEQA allows for the preparation of environmental documents using a multilevel approach whereby a broad level EIR, termed a "program EIR," includes an analysis of general matters (e.g., the impacts of an entire plan, program, or policy), and subsequent project-level EIRs or negative declarations include analyses of the project-specific effects of projects within the program (State CEQA Guidelines Section 15168). State CEQA Guidelines Section 15168 describes the process of tiering from a program EIR, in which CEQA documents that follow a program EIR incorporate by reference and rely on the general discussions, program-wide analyses, and program-level mitigation measures from the broader EIR, and focus on the site-specific impacts of the individual projects that implement the plan, program, or policy.

1.3 Review Process

This IS/MND is being circulated for public and agency review as required by CEQA. Because state agencies will act as responsible or trustee agencies, the District will circulate the IS/MND to the State Clearinghouse of the Governor's Office of Planning and Research for distribution and a 30-day review period. A copy of the CEQA IS/MND is also available for review on the District's website: www.sewd.net.

During the review period, written comments may be submitted to:

Darrel Evensen
District Engineer
Stockton East Water District
6767 East Main Street
Stockton, CA 95215
devensen@sewd.net

After comments are received from the public and reviewing agencies during the public comment period, the District may (1) adopt the Mitigated Negative Declaration and approve the proposed Project; (2) undertake additional environmental studies; or (3) disapprove the Project. If the Project is approved, the District may proceed with detailed design and construction.

1.4 Document Organization

This IS/MND is organized as follows:

Chapter 1: Introduction. This chapter provides an introduction to the environmental review process, and describes the purpose and organization of this document.

Chapter 2: Project Description. This chapter provides a detailed description of the Project and required permits and approvals.

Chapter 3: Environmental Checklist. This chapter presents an analysis of a range of environmental issues identified in the CEQA Environmental Checklist and determines if Project actions would result in no impact, a less-than-significant impact, a less-than-significant impact with mitigation incorporated, or a potentially significant impact. If any impacts were determined to be potentially significant, an EIR would be required. For this Project, however, none of the impacts were determined to be significant.

1.5 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"/> Agricultural Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <input type="checkbox"/> Hazards & 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/Traffic |
| <input type="checkbox"/> Utilities/Service System | <input type="checkbox"/> Mandatory Findings of Significance | |

1.6 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 propose 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 of mitigation measures that are imposed upon the Project, nothing further is required.

By:

 Scot A. Moody, General Manager
 Stockton East Water District

 Date

PROJECT DESCRIPTION

This chapter provides a detailed location, description of the Project, and required permits and approvals.

2.1 Project Location

The proposed Project is located in the east area of San Joaquin County, south of Copperopolis Rd. and west of Drais Rd., as shown in Figure 1. Specifically, the parcels are located in the southeast quarter of Section 21, the southwest quarter of Section 22, and northwest quarter of Section 27, Township 1 North, Range 10 East, Mount Diablo Base and Meridian. Figure 2 shows the Project location.

2.2 Project Description

The Project will consist of a box culvert crossing of Potter Creek, access to lands severed by the District's New Hogan Conveyance System. The constructed facilities will provide a low water culvert crossing consisting of precast box culverts with wing wall foundations, as shown in Figure 3. The crossing will consist of precast 15-foot long by 8-foot high box culverts. The crossing will be 30 feet long by 20 feet wide. The full crossing width and length will be accomplished by securing multiple sections of precast box culverts together and adjacent to each other. The creek bed will be excavated in order to apply a compacted 2-foot depth foundation of aggregate base rock that the culverts will be placed on top of. The culverts will be backfilled to depth of 18-24 inches with the excavated streambed material. Six-inch concrete curbs will be installed on the top surface, along the upstream and downstream edges of the culverts. Concrete wing walls approximately 8 feet tall by 12 feet wide will be constructed at the approaches to retain the side slopes of the approach roads. Rock slope protection will be placed around each abutment to protect against erosion. Compacted road base will be added in the approach areas leading in and out of the crossing.

The crossing will accommodate a design flow of 225 cubic feet per second (CFS) through Potter Creek. The crossing will allow for HS-20 vehicle loads as defined by the American Association of State Highway and Transportation Officials (AASHTO). AASHTO defines HS-20 loading as a tractor truck with semi-trailer. The tractor truck front axle weight is 8,000 pounds, with the rear two axle weights being 32,000 pounds each.

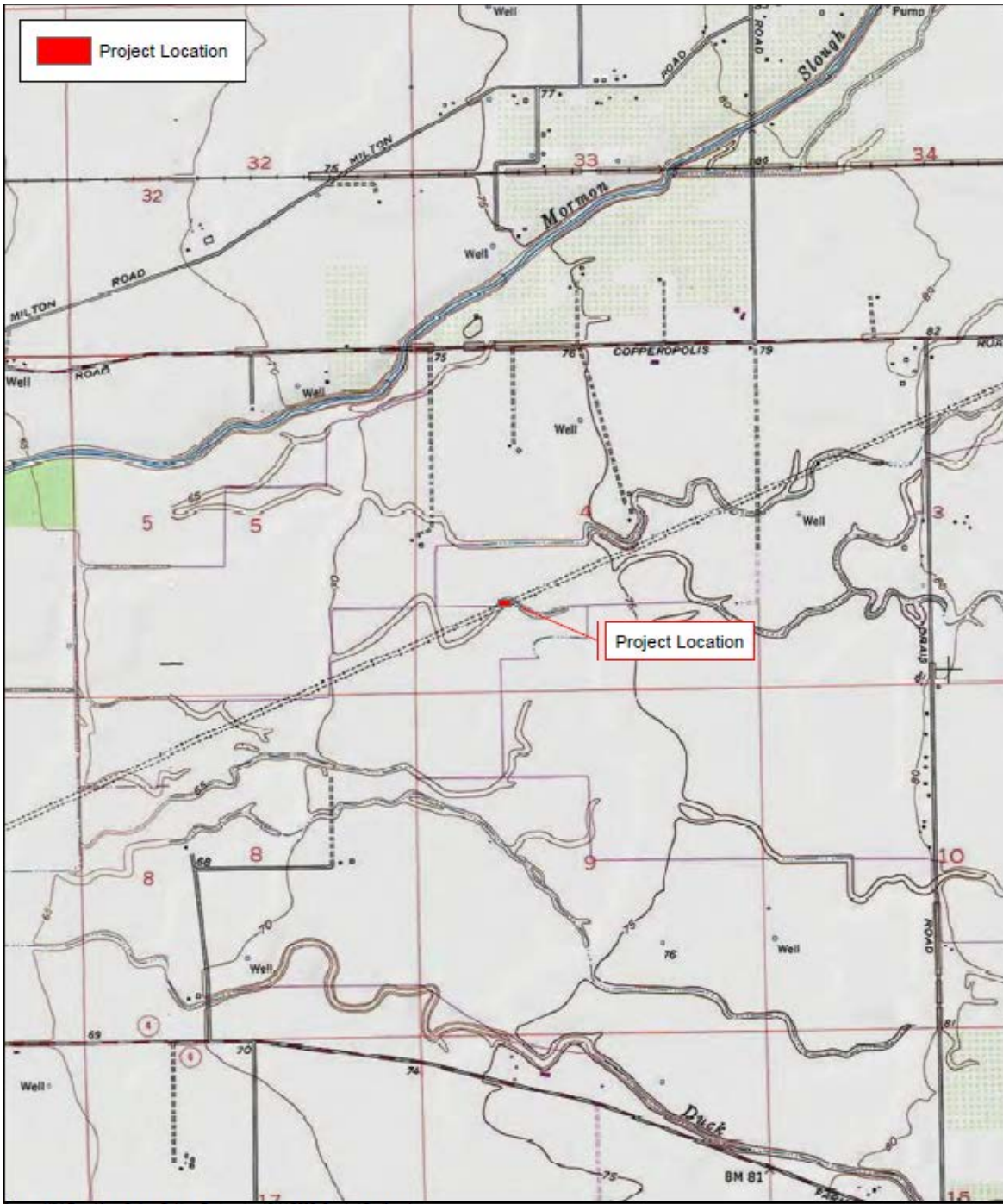


FIGURE 2
Project Location

Dondero Crossing of Potter Creek Project
San Joaquin County, CA





FIGURE 3
Low Water Culvert Crossing Example

Dondero Crossing of Potter Creek Project
San Joaquin County, CA

2.3 Required Permits and Project Approvals

As the lead agency pursuant to CEQA, the District is responsible for considering the adequacy of the IS and determining if the project should be approved.

If approved, elements of the project would be subject to permitting and/or approval authority of other agencies included in the following table:

AGENCY	ACTIVITY	ENTITLEMENT
Federal		
U.S. Army Corps of Engineers	Required for placement of fill into waters of the United States	Section 404 – Nationwide Permit Authorization
State		
California Department of Fish and Wildlife	Work in waters of the State	Section 1600 of the California Fish and Game Code – Lake and Streambed Alteration Agreement
Central Valley Regional Water Quality Control Board	Water quality certification required to support the Section 404 Nationwide Permit Authorization	Section 401 – Water Quality Certification

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 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: Would the Project:	Potentially Significant Impact	Less Than Significant Impact 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) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime view in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) **No Impact.** There are no known scenic vistas within the vicinity of the Project.
- b) **No Impact.** The project will not require the removal of any trees. Additionally, there are no historic buildings within or adjacent to the Project area.
- c) **Less than significant impact.** The existing visual character would change after the installation of the crossing, but the new crossing would not degrade the existing visual character.
- d) **No Impact.** No additional lighting would be required as a result of the proposed Project. Construction of the crossings would only take place during daylight hours.

Mitigation Measures

None.

<p>II. Agriculture and Forest Resources:</p> <p>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:</p>	Potentially Significant Impact	Less Than Significant Impact 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 Project will not result in agricultural lands be converted to non-agricultural use.
- b) **No Impact.** The Project does not conflict with existing zoning or Williamson Act contracts.
- c) **No Impact.** The Project does not conflict with zoning for forest land.
- d) **No Impact.** The Project will not result in loss or conversion of forest land.
- e) **No Impact.** No, the Project actually fosters the continued, existing agricultural use of the land.

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 Impact 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 checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a,b) Less than Significant with Mitigation. The proposed Project is located in the portion of San Joaquin County that is under the jurisdiction of the San Joaquin Valley Air Pollution Control District (APCD). Fugitive dust may potentially be generated from the excavation and movement of construction equipment along the unpaved access road on the Project site. Adherence to best management practices, as recommended by the San Joaquin Valley APCD and described below would be implemented to minimize temporary impacts to air quality.

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.

- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing water.
 - Traffic speeds on unpaved roads shall be limited to 10 miles per hour.
- c) **Less than Significant.** All construction impacts to air quality would be short-term and intermittent; therefore impacts are anticipated to be less than significant. The emission of pollutants during construction would not contribute significantly to a net increase of any criteria pollutant. No long-term, operational impacts are anticipated.
- d) **Less than Significant.** The project site is located within an agricultural area. The closest sensitive receptors are residences located 0.5 miles northeast of the project site; the short-term and intermittent emissions are anticipated to be less than significant at the residences. The project would not result in substantial, long-term quantities of pollutant concentrations that would affect the surrounding rural residents.
- e) **No Impact.** The Project site is located within an agricultural area and would not produce sufficient quantities of objectionable odors during construction that would affect the surrounding rural residents.

Mitigation Measures

None.

