

Initial Study / Proposed Negative Declaration

For

North of O'Neill Forebay Long-Term Exchanges

Between California Department of Water Resources

and the United States Bureau of Reclamation

January 2020

Overview of the Initial Study/Proposed Negative Declaration

1. Project Title

North of O'Neill Forebay Long-Term Exchanges

2. Lead agency name and address:

State of California Department of Water Resources
State Water Project Analysis Office
1416 9th Street, Room 1620
Sacramento, CA 95814

3. Contact person and phone number:

Ms. Anna Fock
Chief, Program Development and Water Supply and Transfers Branch
State Water Project Analysis Office
(916) 653-0190

4. Project location:

San Joaquin County, Merced County and Stanislaus County

5. Project sponsor's name and address:

N/A

6. General plan designation:

N/A

7. Zoning:

N/A

8. Description of project:

See following.

9. Surrounding land uses and setting:

See following.

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

United States Bureau of Reclamation, Byron Bethany Irrigation District, Del Puerto Water District, Oak Flat Water District, and Musco Family Olive Company.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.

No California Native American tribes have requested consultation pursuant to Public Resources Code section 21080.3.1.

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. Where checked below, the topic with a potentially significant impact will be addressed in an environmental impact report.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forest Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology / Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <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 | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities / Service Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance |
| | <input checked="" type="checkbox"/> None | <input type="checkbox"/> None with Mitigation Incorporated |

Determination (To be completed by the Lead Agency)

On the basis of this initial evaluation:

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

Original signed by Anna Fock

January 3, 2020

Signature

Date

Anna Fock

Printed Name

Supervising Engineer, Water Resources

Title

Background

The California Department of Water Resources (DWR) operates and manages the State Water Project (SWP). The SWP is a complex system of reservoirs, pumping and generating plants, and water conveyance facilities, including the California Aqueduct (Aqueduct). The principal purpose of the SWP is to supply water to its 29 long-term water supply contractors (SWP Contractors). At times, capacity exists within the SWP to convey water for non-SWP Contractors without impacting SWP operations.

Consistent with California Water Code (CWC) Section 1810, DWR makes unused SWP conveyance capacity available to non-SWP Contractors. DWR also works cooperatively with the United States Bureau of Reclamation (Reclamation) to assist Reclamation in providing service to several Central Valley Project (CVP) Contractors, through use of available SWP conveyance capacity or through an exchange of SWP and CVP water supplies.

Authorizing use of available capacity in SWP facilities and approving exchanges of SWP and CVP water supply are discretionary actions by DWR that require compliance with the California Environmental Quality Act (CEQA). Authorizing water right changes are discretionary actions by the California State Water Resources Control Board (State Water Board) that also require compliance with CEQA. Authorizing exchange agreements are discretionary actions by Reclamation, which has complied with the National Environment Policy Act (NEPA) in its 2015 Finding of No Significant Impact (FONSI-15-009).

Proposed Project

The Proposed Project (Project) includes (1) up to 5,616 acre-feet of long-term exchanges between DWR and Reclamation to facilitate the delivery of CVP contract supply to three long-term CVP contractors under their existing contracts, and (2) a long-term change in place of use in DWR and Reclamation water rights permits/licenses authorized by the State Water Board to execute the exchanges.

The three CVP contractors, located between south of the Harvey O. Banks Pumping Plant (Banks) and north of O'Neill Forebay (O'Neill) and collectively known as the North of O'Neill Contractors (see **Figure 1**), are: (1) Byron Bethany Irrigation District (BBID), (2) the United States Department of Veteran's Affairs San Joaquin Valley National Cemetery (National Cemetery), and (3) Del Puerto Water District (Del Puerto).