IV. Biological Resources: Would the project:	Potentially Significant Impact	Less Than Significant Impact 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 Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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?	□	□	□	☑
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a) **No Impact.** The biological technical report prepared in December 2020, by Dokken Engineering found no special-status wildlife species and no special-status species plant species have the potential to occur within the biological survey area. Although no special-status species were found the below listed best management practices will further minimize and avoid potential impacts to native plant and animal species and the existing plant and animal communities within the BSA.

- Every individual working on the Project must attend a biological awareness training session delivered by a qualified biologist. This training program shall include information regarding sensitive habitats, special-status species and the importance of avoiding impacts to these species and their habitat.
- Prior to the start of construction activities, the Project limits in proximity to Potter Creek Channel A will be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into water resources.
- All food –related trash must be disposed into closed containers and must be removed from the Project area daily. Construction personnel must not feed or otherwise attract wildlife to the Project area.
- The contractor must not apply rodenticide or herbicide within the BSA during construction.
- 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.
- Should a special-status plant species be observed within or immediately adjacent to the Project area, Environmentally Sensitive Area (ESA) fencing (orange construction barrier fencing) will be installed around special-status plant populations.

Migratory Birds

Native birds are protected by the MBTA and CFG Code Section 3513. To minimize potential impacts to migratory birds, mitigation measure BIO-08 will be incorporated throughout Project construction.

b) No Impact. The biological field survey conducted in December 2020, by Dokken Engineering found no riparian habitat or other sensitive natural communities within the biological survey area. Although no sensitive habitat exists, BMPs will be incorporated into Project design and Project management to minimize impacts on the environment including erosion and the release of pollutants (e.g. oils, fuels):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
- All construction roadway areas would be properly protected to prevent excess erosion, sedimentation, and water pollution;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All disturbed areas would be restored to pre-construction contours and revegetated, and,
- All excess construction materials brought to the site will be hauled off-site after completion of construction.

c) Less than Significant Impact. No federally protected wetland features were delineated in the near vicinity. The Project will obtain appropriate permits for this Project including Clean Water Act Section 401 Water Quality Certification and Streambed Alteration Agreement under 1602 from CDFW. The proposed Project will avoid federally protected wetlands entirely.

- d) **No Impact.** The Project limits are absent of essential fish habitat and no threatened or endangered State listed species have the potential to occur within the biological survey area. Therefore, the Project will have no impacts to native resident or migratory fish or wildlife. Although no fish habitat exists, upon completion of construction activities, any barriers to surface water flow will be removed in a manner that would allow flow to resume with the least disturbance to the substrate.
- e) **No Impact.** The Project area is not included within any tree preservation policies or ordinances.
- f) **No Impact.** The Project is not located within a Habitat Conservation Plan or Natural Community Conservation Plan.

Mitigation Measures

BIO-01: Every individual working on the Project must attend a biological awareness training session delivered by a qualified biologist. This training program shall include information regarding sensitive habitats, special-status species and the importance of avoiding impacts to these species and their habitat.

BIO-02: Prior to the start of construction activities, the Project limits in proximity to Potter Creek Channel A will be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into waters or any other biologically sensitive resources detected during preconstruction surveys.

BIO-03: BMOs will be incorporated into Project management to minimize impacts on the environment including erosion and the release of pollutants (e. g. oils, fuels):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
- All construction roadway areas would be properly protected to prevent excess erosion, sedimentation, and water pollution;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be

hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;

- All erosion control measures and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All disturbed areas would be restored to pre-construction contours and revegetated, and,
- All excess construction materials brought to the site will be hauled off-site after completion of construction.

BIO-04: Upon completion of construction activities, any temporary barriers to surface water flow must be removed in a manner that would allow flow to resume with the least disturbance to the substrate.

BIO-05: 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-06: All food-related trash must be disposed into 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-07: The contractor must not apply rodenticide or herbicide within the BSA during construction.

BIO-08: If project activities are to commence during the nesting season (February 1-August 31), a pre-construction nesting bird survey must be conducted within a 300-foot buffer of project activities within 7 days prior to the start of construction.

A minimum 100-foot no-disturbance buffer will be established around any active nest of migratory birds a minimum of 300-foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the nesting area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the Project biologist and in coordination with wildlife agencies) in the buffer area until a qualified biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the Project biologist and approved by CDFW.

V. Cultural Resources: Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a,b) Less than Significant Impact with Mitigation. In November 2020, a pedestrian ground surface inventory survey was performed by Dokken Engineering. The surface survey was conducted via controlled transects spaced no greater than 5-meter intervals within the APE. Surface visibility within the APE was variable, ranging from poor (90-100% occlusion) in areas with fallen nut-shell cover on some road surfaces or those hosting dense surface vegetation. Visibility relatively improved to good (<75% occlusion) in lightly vegetated areas with more open surface exposures in and adjacent to the agricultural fields. Particular attention was paid to de-vegetated surface exposures, as well as any rodent burrows, cut banks, and other exposed areas where the presence of artifacts, archeological features, or anthropogenic soils are more likely observed.

During the pedestrian surface survey on November 2, 2020, a flake and pestle were identified. The flake is a gray –green chert primary flake with dark rust-orange cortex. The pestle is a dark –grey granitic material with wear on both ends and possible pecking end modification. No additional archeological artifacts, features, or anthropogenic soils were observed within the APE.

The APE would have been a targeted location of prehistoric activity along nearby drainage oxbows. Although the Project grading activities will occur primarily within the previously disturbed construction corridor associated with creation of the channelized drainage and surrounding agricultural fields, the exact depth of previous ground disturbance associated with the channelized drainage and agricultural fields is unknown. Because the vertical ground disturbances depth required to excavate the geotechnical exploration pits will extend to a depth of 12

feet, it is possible that the Project ground disturbing activities will extend into undisturbed soils. For this reason, and as the Project includes soils indicative of deposition, the potential for the Project to impact intact buried cultural resource deposits in the APE is medium to low.

To minimize potential impacts to cultural or historical resources, mitigation measure CR-1 will be incorporated throughout Project construction. Mitigation measure CR-2 will be implemented prior to project construction.

- c) **No Impact.** The Project site does not contain any unique paleontological resources or geologic features.
- d) **Less than Significant Impact.** Disturbance to human remains, including those interred outside of formal cemeteries, is not anticipated. In adherence to best management practices related to disturbance of human remains, the District will follow the minimization measures included within the Tribal Cultural Resource section.

Mitigation Measures

CR-1: An archeologist meeting the Secretary of the Interior's Professional Qualification Standards in Archeology shall conduct archeological monitoring during geotechnical and construction activities.

CR-2: An archeological monitor shall provide cultural awareness training to all personnel conducting geotechnical and construction activities. The program will include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State Laws and regulations. The worker cultural resources awareness program will also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and will outline what to do and whom to contact if any potential archaeological resources or artifacts are encountered. The program will also underscore the requirement for confidentiality and culturally-appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values.

CR-3: If previously unidentified historical or 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. Should the archeological discovery include Native American resources, the Wilton Rancheria shall be contacted, as requested, to assist in the significance and treatment recommendations.

CR-4: If human remains are encountered, State Health and Safety Code Section 7050.5 dictates that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined prehistoric, the

Coroner will notify the NAHC, which will determine and notify a Most Likely Descendent (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of the notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

VI. Tribal Cultural Resources: Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change to a listed or eligible for listing resource 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Cause a substantial adverse change to 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.?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a-c) Less than Significant Impact. The Project area was defined to encompass permanent Project features and areas of potential ground disturbance during construction.

An archaeological pedestrian ground surface inventory survey was conducted by Dokken Engineering Archaeologist Michelle Campbell on November 2, 2020 for the purpose of identifying and recording archaeological resources. The survey revealed a prehistoric flake and pestle. Both artifacts were found on the embankment of the channelized drainage ditch, in an area of regular disturbance.

On September 10, 2020 initial consultation letters were mailed to the Native American tribal governments who have previously submitted a written request to the District requesting to be notified of projects within their traditionally and culturally affiliated areas. Letters were mailed to the following contacts:

- Ralph Hatch (Executive Director of the Wilton Rancheria)
- Michael Mirelez (Cultural Resource Coordinator of the Torres Martinez Desert Cahuilla Indians)
- Roselynn Lwenya (Environmental Resources Director/Tribal Preservation Officer of the Buena Vista Rancheria)
- Bailey Hunter (Environmental and Natural Resources Manager of the Chicken Ranch Rancheria of Me-Wuk Resources Manager)

The District received no responses from Torres Martinez Desert Cahuilla Indians, Buena Vista Rancheria, and Chicken Ranch Rancheria of Me-Wuk Resources Manager.

On September 30, 2020, Mariah Mayberry for Wilton Rancheria, responded via e-mail that the Wilton Rancheria had knowledge of a known village site in proximity to the project area. The Wilton Rancheria requested monitoring during ground disturbing activities associated with the Project and provided mitigation measures.

With adherence to Standard Best Management Practices and/or Minimization Measures as described below, impacts to TCRs would be less than significant.

Standard Best Management Practices and/or Minimization Measures

- Should buried, unforeseen archaeological deposits be encountered during any construction activity, work would cease within a 20-foot radius of the discovery. In accordance with 36 CFR Part 800.13, a qualified archaeologist would be notified to document the discovery, assess its significance, and recommend treatment.
- In the event that human remains or any associated funerary artifacts are discovered during construction, all work would cease within the immediate vicinity of the discovery. In accordance with CEQA and the California Health and Safety Code (Section 7050.5), the San Joaquin County coroner must be contacted immediately. If the remains are deemed to be Native American, the coroner will notify the NAHC, which will in turn appoint and notify a most Likely Descendent (MLD) to act as a tribal representative. The MLD will work with a qualified archaeologist to determine the proper treatment of the human remains and associated funerary objects. Construction activities will not resume until either the human remains are exhumed, or the remains are avoided via project construction design change.

Mitigation Measures

See Cultural Resources Mitigation Measures.

VII. Geology and Soils: Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

sewers are not available for the disposal of waste water?				
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- a (i-iii) **No Impact.** The site is not located near any known Alquist-Priolo faults.
- a (i-iv) **No Impact.** The topography of the Project site is relatively flat and surrounded by flat agricultural parcels. Slopes within the Project area are between zero (0) and two (2) percent according to the Natural Resource Conservation Service. There are no anticipated impacts related to landslides.
- b) **Less than significant Impact.** Any soil disturbed by the Project will be regraded to the existing site conditions and/or be secured against erosion through the use of rock (rip-rap), matting, or other BMP.
- c) **Less than significant Impact.** Soils in the Project area are comprised of Hollenbeck silty clay. All soils unsuitable for use as a structural base or sub-base shall be removed and replaced with suitable structural base material.
- d) **Less than significant Impact.** No expansion soil is located at the Project Site. Refer to answer to question (c) above.
- e) **No Impact.** The Project does not include any waste water disposal systems.

Mitigation Measures

None.

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

a & b) Less Than Significant. Construction impacts to air quality 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.

Mitigation Measures

None.

IX. Hazards and Hazardous Materials: Would the project:	Potentially Significant Impact	Less Than Significant Impact 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 for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

g) 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"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) **Less than significant Impact.** The Project would involve the use of heavy equipment for grading, hauling, and materials handling. 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 staging area 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 crossing project and would not create a significant hazard to the public or the environment.
- c) **No Impact.** There are no schools located within one-quarter mile of the proposed Project.
- d) **No Impact.** According to a search of available environmental records listed on EDR, the Project site is on no known list of hazardous materials sites (Envirostor, 2020).
- e) **No Impact.** The Project is not located within two (2) miles of a public airport. The nearest airport is the Stockton Municipal Airport located approximately 10 miles west.
- f) **No Impact.** The Project is not within the vicinity of a private airstrip.
- g) **No Impact.** Construction and operation of the proposed Project would not result in interference or restriction of access road. There would be no impact to adopted emergency response plans or emergency evacuation plans.
- h) **No Impact.** The proposed Project would not expose people to any risk of wildland fires.

Mitigation Measures

None.

X. Hydrology and Water Quality: Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<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, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) **Less than significant Impact.** BMPs will be incorporated into Project design and Project management to minimize impacts on the environment including reduction of sedimentation and release of pollutants (oil, fuel, etc.). The following measures will be implemented to ensure best management practices:

- The area of construction and disturbance would be limited to as small an area as feasible to reduce erosion and sedimentation.
- Measures would be implemented during land-disturbing activities to reduce erosion and sedimentation. These measures may include mulches, soil binders and erosion control blankets, silt fencing, fiber rolls, temporary berms, sediment de-silting basins, sediment traps, and check dams.
- Existing vegetation would be protected where feasible to reduce erosion and sedimentation. Vegetation would be preserved by installing temporary fencing, or other protection devices, around areas to be protected.
- Exposed soils would be covered by loose bulk materials or other materials to reduce erosion and runoff during rainfall events.
- Exposed soils would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities.
- All construction roadway areas would be properly protected to prevent excess erosion, sedimentation, and water pollution.

- All vehicle and equipment maintenance procedures would be conducted outside of the creek.
 - All concrete curing activities would be conducted to minimize spray drift and prevent curing compounds from entering the waterway directly or indirectly.
 - All construction materials, vehicles, stockpiles, and staging areas would be situated outside of the channel. All stockpiles would be covered, as feasible.
 - Energy dissipaters and erosion control pads would be provided at the bottom of slope drains. Other flow conveyance control mechanisms may include earth dikes, swales, or ditches. Stream bank stabilization measures would also be implemented.
 - All erosion control measures and storm water control measures would be properly maintained until the site has returned to a pre-construction state.
 - All disturbed areas would be restored to pre-construction contours and revegetated, either through hydroseeding or other means, with native or approved non-invasive species.
 - All construction materials would be hauled off-site after completion of construction.
- b) **No Impact.** The project does not require the use of groundwater.
- c) **Less than significant Impact.** The drainage pattern within the Project area will be temporarily disturbed during construction activities, which will occur during the typically dry time of year. The site would be re-graded to return to pre-construction conditions and would not alter existing drainage patterns or cause impacts related to substantial erosion or siltation.
- d) **Less than significant Impact.** The crossing will not restrict flow from its normal pathway or alter its original course.
- e) **No Impact.** The site would be re-graded to return to pre-construction conditions, thereby not increasing historical runoff. The Project does not connect to any existing storm drain system.
- f) **Less than significant Impact with Mitigation.** See answer (a) above.
- g) **No Impact.** No housing is included in this project.
- h) **No Impact.** The project is not constructing any habitable structures and the Project location is not located within a 100-year flood hazard area.
- i) **No Impact.** The construction of a dam or levee is not included in this Project.
- j) **No Impact.** The Project is not located within or adjacent to a large body of water.

Mitigation Measures

None.

XI. Land Use and Planning: Would the project:	Potentially Significant Impact	Less Than Significant Impact 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) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) **No Impact.** The Project proposes to construct improvements to mitigate a physical divide between severed areas of private property.
- b) **No Impact.** The Project would not conflict with applicable land use plans, policies, or regulations of an agency with jurisdiction over the Project.
- c) **No Impact.** The Project is not within any known habitat or community conservation plans.

Mitigation Measures

None.

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

- a) **No Impact.** There are no known valuable mineral resources available at the Project site.
- b) **No Impact.** There is no delineated mineral resources recovery site at the Project site.

Mitigation Measures

None.

XIII. Noise: Would the project result in:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels 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) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the Project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 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"/>
f) For a Project within the vicinity of a private airstrip, 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"/>

- a) **Less than Significant.** The construction activities would only occur during weekday work hours in accordance with Chapter 10.46 Noise Control of the San Joaquin County Code and would not generate noise in excess of the nearby roadway.

- b) **Less than Significant.** The temporary ground borne vibration and noise of the construction activities would be in accordance with Chapter 10.46 Noise Control of the San Joaquin County Code and would not be excessive to the nearest occupied structures.
- c) **No Impact.** There is no equipment included in this Project to permanently increase the ambient noise level.
- d) **Less than Significant.** Construction activities would only occur during weekday work hours and would not generate noise in excess of the nearby roadway.
- e) **No Impact.** The Project is not located within an airport land use plan.
- f) **No Impact.** The Project is not in the vicinity of a private airstrip.

Mitigation Measures

None.

XIV. Population and Housing: Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial 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 housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) **No Impact.** The Project would not induce substantial population growth in the area. The proposed Project provides access to adjacent farmlands for agricultural purposes.
- b) **No Impact.** No existing housing would be displaced by this Project.
- c) **No Impact.** Displacement of people and housing would not occur as a part of this Project.

Mitigation Measures

None.

XV. Public Services:	Potentially Significant Impact	Less Than Significant Impact 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:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a (i, ii) No Impact. The Project site is located within agricultural fields and would not result in the need for new facilities or affect response times to the adjacent residences.

a (iii-v) No Impact. There are no schools, parks, or other public facilities within the Project area. No mitigation measures would be required.

Mitigation Measures

None.

XVI. Recreation:	Potentially Significant Impact	Less Than Significant Impact 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 proposed Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- b) **No Impact.** Bicycle facilities do not currently exist within the Project area. The proposed Project does not include recreational facilities, nor does it require the construction or expansion of recreational facilities.

Mitigation Measures

None.

XVII. Transportation/Traffic: Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

decrease the performance or safety of such facilities?				
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- a) **Less than Significant.** The Project would result in increased traffic along Copperopolis Road due to visits to the project site for construction; however the work would be temporary and therefore would not result in a significant impact.
- b) **No Impact.** The Project would not conflict with a congestion management program or standards established by San Joaquin County.
- c) **No Impact.** The nearest airport is the Stockton Municipal Airport, which is approximately 10 miles west of the project. The Project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks; therefore, no impact would occur, and no mitigation is required.
- d) **No Impact.** The proposed Project would not result in any impacts related to increased hazards from design features or incompatible uses.
- e) **No Impact.** The proposed Project would be constructed within farm roads and would not require any road closures along residential roads.
- f) **No Impact.** No interruptions to alternative transportation would result from the proposed Project.

Mitigation Measures

None.

XVIII. Utilities and Service Systems: Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) **No Impact.** The project will not produce any wastewater.

- b) **No Impact.** No new water treatment facilities are proposed as a part of this Project.
- c) **No Impact.** Existing storm water drainage facilities are adequate to deal with the runoff from the Project site. No impacts to existing storm water drainage facilities would occur.
- d) **No Impact.** The Project does not require any water supplies.
- e) **No Impact.** There is no wastewater treatment required for this Project.
- f) **No Impact.** Construction of the proposed Project would result in minor amounts of solid waste that would be disposed of at the Calaveras County Rock Creek Landfill.
- g) **No Impact.** The Project would comply with all federal, state, and local statutes and regulations related to solid waste disposal. Construction of the proposed Project would result in minor amounts of solid waste that would be disposed of at the Calaveras County Rock Creek Landfill.

Mitigation Measures

None.

XIX. Mandatory Findings of Significance:	Potentially Significant Impact	Less Than Significant Impact 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 Impact with Mitigation.** The Project will utilize measures listed within Section IV and V to minimize and avoid potential impacts to the American Badger and cultural resources. Construction would not have a cumulatively considerable contribution to the decline of American Badger habitat in the region. There are no known historic resources within the project area.
- b) **No Impact.** The Project is a water conveyance project and is not anticipated to have cumulatively significant impacts on environmental resources.

- c) **No Impact.** No substantial adverse effects on human beings, either directly or indirectly, are anticipated.

Mitigation Measures:

None.

Appendix A - BIOLOGICAL RESOURCES TECHNICAL REPORT

Biological Resources Technical Report
Dondero Crossing Project
San Joaquin County, California



Prepared for:

Stockton East Water District
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December 2020

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List of Abbreviations

BMPs	Best Management Practices
BSA	Biological Study Area
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFG	California Fish and Game
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CWA	Clean Water Act
District	Stockton East Water District
EO	Executive Order
ESA	Environmentally Sensitive Area
°F	Fahrenheit
Feet	ft.
FESA	Federal Endangered Species Act
IPaC	Information for Planning and Consultation
MBTA	Migratory Bird Treaty Act
NEPA	National Environmental Policy Act
NRCS	Natural Resources Conservation Service
Project	Dondero Crossing Project
RWQCB	Regional Water Quality Control Board
U.S.	United States
U.S.C.	United States Code
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

Summary

The Stockton East Water District (District) proposes to construct a new crossing and flashboard dam structure in Potter Creek in unincorporated eastern San Joaquin County, California. The Dondero Crossing Project (Project) is completely locally funded by the District.

This Biological Resources Technical Report is a review and evaluation of the potential impacts to threatened, endangered, proposed listed or sensitive species and protected habitat resources as a result of the proposed Project. Reconnaissance level surveys were conducted within the proposed Project's Biological Study Area (BSA), which is approximately 0.77 acres and encompasses all proposed impact areas with an approximate 20-foot buffer.

Literature research, habitat assessments and field surveys were conducted to determine the potential for special status species to occur within the BSA. Special status species include any plant or animal species listed by a state or Federal agency or by one or more special interest groups, such as California Native Plant Society. Based on biological surveys and habitat assessments, the BSA lacks habitat communities that could support special status species. Additionally, no federally designated critical habitat is present within or adjacent to the BSA.

An analysis was conducted to assess the biological resources within the BSA that potentially could be impacted by the Project's activities. The creek within the BSA was determined to be a jurisdictional water feature, pursuant to the Clean Water Act, due to its connectivity to a larger jurisdictional water feature downstream. Impacts to Potter Creek Channel A, as a result of the Project, include approximately 0.01 acres of permanent impacts and 0.07 acres of temporary impacts.

The proposed Project is subject to compliance with the California Environmental Quality Act (CEQA); the District represents the Project proponent and, therefore, the CEQA lead agency. The District will obtain appropriate permits for the proposed Project. Regulatory permits include; Clean Water Act Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB) and a Streambed Alteration Agreement under Section 1602 from the California Department of Fish and Wildlife (CDFW). The Project is the construction of a crossing over Potter Creek Channel A for transportation purposes, which is covered under Nationwide Permit 14 of Section 404 of the Clean Water Act. Therefore, no permit from the United States Army Corps of Engineers (USACE) Section 404 group for impacts to jurisdictional waters is required. Implementation of terms and conditions of environmental permits, along with Best Management Practices (BMPs) and avoidance and minimization measures will occur throughout the Project.

1. Introduction

The County of San Joaquin, in cooperation with the Stockton East Water District, proposes to construct a new crossing and flashboard dam structure in Potter Creek in unincorporated Eastern San Joaquin County, California. The Dondero Crossing Project (Project) is located approximately 3.5 miles west of the unincorporated town of Peters and approximately 1.3 miles north of State Route 4 in San Joaquin County, California (Figure 1. Project Vicinity). The Project site is located on a dirt road south of Copperopolis Road, approximately 2 miles after intersecting South Jack Tone Road (Figure 2. Project Location). The Project is located in Township 1 North, Range 8 East of the Mount Diablo Base Meridian in the United States Geological Survey (USGS) 7.5-minute topographic maps.