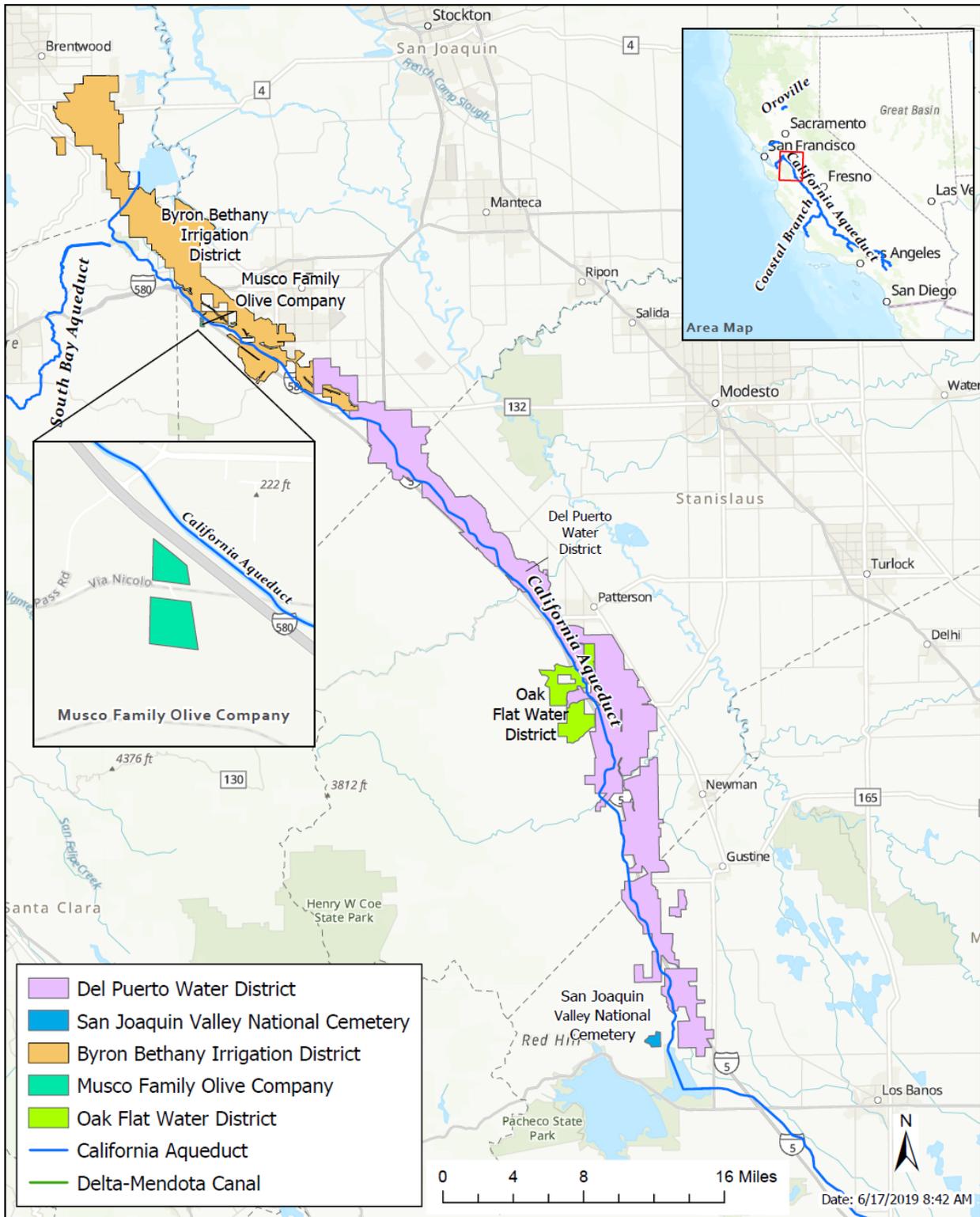


Figure 1. Location Map of North of O'Neill Forebay Contractors

The North of O'Neill Contractors are either unable to directly receive CVP water using CVP facilities or require additional operational flexibility to allow more efficient water deliveries. Currently, when unused Aqueduct capacity is available, DWR can convey CVP water to the North of O'Neill Contractors under CWC Section 1810 or using Joint Point of Diversion (JPOD) authorized in Water Rights Decision 1641 (D1641)¹. CVP water under JPOD through Banks has lower priority than SWP deliveries; therefore, excess capacity is only available to CVP after DWR has met all its SWP demands. Since unused SWP capacity cannot be guaranteed, CVP deliveries to the North of O'Neill Contractors pursuant to JPOD is unreliable. The Project would improve reliability by having DWR deliver SWP water through Banks to the North of O'Neill Contractors consistent with approved monthly schedules. In exchange, Reclamation would deliver an equivalent amount of CVP water pumped at the Jones Pumping Plant (Jones) to DWR at O'Neill. DWR would use the CVP water provided at O'Neill within the SWP place of use downstream of O'Neill. The proposed exchanges would be one-for-one exchanges and there would be no increase in diversions from the Sacramento-San Joaquin River Delta (Delta) by either DWR or Reclamation due to the Project.

The Project requires DWR and Reclamation to obtain approval from the State Water Board to change the place of use in their existing water rights permits/licenses. The requested change to DWR water rights permit will be to add Musco Family Olive Company (Musco), Del Puerto, and the National Cemetery to the existing place of use (see Figure 2). Musco and Del Puerto are currently outside the SWP authorized place of use. National Cemetery may be outside SWP authorized place of use; however, due to the lack of precision in the original maps filed with the State Water Board for SWP water rights permits, it is difficult to determine whether the National Cemetery is located entirely within the SWP authorized place of use.

The requested change to Reclamation water rights permits/licenses will be to add the SWP Contractors service area south of O'Neill to the authorized CVP place of use (see Figure 3). The Project will not change DWR and Reclamation's operational constraints. DWR and Reclamation will continue to operate to divert the quantities allowed consistent with their water rights, as well as all restrictions affecting SWP and CVP operations, including the 2008 United States Fish and

¹ Under D-1641, DWR and Reclamation may use each other's pumping facilities for the diversion and rediversion of Project supplies.

Wildlife Service Biological Opinion and the 2009 National Marine Fisheries Service Biological Opinion for the long-term CVP-SWP operations (collectively as BOs).

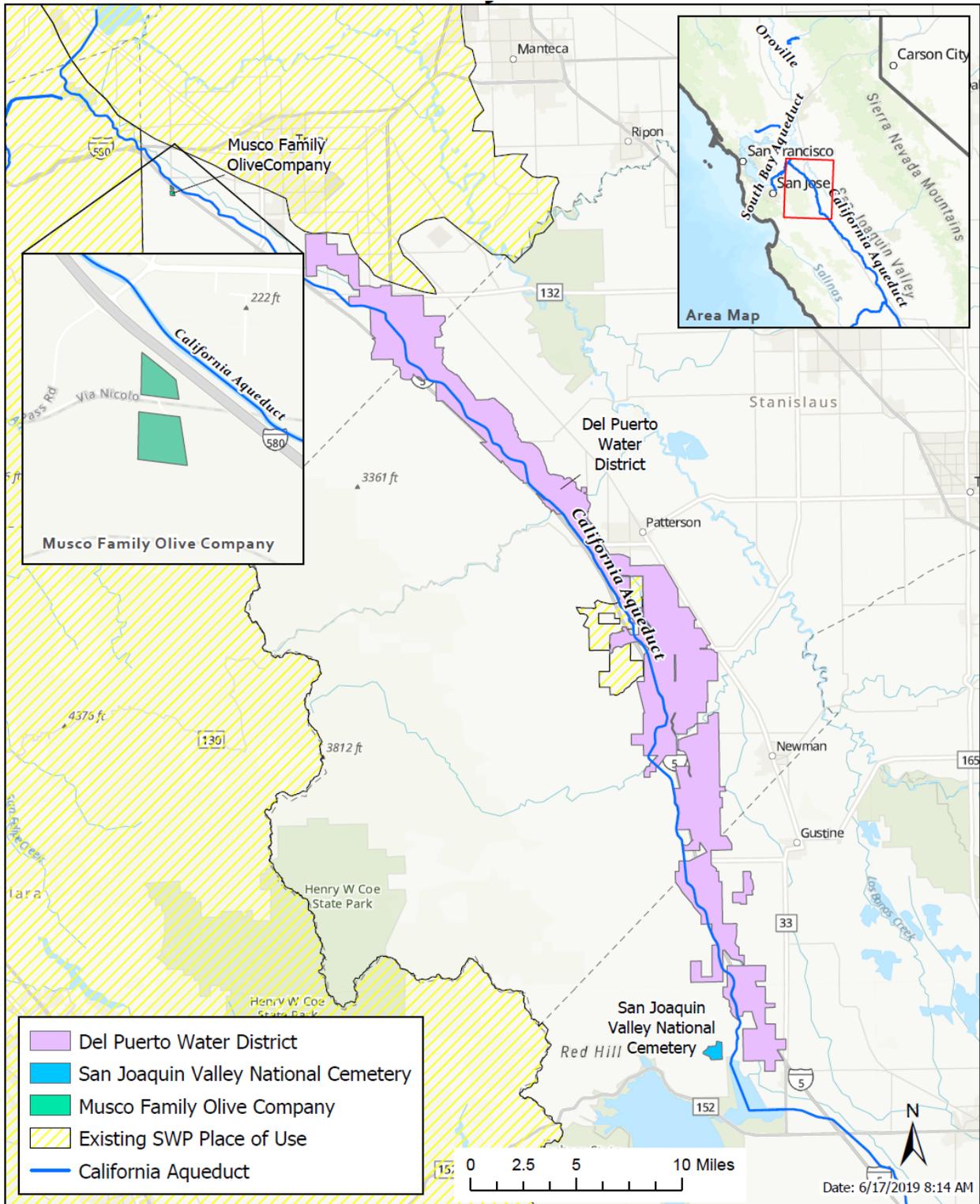


Figure 2. Areas to be Added to Place of Use in SWP Water Rights Permits

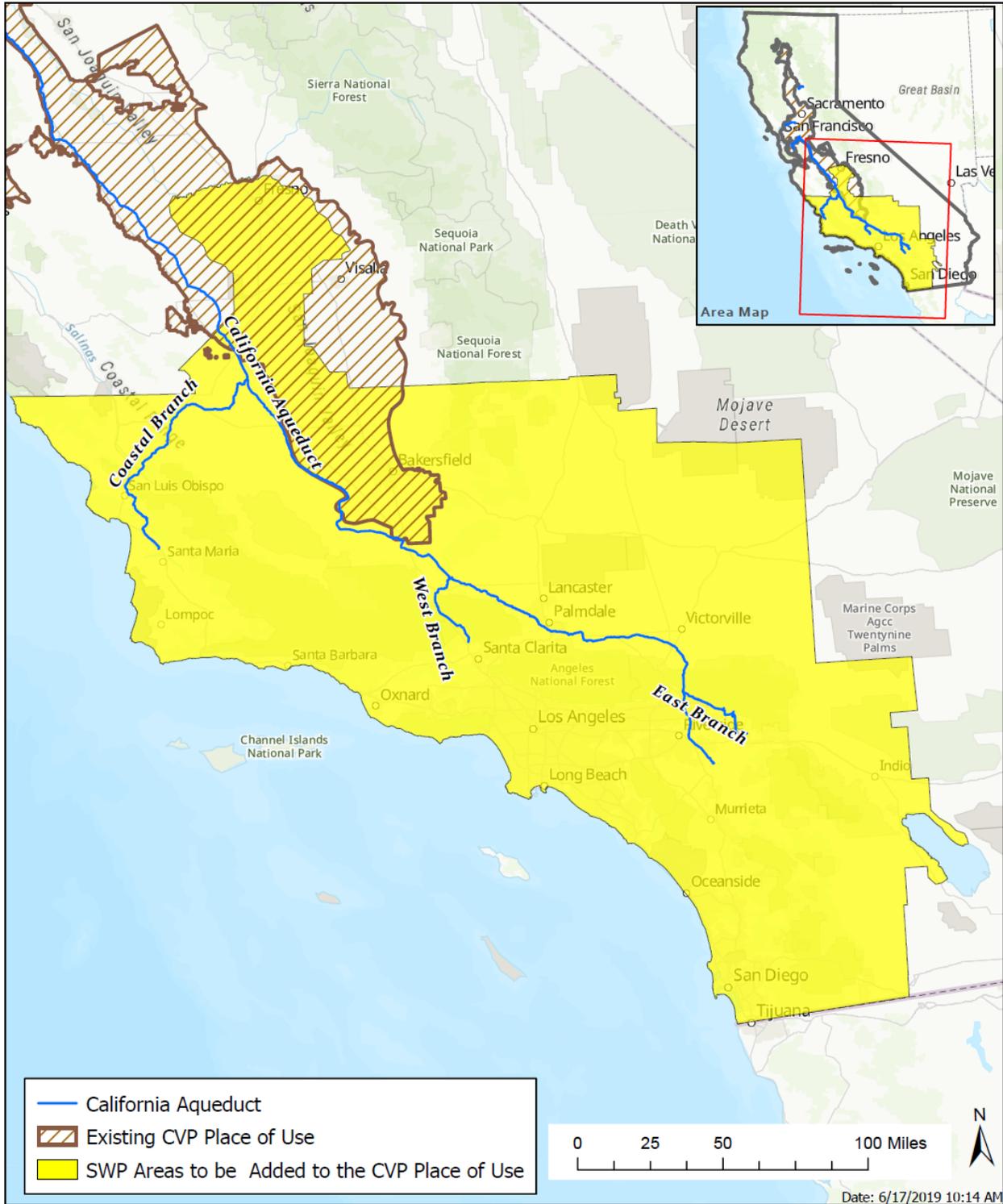


Figure 3. Areas to be Added to Place of Use in CVP Water Rights Permits

Within 60 days of receiving SWP deliveries from DWR, Reclamation will complete the delivery of CVP water to DWR in exchange for the SWP water delivered to the North of O’Neill