1.1 History

According to historical aeriels, the Project vicinity has been developed for agricultural purposes since the 1960's (NETR 2020). Land within the Project area has been highly disturbed for decades through farming practices and all vegetative communities are man-made, including the unlined creek.

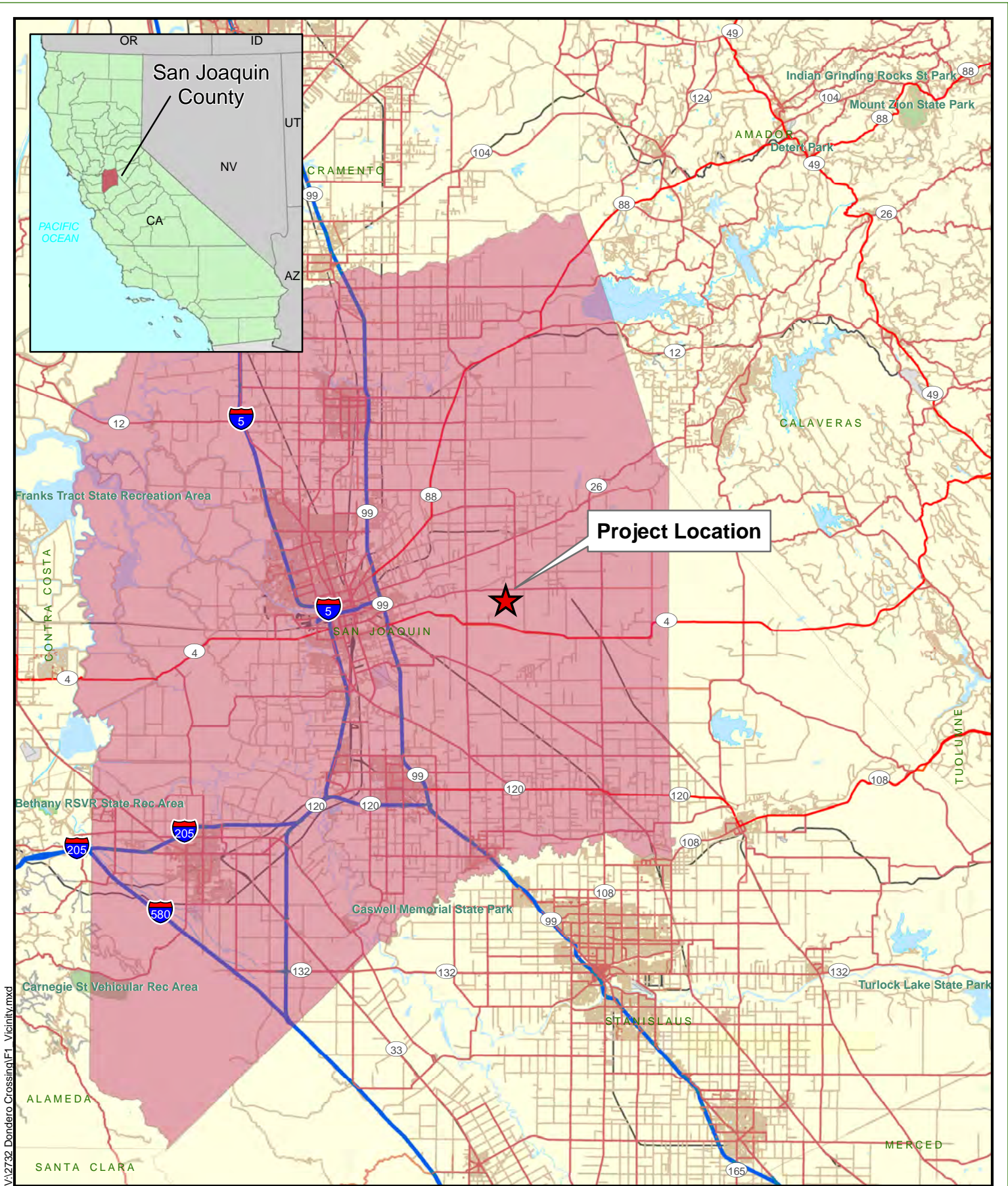
1.2 Project Description

Potter Creek currently provides irrigation water to adjacent private farmlands during the summer and conveyance for precipitation runoff during the winter. The District is proposing to construct a box culvert crossing with a removable flashboard dam within Potter Creek to offset anticipated increases in irrigation demand and provide vehicle access for private landowners and District maintenance purposes. The proposed project is needed to conserve irrigation water for adjacent farmlands. The purpose of the project is to impound irrigation flows in Potter Creek and redistribute it for irrigation purposes.

The proposed project will include a construction of a new box culvert crossing that will also operate as a flashboard dam. The preliminary site work will include the following: a survey and the excavation of two geotechnical exploration pits, one pit located at either end of the proposed crossing. The excavated area necessary to develop the geotechnical exploration pits is estimated at 8 feet by 8 feet wide and up to 12 feet deep. The culvert crossing would require minimum excavation.

The culvert crossing would require minimum excavation; only as required to develop a suitable culvert base and necessary bank grading to connect to existing access roads on either side of Potter Creek. Existing water services provided by the District will remain active during project construction. All ground disturbing activities will take place within the proposed temporary construction areas depicted in the plans. No extended time road closures are anticipated to occur, and access to each residence will be maintained. There will be no right-of-way (ROW) impacts or utility easements. Temporary construction easements (TCEs) and encroachment permits will be needed on a limited basis to accommodate the construction of the box culvert crossing. Construction is anticipated to last six months.

The project is locally funded through the Stockton East Water District, as such it requires compliance with the California Environmental Quality Act (CEQA). The lead agency for the CEQA compliance is the District.



V:\2732_Donado Crossing\F1_Vicinity.mxd

Source: ESRI 2008; Dokken Engineering 10/14/2020; Created By: jfogerty

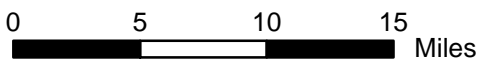


FIGURE 1
Project Vicinity

Dondero Crossing Project
San Joaquin County, California



X:\1836 - 11thSt\Bridges\Cultural\F2_Loc_10-12-10.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 10/14/2020; Created By: jfogerty

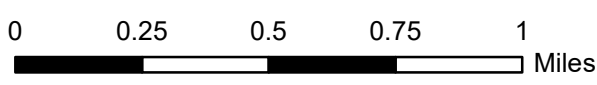


FIGURE 2
Project Location

Dondero Crossing Project
San Joaquin County, California

2. Study Methods

2.1 Regulatory Requirements

This section describes the general Federal, State, and local plans, policies, and laws that are relevant to biological resources within the BSA. Applicable approvals that could be required before construction of the Project are provided in Chapter 5.

Federal Regulations

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 (16 United States Code (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 the United States Fish and Wildlife Service (USFWS).

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 United States (U.S.). The CWA serves as the primary Federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The CWA empowers the U.S. 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 routine maintenance site. Non-point-source pollution originates over a broader area and includes urban contaminants in storm water runoff and sediment loading from upstream areas. The 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.

The RWQCB has jurisdiction under Section 401 of 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 the 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 requires consideration of invasive species in the National Environmental Policy Act (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 includes 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

The CEQA is a 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 District 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 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 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 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.

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.

2.2 Studies Required

Literature Search

Prior to field work, literature research was conducted through the USFWS Information for Planning and Consultation (IPaC) official species list generator (Appendix A), the CDFW California Natural Diversity Database (CNDDDB) (Appendix B), and the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Plants (Appendix C) to identify habitats and special-status species having the potential to occur within the BSA. Table 1 provides a comprehensive list of the species generated from the online database searches and presents specific characteristics, habitat requirements, and potential for occurrence for each species.

Survey Methods

Prior to field surveys, the BSA was defined as the Project impact area plus an approximate 20-foot buffer to facilitate construction access and capture potential biological resources adjacent to Project limits (Figure 3. Biological Study Area). Habitat assessment and analysis of historic occurrences were conducted to determine the potential for each of these species to occur within the BSA.

Biological surveys and habitat assessment included walking through the BSA, observing vegetation communities, compiling notes on observed flora and fauna, and assessing the potential for existing habitat to support sensitive plants and wildlife (Appendix E. Species Observed List). Additionally, a jurisdictional delineation was conducted to identify jurisdictional waters, as defined under the Clean Water Act or by CDFW, within the BSA. All plant and wildlife observations were recorded and are discussed in Chapter 3 of this document.

Personnel Survey Dates

A biological field survey was conducted on November 9, 2020 by Dokken Engineering biologists Hanna Sheldon and Clare Favro. Habitat assessments were conducted within the BSA to assess the vegetative communities present, identify biological resources which may be impacted by the Project, and evaluate the potential for special status species to occur on-site.

Agency Coordination and Professional Contacts

United States Fish and Wildlife Service


On November 2, 2020, an official species list was obtained from USFWS of Federal Endangered and Threatened species that could occur in the vicinity of the Project (Appendix A: USFWS Species List).

California Department of Fish and Wildlife

On November 2, 2020 a six-quadrangle list of species with potential to occur in the Project vicinity was obtained from CDFW's CNDDDB (Appendix B: CNDDDB Species List).

California Native Plant Society

On November 2, 2020, a six-quadrangle list of plant species with potential to occur in the Project vicinity was obtained from the CNPS Inventory of Rare and Endangered Plants of California (Appendix C: CNPS Species List).

 Biological Study Area



V:\2732_Donado Crossing\F3_Project_Features.mxd

Source: ESRI Maps Online; Dokken Engineering 11/19/2020; Created By: hsheldon



1 inch = 100 feet



Figure 3
Biological Study Area

Dondero Crossing Project
San Joaquin County, California

Limitations That May Influence Results

Sensitive wildlife species with the potential to occur in the BSA may be cryptic (difficult to detect) or transient, migratory species. The population size and locations of sensitive species may fluctuate through time. Because of this, the data collected for this biological resource technical report represents a “snap shot” in time and may not reflect actual future conditions.

The collection of biological field data is normally subject to environmental factors that cannot be controlled or reliably predicted. Consequently, the interpretation of field data must be conservative and consider the uncertainties and limitations imposed by the environment. However, due to the experience and qualifications of the consulting biologists involved in the surveys, this limitation is not expected to severely influence the results or substantially alter the findings.

No additional limitations were present that could influence the results of this document. All surveys were conducted during appropriate weather and temperature conditions.

3. Results: Environmental Setting

3.1 Description of the Existing Biological and Physical Conditions Study Area

Study Area

Prior to field surveys, the BSA was established by creating a 20-foot buffer around all anticipated Project impacts; including the box culvert, gravity diversion structure, wingwalls, rip rap, and potential staging areas. From north to south, the BSA measures approximately 144 feet (ft.) and from east to west measures approximately 237 ft. The total area of the BSA is approximately 0.77 acres.