Contractors. DWR may terminate or suspend the exchange if it determines that the deliveries would adversely affect SWP operations. No construction or modification of the Aqueduct, or other facilities is required to implement the Project. The Project will involve no increase in SWP or CVP diversions or allocations. DWR will execute separate agreements for SWP exchange water with each North of O'Neill Contractor. All agreements would expire 15 years after execution. Additional details regarding the separate agreements with North of O'Neill Contractors are described below.

A. Musco Family Olive Company

Musco is in San Joaquin County (Figure 1) and has a contract with BBID for up to 800 acre-feet per year of CVP water for Municipal and Industrial (M&I) purposes. However, because Musco has no physical connection to the CVP or BBID conveyance facilities, BBID cannot supply water to Musco. Since 1984, DWR has provided water to Musco under short-term agreements among DWR, Reclamation, BBID and occasionally with Musco. DWR delivers the water to Musco through a turnout located in Reach 2A of the Aqueduct near the City of Tracy.

A secure, reliable water supply is critical to the operations of Musco. Reclamation is currently permitted to serve Musco through JPOD authorized under D1641 if DWR has capacity available after meeting its project deliveries. However, there are periods when SWP does not have unused capacity available at Banks to deliver CVP water to Musco. An exchange of CVP and SWP supplies is necessary to reliably facilitate deliveries of water to Musco. Without the Project and the reliability it would provide to Musco, there will very likely be times when it is not possible to deliver any water to Musco.

The Project includes an agreement for DWR delivery of up to 800 acre-feet per year of SWP water to Musco on behalf of Reclamation using SWP facilities in Reach 2A of the Aqueduct. Reclamation will then deliver an equal amount of CVP water to DWR at O'Neill for use within the SWP service area south of O'Neill. All deliveries to Musco will be done through the exchange.

DWR will modify its place of use to include Musco so that SWP water can be delivered to Musco during periods when JPOD capacity is unavailable. Reclamation will add the SWP service area south of O'Neill to the CVP place of use so DWR can use the exchange water received from Reclamation in the SWP Contractor's service area south of O'Neill. The Project will enable reliable water deliveries to Musco.

B. United States Department of Veteran’s Affairs, San Joaquin Valley National Cemetery

Under the Central Valley Improvement Act of 1992 (Public Law 102-575 Title 34), Congress directed Reclamation to provide up to 850 acre-feet per year of CVP water supply for M&I use to the National Cemetery, managed by the U.S. Department of Veterans Affairs, and located in Merced County near the City of Santa Nella. Reclamation cannot physically serve the National Cemetery with CVP facilities, so in 1993 Reclamation obtained a water rights change to add Banks pumping plant as a point of diversion and redirection, and the National Cemetery to the CVP place of use. In practice, however, it became clear that Banks and the Aqueduct do not always have the capacity to deliver this water directly under JPOD without impacting the SWP. While DWR has provided water to the National Cemetery under short-term agreements among DWR, Reclamation, and National Cemetery since 1990, these agreements have evolved to improve the efficiency of the operation, moving from direct deliveries to exchange agreements. Under an exchange, DWR delivers SWP water to National Cemetery through a turnout located in Reach 2B of the Aqueduct and Reclamation delivers a like amount of water at O’Neill to DWR.

The Project includes an agreement for DWR delivery of up to 850 acre-feet of SWP water through SWP conveyance facilities to the National Cemetery in Reach 2B of the Aqueduct. In exchange, Reclamation will deliver an equal amount of CVP water to DWR at O’Neill for DWR to deliver to SWP contractors south of O’Neill. To facilitate this exchange, Reclamation will add the SWP service area south of O’Neill to its place of use, and DWR will add the National Cemetery to its place of use.