Physical Conditions

Regionally, the BSA is located approximately 3.5 miles west of the unincorporated town of Peters and approximately 1.3 miles north of State Route 4 in San Joaquin County, California, within the San Joaquin Valley Floristic Province (Jepson Herbarium 2020). San Joaquin County experiences Mediterranean conditions including warm, dry summers and cool, wet winters. Average summer highs reach approximately 76 degrees Fahrenheit (°F) and winter lows reach approximately 48°F, with up to 17.7 inches of precipitation annually (US Climate Data 2020). The BSA ranges in elevation from approximately 76 to 80 ft. above mean sea level. The soil type within the BSA is Hollenbeck silty clay, 0 to 2 percent slopes (NRCS 2020) (Appendix D. NRCS Soil Report). Vegetation communities within the BSA include barren/farm roads, Potter Creek Channel A, and agricultural lands (Figure 4. Vegetation Communities within the BSA), (Appendix F. Representative Photographs).

Biological Conditions in the Study Area

Agricultural Lands


Agricultural lands within the BSA consists of walnut (*Juglans regia*) orchards. Maintenance surrounding the walnut orchards includes regular watering through irrigation lines, clearing orchard floors and may include the use of pesticides. Agricultural lands comprise approximately 0.34 acres (44.1%) of the BSA.

Barren/Farm Roads




The BSA contains dirt roads used for access to adjacent agricultural lands. The roads are barren, compacted and are regularly disturbed. The BSA contains approximately 0.28 acres (36.3%) of dirt roads.

Potter Creek Channel A

The BSA contains approximately 0.15 acres (19.4%) or 237 linear feet of Potter Creek Channel A. The Potter Creek Channel is a human modified, unlined channel used for irrigation delivery and precipitation runoff conveyance to surrounding agricultural operations. The Potter Creek Channel A is regulated and controlled by the District during the irrigation season. The channel, within the BSA, has defined banks that are bordered by farm roads on either side. The banks lack riparian vegetation and are mostly barren. There is vegetation within the channel, but the vegetation is dominated by the non-native species common smartweed (*Persicaria hydropiper*), but also contains some native rush species (*Juncus spp.*). This vegetation is most likely present when there is little to no flow within the channel.

 Biological Study Area

Vegetation Communities

-  Barren/Farm Road (0.28 acres)
-  Potter Creek Channel A (0.15 acres)
-  Agricultural Lands (0.34 acres)



V:\2732_Dontero_Crossing\Biology\F4_Veg_Comm.mxd

Source: ESRI Maps Online; Dokken Engineering 11/17/2020; Created By: hsheldon

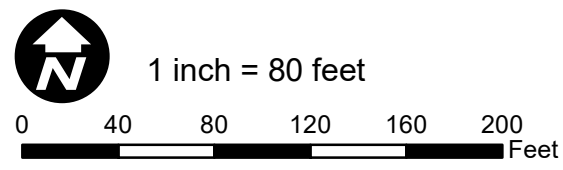


Figure 4
Vegetation Communities within the BSA

Dondero Crossing Project
San Joaquin County, California

Habitat Connectivity

The CDFW Biogeographic Information & Observation System (BIOS 2020) was reviewed to determine if the BSA is located within an Essential Connectivity Area. The BSA is outside of any Essential Habitat Connectivity network and therefore the Project would not impact any habitat connectivity network or fragment any existing habitat.

3.2 Regional Species and Habitats and Natural Communities of Concern

Plant and animal species are considered to have a special-status if they have been listed as such by Federal or State agencies or by one or more special interest groups, such as CNPS. Prior to the field survey, literature searches were conducted using USFWS IPaC, CDFW CNDDDB and CNPS databases to identify regionally sensitive species with potential to occur within the BSA. Table 1 provides a list of regional species of special concern returned by the database searches, describes the habitat requirements for each species, and states if the species was determined to have potential to occur within the BSA. No special status wildlife species or special status plant species have been determined to have potential to occur within the BSA. Additionally, no critical habitat occurs within or is adjacent to the BSA.

Table 1: Special-status Species with Potential to Occur in Project Vicinity

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Amphibian Species					
California Red-legged Frog	<i>Rana draytonii</i>	Fed: T State: -- CDFW: SSC	<p>The California red-legged frog occupies a fairly distinct habitat, combining both specific water (aquatic) and upland (terrestrial) components. California red-legged frog habitat includes nearly any area within 1-2 miles of a breeding site that stays moist and cool through the summer; this includes non-breeding aquatic habitat in pools of slow-moving streams, perennial or ephemeral ponds, and upland sheltering habitat such as rocks, small mammal burrows, logs, densely vegetated areas, and even, man-made structures (i.e. culverts, livestock troughs, spring-boxes, abandoned sheds).</p> <p>Breeding sites are generally found in deep, still or slow-moving water (greater than 2.5 feet) and can have a wide range of edge and emergent cover amounts. California red-legged frogs can breed at sites with dense shrubby riparian or emergent vegetation, such as cattails, tules, or overhanging willows or can proliferate in ponds devoid of emergent vegetation and any apparent vegetative cover (i.e., stock ponds). Breeds from late November to late April. Occurs from elevations near sea level to 5,200 ft.</p>	A	<p>Presumed Absent: The BSA lacks densely vegetated areas and upland habitat required by the species. Furthermore, there are no CNDDDB documented occurrences within a 10-mile radius of the Project area. Due to the lack of documented occurrences within the Project vicinity and a lack of suitable habitat, the species is presumed absent from the Project area.</p>

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
California Tiger Salamander	<i>Ambystoma californiense</i>	Fed: State: CDFW:	T --- SSC	Inhabits annual grasslands and the grassy understory of Valley-Foothill Hardwood communities. Requires underground refuges, especially ground squirrel burrows and vernal pools or other seasonal water sources for breeding.	A	Presumed Absent: The BSA lacks grassland communities within a valley-foothill hardwood habitat and lacks vernal pool habitat preferred by the species. The nearest most recent CNDDDB occurrence within a 10-mile radius is located approximately 5.4 miles northeast of the BSA (2011). The species was found within vernal pool habitat within an agriculture conservation area. Due to the lack of suitable habitat, the species is presumed absent from the BSA.
Western Spadefoot	<i>Spea hammondi</i>	Fed: State: CDFW:	-- -- SSC	Inhabits open areas with sandy or gravelly soils including mixed woodlands, grasslands, coastal sagerscrub, chaparral, sandy washes, river floodplains, foothills and mountains. Species spends most of the time underground in burrows and only emerges between October and May during ample rainfall. A permanent or ephemeral body of water is required for breeding.	A	Presumed Absent: The BSA lacks woodland, chaparral, coastal sage scrub, sandy washes and foothill mountain habitat preferred by the species. The nearest, most recent CNDDDB documented occurrence within a 10-mile radius of the Project area is located approximately 9.7 miles east of the BSA (1992). Due to the lack of suitable habitat and the lack of local, recent occurrences, the species is presumed absent from the BSA.
Avian Species						
Burrowing Owl	<i>Athene cunicularia</i>	Fed: State: CDFW:	-- -- SSC	Species inhabits arid, open areas with sparse vegetation cover such as deserts, abandoned agricultural areas, grasslands, and disturbed open habitats. Requires friable soils for burrow construction (Below 5,300 feet).	A	Presumed Absent: The BSA lacks grassland habitats and is dominated by walnut orchards, which are not suitable for the species. The nearest, most recent CNDDDB documented occurrence within a 10-mile radius of the BSA is located approximately 8 miles east of the BSA (2011). Furthermore, no burrowing owl burrows were observed during biological surveys. Due to the lack of suitable

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
					habitat, the species is presumed absent from the BSA.
Swainson's hawk	<i>Buteo swainsoni</i>	Fed: --- State: T CDFW: ---	Inhabits grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, alfalfa or grain fields that support a stable rodent prey base. Breeds March to late August.	A	Presumed Absent: The BSA lacks trees suitable for nesting and suitable foraging habitat. However, large unidentified raptor's nests were observed within the electrical towers near the BSA. The towers are more than 100 feet away from the Project and the nests were located approximately 50-100 feet above ground level. Swainson's hawks prefer to nest near established river systems and riparian woodland communities and are unlikely to utilize the nests observed from the BSA. The nearest, most recent CNDDDB documented occurrences within a 10-mile radius of the BSA is located approximately 6.8 miles west of the BSA (2012). Although Swainson's hawk is known to occur in the area, due to the lack of preferred nesting habitat and preferred foraging habitat, the species is presumed absent from the BSA.
Tricolored blackbird	<i>Agelaius tricolor</i>	Fed: --- State: --- CDFW: SSC	Inhabits freshwater marsh, swamp and wetland communities, but may utilize agricultural or upland habitats that can support large colonies, often in the Central Valley area. Requires dense nesting habitat that is protected from predators, is within 3-5 miles from a suitable foraging area containing insect prey and is within 0.3 miles of open water. Suitable foraging includes wetland, pastureland, rangeland, at dairy farms, and some irrigated croplands (silage, alfalfa, etc.). Nests mid-	A	Presumed Absent: The BSA lacks freshwater marsh, swamp and large wetland communities with dense nesting habitat that can support large colonies of the species. The nearest and most recent occurrence is approximately 6.5 miles north of the BSA (2002). Due to the lack of suitable habitat within the BSA, the species is presumed absent.

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
			March - early August but may extend until October/November in the Sacramento Valley region.		
Crustacean Species					
Conservancy Fairy Shrimp	<i>Branchinecta conservatio</i>	Fed: E State: --- CDFW: ---	Inhabits relatively large and turbid clay bottomed playa vernal pools. Species requires pools to continuously hold water for a minimum of 19 days and must remain inundated into the summer months. Occupied playa pools typically are 1 to 88 acres in size, but species may utilize smaller, less turbid pools.	A	Presumed Absent: The BSA lacks vernal pools required by the species. Furthermore, there are no CNDDDB documented occurrences within a 10-mile radius of the BSA. Due to the lack of suitable habitat and the lack of local recent occurrences, the species is presumed absent from the BSA.
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	Fed: T State: --- CDFW: ---	Inhabits vernal pools and seasonal wetlands. Their diet consists of algae and plankton. Requires mud for egg laying.	A	Presumed Absent: The BSA lacks contain vernal pools required by the species. There is one documented CNDDDB occurrence within a 10-mile radius of the BSA, located approximately 5.5 miles east of the BSA (2011). Due to the lack of vernal pool habitat, the species is presumed absent from the BSA.
Vernal pool tadpole shrimp	<i>Lepidurus packardii</i>	Fed: E State: --- CDFW: ---	This species can be found in vernal pools. The species burrows into the muddy bottom of vernal pools and consumes fairy shrimp, bacteria and protozoa. Requires mud for egg laying.	A	Presumed Absent: The BSA lacks vernal pool habitat required by the species. There is one documented CNDDDB occurrence within a 10-mile radius of the BSA, located approximately 5.5 miles east of the BSA (2011). Due to the lack of vernal pool habitat, the species is presumed absent from the BSA.
Fish Species					
Delta smelt	<i>Hypomesus transpacificus</i>	Fed: T State: --- CDFW: ---	Inhabits brackish water below 25 degrees Celsius. Shallow, fresh or edge waters with good water quality are ideal for spawning. Juveniles require food-rich nursery habitat while	A	Presumed Absent: The BSA lacks brackish water and shallow sandy beaches required by the species. Furthermore, there are no CNDDDB documented occurrences within a 10-

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				<p>adult almost exclusively eat small crustaceans. They are thought to spawn on shallow sandy beaches or some other substrate in the water column. Occurs within the Sacramento-San Joaquin Delta and seasonally within the Suisun Bay, Carquinez Strait and San Pablo Bay. Most often occurs in partially saline waters.</p>		<p>mile radius of the BSA. Additionally, the BSA is outside of the species current known range. Due to the lack of suitable aquatic habitat and the fact that the BSA is outside of the species known range, the species is presumed absent.</p>
<p>Steelhead – Central Valley DPS</p>	<p><i>Oncorhynchus mykiss irideus pop.</i> 11</p>	<p>Fed: T State: --- CDFW: ---</p>		<p>This species is known to occur along most of the California coastline and inhabits freshwater streams and tributaries in northern and central California. The preferred habitat consists of estuaries, freshwater streams and near shore habitat with productive coastal oceans. Spawning occurs in small freshwater streams and tributaries occurs from January through March and could extend into spring. Spawning occurs where cool, well oxygenated water is available year-round. Approximately 550-1,300 eggs are deposited in an area with good intergravel flow. The fry emerges from the gravel about 4-6 six weeks after hatching and remain in shallow protected areas associated with stream margin. Juveniles may remain in freshwater for the rest of their life cycle or return to the ocean. The principal remaining wild populations spawn annually in Deer and Mill Creeks in Tehama County, in the lower Yuba River, and a small population in the lower Stanislaus River.</p>	<p>A</p>	<p>Presumed Absent: The BSA lacks estuaries, coastal oceans and suitable aquatic habitat for the species. There is one CNDDDB documented occurrence within a 10-mile radius of the BSA, located approximately 6.2 miles north of the BSA within the lower Calaveras River (2010). The aquatic feature within the BSA has no hydrologic connection to the lower Calaveras River and is dry during the migrating season of steelhead. Due to the lack of suitable aquatic habitat, the species is presumed absent from the BSA.</p>

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Invertebrate Species					
Valley Elderberry Longhorn Beetle	<i>Desmocerus californicus dimorphus</i>	Fed: T State: --- CDFW: ---	Exclusively inhabits red or blue elderberry along rivers and streams. Diet consists of elderberry leaves and flowers. The larvae eat the inside of the elderberry stems. Adults are actively feeding and mating from March-June.	A	Presumed Absent: The BSA lacks suitable river and stream habitat, as well as elderberry shrubs required by the species. No elderberry shrubs were identified during the biological surveys conducted on November 9, 2020. The nearest, most recent CNDDDB documented occurrence is located approximately 7.3 miles north of the BSA (2000). Due to the lack of suitable habitat within the BSA, the species is presumed absent.
Western bumble bee	<i>Bombus occidentalis</i>	Fed: --- State: CE CDFW: ---	The habitat for this species is described as open grassy areas, urban parks and gardens, chaparral and shrub areas, and mountain meadows. Most reports of <i>B. occidentalis</i> nests are from underground cavities such as old squirrel or other animal nests and in open west-southwest slopes bordered by trees, although a few nests have been reported from above-ground locations such as in logs among railroad ties. Elevations of known sites range from sea level to over 2,000 m asl.	A	Presumed Absent: The BSA lacks open grassy areas, gardens, chaparral and mountain meadows required by the species. Furthermore, there are no documented CNDDDB occurrences within a 10-mile radius of the BSA. Due to the lack of suitable habitat within the BSA, the species is presumed absent.
Mammal Species					
Pallid bat	<i>Antrozous pallidus</i>	Fed: --- State: --- CDFW: SSC	Inhabits low elevations of deserts, grasslands, shrub lands, woodlands and forests year-round. Most common in open, dry habitats with rocky areas for roosting. Forages over open ground within 1-3 miles of day roosts. Prefers caves, crevices,	A	Presumed Absent: The BSA lacks woodland and forest habitat preferred by the species and lacks caves, crevices and mines required by the species for roosting. There is one documented CNDDDB occurrence within a 10-mile radius of the BSA, located approximately

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
			and mines for day roosts, but may utilize hollow trees, bridges and buildings. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites. Maternity colonies form early April and young are born April-July (below 10,000 feet).		5.3 miles southeast of the BSA (1951). Due to the lack of suitable habitat and lack of roosting habitat, the species is presumed absent from the BSA.
Reptile Species					
Giant garter snake	<i>Thamnophis gigas</i>	Fed: T State: T CDFW: --	Inhabits marsh, swamp, wetland (including agricultural wetlands), sloughs, ponds, rice fields, low gradient streams and irrigation/drainage canals adjacent to uplands. Ideal habitat contains both shallow and deep water with variations in topography. Species requires adequate water during the active season (April-November), emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat and mammal burrows estivation. Requires grassy banks and openings in waterside vegetation for basking and higher elevation uplands for cover and refuge from flood waters during winter dormant season.	A	Presumed Absent: The BSA does contain a creek, however it does not provide the preferred habitat characteristics for the species, including adequate water from April-November, emergent and herbaceous vegetation, and grassy banks. During the November 9, 2020 biological survey, the creek was dry. The nearest, most recent documented CNDDB occurrence within a 10-mile radius of the BSA is located approximately 2.9 miles south of the BSA (1976). Due to the lack of suitable habitat and the lack of recent occurrences, the species is presumed absent from the BSA.
Northern California legless lizard	<i>Anniella pulchra</i>	Fed: -- State: -- CDFW: SSC	This species occurs in moist, warm, loose soil with plant cover. Moisture is essential. Requires moisture to aid in shedding skin. Occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores,	A	Presumed Absent: The BSA lacks the preferred habitat types, including dunes, chaparral, pine-oak woodland, desert scrub and sandy washes for the species. Furthermore, there are no documented CNDDB occurrences within a 10-mile radius of the BSA. Due to the lack of

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
			cottonwoods, or oaks. Leaf litter under trees and bushes in sunny areas and dunes stabilized with bush lupine and mock heather often indicate suitable habitat. Often can be found under surface objects such as rocks, boards, driftwood, and logs. Sometimes is found in suburban gardens in Southern California. Occurs from the southern edge of the San Joaquin River in northern Contra Costa County south to the Ventura County. Probably breeds from early spring to July, and bears live young.		suitable habitat, the species is presumed absent from the BSA.
Plant Species					
Delta button-celery	<i>Eryngium racemosum</i>	Fed: -- State: E CA RPR 1B.1	An annual or perennial herb inhabiting seasonally flooded clay depressions in floodplains and riparian scrub within vernal mesic clay depressions. Flowers June-August (10-100 feet).	A	Presumed Absent: The BSA lacks riparian scrub and vernal mesic clay depressions required by the species. There is one documented CNDDDB occurrence within a 10-mile radius of the BSA located approximately 1.1 miles north of the BSA (1984). Due to the lack of suitable habitat and the lack of local recent occurrences, the species is presumed absent from the BSA.
Greene's Tuctoria	<i>Tuctoria greenei</i>	Fed: E State: -- CA RPR 1B.1	An annual grass that is native and endemic to California. This species typically occurs in vernal pools in open grassland on the eastern side of the Sacramento and San Joaquin Valleys. It is only found in these seasonally wet areas. Blooms from May-July (98-3,500 ft.).	A	Presumed Absent: The BSA lacks vernal pools and open grassland habitat required by the species. There is one documented CNDDDB occurrence within a 10-mile radius of the BSA located approximately 5.3 miles southeast of the BSA (1987). Due to the lack of suitable habitat within the BSA, the species is presumed absent.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Recurved larkspur	<i>Delphinium recurvatum</i>	Fed: State: CA RPR	-- -- 1B.1	A perennial herb inhabiting poorly drained, fine, alkaline soils in chenopod scrub, Atriplex scrub, cismontane woodland, and valley and foothill grassland communities. Flowers March-June (10-2,600 feet).	A	Presumed Absent: The BSA lacks chenopod scrub, Atriplex scrub, cismontane woodland and valley and foothill grassland communities required by the species. There is one documented CNDDDB occurrence within a 10-mile radius of the BSA located approximately 3.8 miles west of the BSA (1937). Due to the lack of suitable habitat, the species is presumed absent from the BSA.
Sanford's arrowhead	<i>Sagittaria sanfordii</i>	Fed: State: CA RPR	-- -- 1B.1	A perennial rhizomatous herb inhabiting freshwater marshes, swamps, ponds, and ditches. Flowers May-October (0-2,130 feet).	A	Presumed Absent: The BSA lacks freshwater marsh, swamp and pond habitat required by the species. There is one documented CNDDDB occurrence within a 10-mile radius of the BSA located approximately 8.8 miles west of the BSA (1901). Due to the lack of suitable habitat and the lack of local, recent occurrences, the species is presumed absent from the BSA.
Suisun marsh aster	<i>Symphotrichum lentum</i>	Fed: State: CA RPR	-- -- 1B.2	A perennial rhizomatous herb inhabiting wetlands, freshwater marsh, and brackish-marsh communities. Flowers May-November (0-10 feet).	A	Presumed Absent: The BSA lacks wetlands, freshwater marsh habitat and brackish-marsh habitat required by the species. There is one documented CNDDDB occurrence within a 10-mile radius of the BSA located approximately 9.6 miles west of the BSA (1926). Due to the lack of suitable habitat and lack of local, recent occurrences, the species is presumed absent from the BSA.

<p>Federal Designations (Fed): (FESA, USFWS) E: Federally listed, endangered T: Federally listed, threatened DL: Federally listed, delisted</p>	<p>State Designations (CA): (CESA, CDFW) E: State-listed, endangered T: State-listed, threatened</p>
<p>Other Designations CDFW_SSC: CDFW Species of Special Concern CDFW_FP: CDFW Fully Protected</p>	
<p>California Native Plant Society (CNPS) Designations: <i>*Note: according to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10 of the California Fish and Game Code. This interpretation is inconsistent with other definitions.</i> 1A: Plants presumed extinct in California. 1B: Plants rare and endangered in California and throughout their range. 2: Plants rare, threatened, or endangered in California but more common elsewhere in their range. 3: Plants about which need more information; a review list.</p> <p>Plants 1B, 2, and 4 extension meanings: _1 Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat) _2 Fairly endangered in California (20-80% occurrences threatened) _3 Not very endangered in California (<20% of occurrences threatened or no current threats known)</p>	
<p>Habitat Potential Absent [A] - No habitat present and no further work needed. Habitat Present [HP] - Habitat is or may be present. The species may be present. Critical Habitat [CH] – Project is within designated Critical Habitat.</p>	
<p>Potential for Occurrence Criteria: Present: Species was observed on site during a site visit or focused survey. High: Habitat (including soils and elevation factors) for the species occurs on site and a known occurrence has been recorded within 5 miles of the site. Low-Moderate: Either low quality habitat (including soils and elevation factors) for the species occurs on site and a known occurrence exists within 5 miles of the site; or suitable habitat strongly associated with the species occurs on site, but no records were found within the database search. Presumed Absent: Focused surveys were conducted, and the species was not found, or species was not found within the database search but habitat (including soils and elevation factors) do not exist on site, or the known geographic range of the species does not include the survey area.</p>	
<p>Source: (CDFW 2020), (CNDDDB 2020), (CNPS 2020), (Calflora 2020) (Jepson, 2nd Ed.).</p>	

4. Results: Biological Resources, Discussion of Impacts & Mitigation

4.1 Habitats and Natural Communities of Special Concern

Jurisdictional Waters

The BSA contains approximately 0.15 acres, 237 linear feet, of Potter Creek Channel A. The Potter Creek Channel is a human modified, unlined channel used for irrigation delivery to and precipitation runoff conveyance from surrounding agricultural operations. The Potter Creek Channel A is regulated and controlled by the District during the irrigation season. The channel, within the BSA, has defined banks that are bordered by farm roads on either side. The channel is approximately 25 feet wide and approximately 10 feet deep. Potter Creek Channel A originates at the Mormon Slough approximately 3 miles downstream of the BSA and splits into two different channels just before Drais Road, approximately 0.98 miles upstream of the BSA.

Impacts to Jurisdictional Waters


The Project is anticipated to have temporary and permanent impacts to Potter Creek Channel A. Temporary impacts include access for construction equipment, potential for a temporary water diversion, and potential staging areas. Temporary impacts include approximately 65 linear feet (total of approximately 130 linear feet) both downstream and upstream of the proposed crossing to accommodate a temporary water diversion. For the purpose of this impact analysis, it is assumed that the area directly before the proposed crossing, where the water diversion materials would be placed, and the area directly around the proposed crossing location will be temporarily affected during construction. All temporary impacts would be restored to pre-existing conditions upon completion of construction. Permanent impacts to jurisdictional waters are anticipated to result from the installment of the box culverts, wingwalls, and rip rap needed for bank stabilization. The Project is anticipated to temporarily impact approximately 0.07 acre of Potter Creek Channel A and permanently impact approximately 0.01 acre of Potter Creek Channel A (Figure 5. Project Impacts).

Jurisdictional Waters Avoidance and Minimization Efforts


The following BMPs and avoidance and minimization measures will be incorporated into the Project design and Project management to reduce potential impacts to jurisdictional waters present within the BSA. BMPs will minimize impacts on the environment, including reduction of sedimentation and erosion. Construction workers involved within the Project must attend a biological awareness training session delivered by a qualified biologist prior to starting work. This training program shall include information regarding sensitive resources and the importance of avoiding impacts to these resources.


- BIO-1** Every individual working on the Project must attend a biological awareness training session delivered by a qualified biologist. This training program shall include information regarding sensitive habitats, special-status species and the importance of avoiding impacts to these species and their habitat.


- BIO-2** Prior to the start of construction activities, the Project limits in proximity to Potter Creek Channel A will be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into water resources.

 Biological Study Area (0.77 acres)


Vegetation Communities


 Barren/Farm Road (0.28 acres)

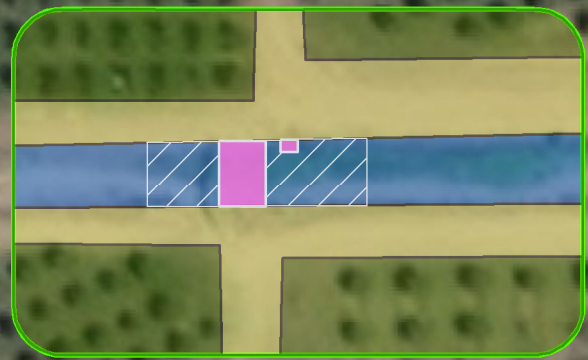
 Potter Creek Channel A (0.15 acres)

 Agricultural Lands (0.34 acres)

Project Impacts to Potter Creek Channel A

 Permanent Impacts (0.01 acres)

 Temporary Impacts (0.04 acres)



Potter Creek Channel A

V:\2732_Donadero Crossing\Biology\F5_Impacts.mxd

Source: ESRI Maps Online; Dokken Engineering 11/17/2020; Created By: hsheldon

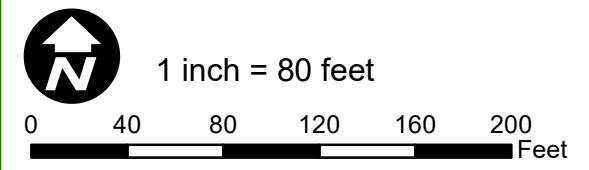


Figure 5
Project Impacts
 Dondero Crossing Project
 San Joaquin County, California

BIO-3 BMPs will be incorporated into Project design and Project management to minimize impacts on the environment including erosion and the release of pollutants (e.g. oils, fuels):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
- All construction roadway areas would be properly protected to prevent excess erosion, sedimentation, and water pollution;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All disturbed areas would be restored to pre-construction contours and revegetated, either through hydroseeding or other means, with native or approved non-invasive exotic species; and,
- All construction materials would be hauled off-site after completion of construction.

BIO-4 Upon completion of construction activities, any temporary barriers to surface water flow must be removed in a manner that would allow flow to resume with the least disturbance to the substrate.

4.2 Special-Status Plant Species

Prior to field surveys, a list of regional special status plant species with potential to occur within the Project vicinity was compiled from database searches (Appendix A, B and C). The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA. After a careful comparison between habitat requirements and the habitat available within the BSA, no special status plants were determined to have potential to occur.

4.3 Special-Status Wildlife Species

Prior to field surveys, a list of regional special-status wildlife species with potential to occur within the Project vicinity was compiled from database searches (Appendices A, B and C). The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA. After a careful comparison between habitat requirements and the habitat available within the BSA, no special status wildlife species were determined to have potential to occur within the BSA.

5. Conclusion and Regulatory Determination

5.1 Federal Endangered Species Act Consultation Summary

All Federally protected plants or wildlife species have been presumed absent from the BSA; therefore, Section 7 consultation for Federally protected species is not required.

5.2 Essential Fish Habitat Consultation Summary

No Essential Fish Habitat is present within the Project limits; therefore, consultation for Essential Fish Habitat is not required.

5.3 California Endangered Species Act Consultation Summary

No threatened or endangered State listed species have the potential to occur within the BSA; therefore, no further action is required and consultation with CDFW, under CESA, is not required.

5.4 Wetlands and Other Waters Coordination Summary

The Project is anticipated to have temporary and permanent impacts to one jurisdictional water feature present within the BSA, Potter Creek Channel A. Temporary impacts to Potter Creek Channel A are anticipated to be approximately 0.07 acres and permanent impacts to Potter Creek Channel A will include approximately 0.01 acres to accommodate the installation of the box culverts, flashboard dam, wingwalls and rip-rap. Appropriate mitigation for impacts to Potter Creek Channel A will be determined during the permitting phase of the Project. The District will obtain appropriate permits for this Project including Clean Water Act Section 401 Water Quality Certification from the RWQCB and a Streambed Alteration Agreement under Section 1602 from CDFW. As the Project would be constructing a crossing over Potter Creek Channel A the Project would qualify for a Section 404 non-notifying Nationwide Permit 14 of the Clean Water Act program.

5.5 Invasive Species

In February 1999, EO 13112 was signed, requiring Federal agencies to work on preventing and controlling the introduction and spread of invasive species. Protective measure **BIO-5** will be incorporated into the Project plans to ensure that invasive species are not introduced or spread.

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.

5.6 Other Wildlife Species

General Wildlife

To minimize and avoid potential effects to local wildlife, the following conservation measures have been incorporated into the Project design:

BIO-6 All food-related trash must be disposed into 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-7 The contractor must not apply rodenticide or herbicide within the BSA during construction.

Migratory Birds

Native birds are protected by the MBTA and CFG Code Section 3513. To minimize potential impacts to migratory birds, the following avoidance and minimization measure will be incorporated throughout Project construction.

BIO-8 If project activities are to commence during the nesting season (February 1–August 31), a pre-construction nesting bird survey must be conducted within a 300-foot buffer of project activities within 7 days prior to the start of construction.

A minimum 100-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300-foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the nesting area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the Project biologist and in coordination with wildlife agencies) in the buffer area until a qualified biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the project biologist and approved by CDFW.

6. References

Biogeographic Information and Observation System (BIOS). 2020 Available at:
<<https://wildlife.ca.gov/Data/BIOS>> (accessed: November 15, 2020).

California Invasive Plant Council (Cal-IPC). 2020 Available at: <<http://www.cal-ipc.org/paf/>>
(accessed: November 2, 2020).

Calflora. 2020. Plants of California. Available at: <<http://www.calflora.org/>>
(accessed: November 2, 2020).

CNDDDB (California Natural Diversity Database). 2020. Available at:
<<http://www.dfg.ca.gov/biogeodata/cnddb/>> (accessed: November 2, 2020).

CNPS (California Native Plant Society). 2020. Inventory of Rare and Endangered Plants.
Available at: <<http://cnps.site.aplus.net/cgi-bin/inv/inventory.cgi/BrowseAZ?name=quad>>
(accessed: November 2, 2020).

Jepson Herbarium. 2020. University of California, Berkeley. Available at:
<<http://ucjeps.berkeley.edu/eflora/geography.html>> (accessed: November 16, 2020).

NETR (Nationwide Environmental Title Research). 2020. Historic Aerials. Available at:
<<https://www.historicaerials.com/>> (accessed: November 15, 2020).

NRCS. 2020. Custom Soil Resources Report for San Joaquin County, California. Available at:
<<https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>> (accessed November 16,
2020).

US Climate Data. 2020. Stockton Weather Averages. Available at:
<<http://www.usclimatedata.com>> (accessed: November 16, 2020).

USFWS. 2020. Official Species List: U.S. Department of the Interior – Fish and Wildlife Service:
Sacramento Fish and Wildlife Office. Consultation Code 08ESMF00-2021-SLI-0272
(requested: November 2, 2020).

Appendix A: USFWS Species List



United States Department of the Interior



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

In Reply Refer To:

November 02, 2020

Consultation Code: 08ESMF00-2021-SLI-0272

Event Code: 08ESMF00-2021-E-00706

Project Name: Dondero Crossing

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: 08ESMF00-2021-SLI-0272

Event Code: 08ESMF00-2021-E-00706

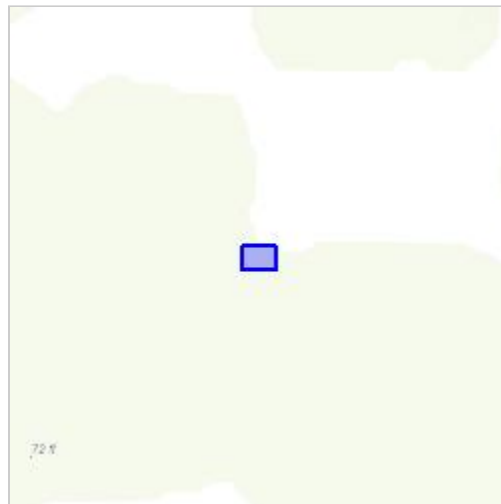
Project Name: Dondero Crossing

Project Type: LAND - DRAINAGE

Project Description: Dondero Crossing

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/37.960852945081015N121.10812335800068W>



Counties: San Joaquin, CA

Endangered Species Act Species

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

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

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

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

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

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

Flowering Plants

NAME	STATUS
Greene's Tuctoria <i>Tuctoria greenei</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1573	Endangered

Critical habitats

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

Appendix B: CNDDDB Species List



Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad IS (Peters (3712181) OR Stockton East (3712182) OR Waterloo (3812112) OR Linden (3812111) OR Manteca (3712172) OR Avena (3712171))



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
An andrenid bee <i>Andrena subapasta</i>	IIHYM35210	None	None	G1G2	S1S2	
burrowing owl <i>Athene cunicularia</i>	ABNSB10010	None	None	G4	S3	SSC
California linderiella <i>Linderiella occidentalis</i>	ICBRA06010	None	None	G2G3	S2S3	
California tiger salamander <i>Ambystoma californiense</i>	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
Delta button-celery <i>Eryngium racemosum</i>	PDAP10Z0S0	None	Endangered	G1	S1	1B.1
giant gartersnake <i>Thamnophis gigas</i>	ARADB36150	Threatened	Threatened	G2	S2	
Greene's tuctoria <i>Tuctoria greenei</i>	PMPOA6N010	Endangered	Rare	G1	S1	1B.1
midvalley fairy shrimp <i>Branchinecta mesovallensis</i>	ICBRA03150	None	None	G2	S2S3	
moestan blister beetle <i>Lytta moesta</i>	IICOL4C020	None	None	G2	S2	
Northern California legless lizard <i>Anniella pulchra</i>	ARACC01020	None	None	G3	S3	SSC
pallid bat <i>Antrozous pallidus</i>	AMACC10010	None	None	G5	S3	SSC
recurved larkspur <i>Delphinium recurvatum</i>	PDRAN0B1J0	None	None	G2?	S2?	1B.2
Sanford's arrowhead <i>Sagittaria sanfordii</i>	PMALI040Q0	None	None	G3	S3	1B.2
steelhead - Central Valley DPS <i>Oncorhynchus mykiss irideus pop. 11</i>	AFCHA0209K	Threatened	None	G5T2Q	S2	
Swainson's hawk <i>Buteo swainsoni</i>	ABNKC19070	None	Threatened	G5	S3	
tricolored blackbird <i>Agelaius tricolor</i>	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	IICOL48011	Threatened	None	G3T2	S3	
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 spadefoot <i>Spea hammondi</i>	AAABF02020	None	None	G3	S3	SSC

Record Count: 21

Appendix C: CNPS 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

5 matches found. *Click on scientific name for details*

Search Criteria

Found in Quads 3712181, 3712182, 3812112, 3812111 3712172 and 3712171;

[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
Centromadia parryi ssp. rudis	Parry's rough tarplant	Asteraceae	annual herb	May-Oct	4.2	S3	G3T3
Delphinium recurvatum	recurved larkspur	Ranunculaceae	perennial herb	Mar-Jun	1B.2	S2?	G2?
Eryngium racemosum	Delta button-celery	Apiaceae	annual / perennial herb	Jun-Oct	1B.1	S1	G1
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	1B.2	S3	G3
Symphyotrichum lentum	Suisun Marsh aster	Asteraceae	perennial rhizomatous herb	(Apr)May-Nov	1B.2	S2	G2

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 02 November 2020].

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

Questions and Comments

rareplants@cnps.org

Appendix D: NRCS Soil Report



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

Custom Soil Resource Report for San Joaquin County, California



Preface

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

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

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

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

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

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

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How Soil Surveys Are Made

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

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

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

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

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

Custom Soil Resource Report

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

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

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

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

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

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

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

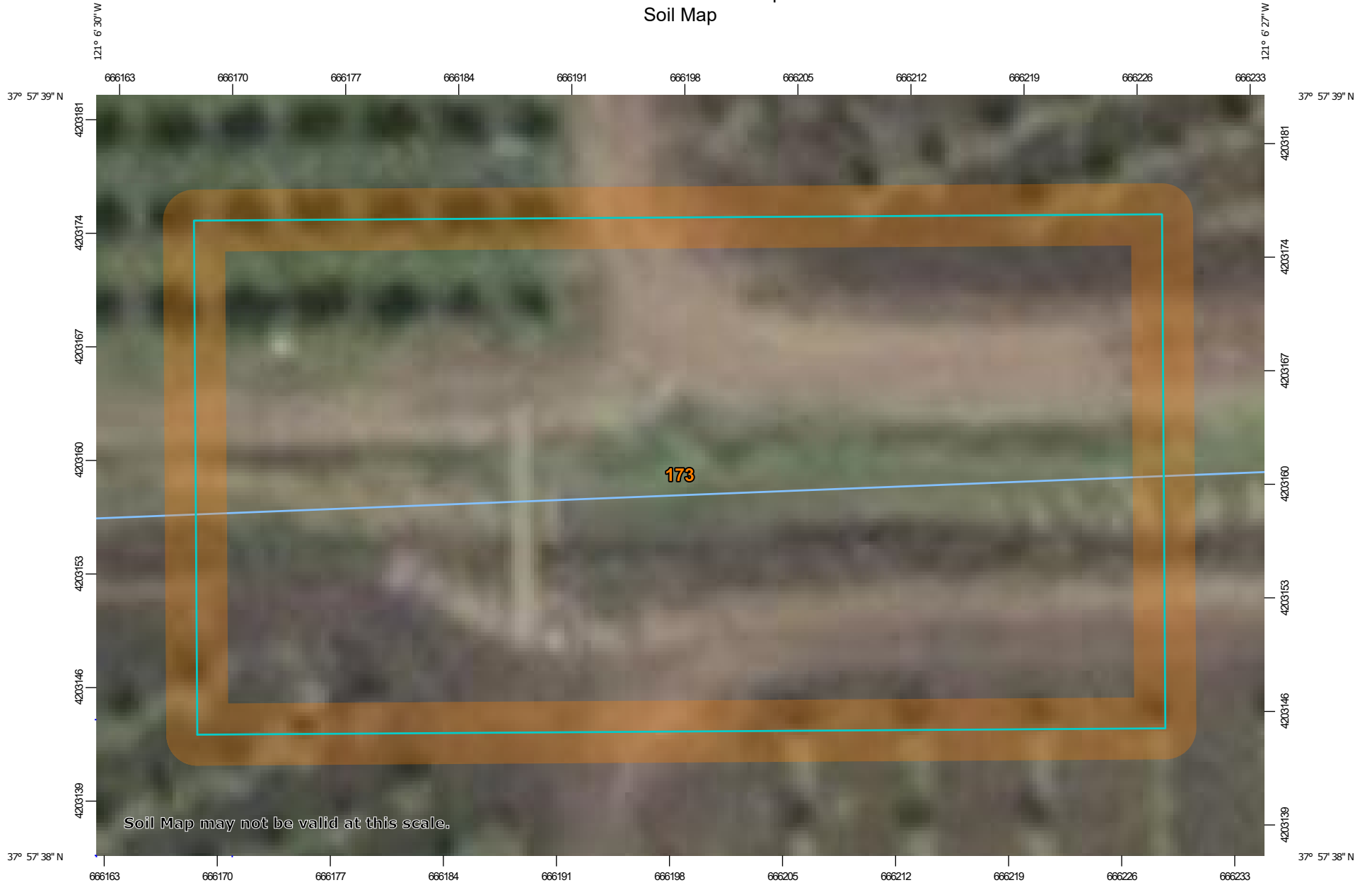
Custom Soil Resource Report

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

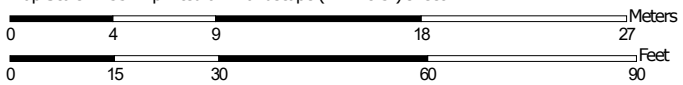
Soil Map

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

Custom Soil Resource Report Soil Map



Map Scale: 1:331 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)


Soils


 Soil Map Unit Polygons


 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit


 Clay Spot


 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water


 Perennial Water

 Rock Outcrop


 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole

 Slide or Slip


 Sodic Spot


 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals


Transportation

 Rails


 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: San Joaquin County, California
 Survey Area Data: Version 14, May 29, 2020

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

Date(s) aerial images were photographed: Feb 14, 2016—Jul 2, 2019

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
173	Hollenbeck silty clay, 0 to 2 percent slopes	0.5	100.0%
Totals for Area of Interest		0.5	100.0%

Map Unit Descriptions

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

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

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

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

Custom Soil Resource Report

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

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

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

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

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

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

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

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

San Joaquin County, California

173—Hollenbeck silty clay, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hhtb
Elevation: 20 to 100 feet
Mean annual precipitation: 14 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 270 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

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

Description of Hollenbeck

Setting

Landform: Backswamps on flood plains, swales
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Linear, concave
Parent material: Alluvium derived from mixed rock sources

Typical profile

A - 0 to 10 inches: silty clay
Bss - 10 to 37 inches: clay
Bk - 37 to 42 inches: silty clay loam
Bkqm - 42 to 60 inches: cemented

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 40 to 60 inches to duripan
Drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water capacity: Moderate (about 6.5 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Galt

Percent of map unit: 3 percent

Custom Soil Resource Report

Landform: Depressions

Hydric soil rating: Yes

Archerdale

Percent of map unit: 3 percent

Hydric soil rating: No

Unnamed, saline-sodic throughout

Percent of map unit: 2 percent

Hydric soil rating: No

Vignolo

Percent of map unit: 2 percent

Hydric soil rating: No

Stockton

Percent of map unit: 2 percent

Hydric soil rating: No

Cogna

Percent of map unit: 2 percent

Hydric soil rating: No

Guard

Percent of map unit: 1 percent

Landform: Valley floors

Hydric soil rating: Yes

References

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

Custom Soil Resource Report

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

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

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

Appendix E: Species Observed List

List of plant species observed within the BSA

Common Name	Scientific Name	Native/Non-Native [Cal-IPC Invasive Rating]
Grass/Herb Layer		
Bermuda grass	<i>Cynodon dactylon</i>	X [Moderate]
Common smartweed	<i>Persicaria hydropiper</i>	X
Curly dock	<i>Rumex crispus</i>	X [Limited]
Field bindweed	<i>Convolvulus arvensis</i>	X
Horse weed	<i>Erigeron canadensis</i>	N
Rush	<i>Juncus spp.</i>	N
Tall flat sedge	<i>Cyperus eragrostis</i>	N
Tar weed	<i>Madia elegans</i>	N
Velvet leaf	<i>Abutilon theophrasti</i>	X
Trees		
English walnut	<i>Juglans regia</i>	X

List of wildlife species observed within the BSA

Common Name	Scientific Name	Native/Non-Native [Cal-IPC Invasive Rating]
Bird Species		
Song sparrow	<i>Melospiza melodia</i>	N
Turkey vulture	<i>Cathartes aura</i>	N
White-crowned sparrow	<i>Zonotrichia leucophrys</i>	N

Appendix F: Representative Photographs



Photo-1: Representative of the proposed crossing location, facing west (November 2020).



Photo-2: Representative of the unnamed canal within the BSA, facing east (November 2020).



Photo-3: Representative of the electrical towers in the Project vicinity, facing west (November 2020).



Photo-4: Representative of the adjacent walnut orchards, facing north (November 2020).



Photo-5: Representative of the unnamed canal while dry, facing east (November 2020).

Appendix B - ~~RESPONSE TO PUBLIC COMMENT CULTURAL
RESOURCES TECHNICAL REPORT~~



Central Valley Regional Water Quality Control Board

14 April 2021

Darrel Evensen
Stockton East Water District
6767 East Main Street
Stockton, CA 95215

COMMENTS TO REQUEST FOR REVIEW FOR THE MITIGATED NEGATIVE DECLARATION, DONDERO CROSSING OF POTTER CREEK PROJECT, SCH#2021030382, SAN JOAQUIN COUNTY

Pursuant to the State Clearinghouse's 17 March 2021 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Mitigated Negative Declaration* for the Dondero Crossing of Potter Creek Project, located in San Joaquin County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of

KARL E. LONGLEY ScD, P.E., CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

11020 Sun Center Drive #200, Rancho Cordova, CA 95670 | www.waterboards.ca.gov/centralvalley

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Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:

http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:

https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Construction General Permit Order No. 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at:

https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., “non-federal” waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at:

https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Threat General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Threat Waiver) R5-2018-0085. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Threat Waiver and the application process, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

If you have questions regarding these comments, please contact me at (916) 464-4856 or Nicholas.White@waterboards.ca.gov.



Nicholas White
Water Resource Control Engineer

cc: State Clearinghouse unit, Governor's Office of Planning and Research,
Sacramento

Response:

Thank you for your comments.

Response to Comment 1A:

The District will comply with all applicable permitting requirements prior to construction.