The Project will enable reliable M&I water deliveries to the National Cemetery. Without the Project and the reliability it would provide, there will likely be times when no water can be delivered. DWR has no authority over the operations, land use, or maintenance of the National Cemetery facilities.

C. Del Puerto and Oak Flat Water Districts

Del Puerto is a CVP contractor located in San Joaquin, Stanislaus, and Merced Counties along the Delta-Mendota Canal and the Aqueduct (Figure 3). Del Puerto contracts with Reclamation for CVP water for agricultural and incidental M&I purposes. Del Puerto’s existing infrastructure connected to the Delta-Mendota Canal is old, overprescribed, and costly to replace. The existing infrastructure is therefore inadequate to deliver existing CVP water allocations.

Consequently, water delivery to some Del Puerto lands adjacent to the Aqueduct is more efficient if conveyed through Oak Flat's Reach 2A turnouts and facilities on the Aqueduct.

Since 2014, DWR has facilitated the delivery of CVP water to Del Puerto through the Aqueduct turnouts and facilities in Reach 2A to Oak Flat, followed by an exchange with Reclamation.

The Project includes executing an agreement for DWR delivery of up to 3,966 acre-feet of SWP water to Del Puerto through Oak Flat using SWP facilities in Reach 2A of the Aqueduct. In exchange, Reclamation will deliver an equal amount of CVP water to DWR at O'Neill for DWR to deliver to SWP contractors south of O'Neill. The Project will increase Del Puerto's operational flexibility and reliability by providing an alternate point of water delivery to Del Puerto. To facilitate this exchange Reclamation will add the SWP service area south of O'Neill to the CVP place of use and DWR will add Del Puerto to the SWP place of use.

Environmental Setting

A. Musco Family Olive Company

Musco is located in the San Joaquin Valley in western San Joaquin County. In San Joaquin County, the leading commodities are fruit and nuts, vegetable crops, field crops, nursely products, and livestock and poultry (San Joaquin County, 2017).

Musco is a private, family owned business based in Tracy, California, and is a leading supplier of table olives. The Tracy plant, which began production in the early 1980's, also houses the company's sales and processing facilities. The Tracy facility is in an area zoned for general agricultural uses.

Warm, dry summers and moist winters characterize the climate in the project area. The average maximum summer temperature is about 93 degrees, and the average winter minimum is about 37 degrees. Annual rainfall ranges from 18 inches in the north part of the county to 10 inches in the south. Cool, moist winds from the Pacific pass through the Delta, and as a result, San Joaquin County experiences slightly lower summer temperatures, and cooler nights than valley counties to the north and south of it (University of California Davis Cooperative Extension, 2005).

Situated between San Francisco Bay and Lake Tahoe, San Joaquin County marks the transition between California's coastal region and the Sierra Nevada. Topography varies from flat Delta farmland in the west, to rolling hills in the east. The western portion of the County lies below sea

level while the eastern border rises to 360 feet (University of California Davis Cooperative Extension, 2005).

B. United States Department of Veteran’s Affairs, San Joaquin Valley National Cemetery

In February 1989, the Romero Ranch Company donated 322 acres of land to the United States Department of Veteran’s Affairs (VA) for development of a cemetery for veterans, and members of the armed forces. The National Cemetery is located near the town of Santa Nella, along the eastern edge of the Diablo Mountain Range, 15 miles west of the City of Los Banos, and 15 miles south of the City of Gustine in Merced County (Figure 2).

Before conversion to the National Cemetery, the Romero Ranch Company used the area for cattle grazing. Merced County designates the area as foothill pasture, and its zone is exclusively agricultural. The natural landscape surrounding the cemetery is characterized by dry, steep rolling hills punctuated by occasional native oaks, but over the years, the cemetery has been landscaped with lawns, trees, and shrubs. The site is bordered on three sides by a working cattle ranch and adjoins an almond orchard on the remaining side. Portions of the cattle ranch are managed for conservation purposes and the landowner has agreed to the limitations of land use on those areas.

No natural lakes, ponded areas, or vernal pools are present on the National Cemetery site. Rainfall is low and runoff occurs rapidly from the moderately steep slopes. Scarce vegetation and permeable soils further reduce the potential for ponded water or springs on the site. Romero Creek drains the area, transporting runoff to the east toward the San Joaquin Valley floor. The National Cemetery relies solely on CVP water supplies and does not operate groundwater extraction wells.

The O’Neill Forebay and the Aqueduct lie to the east of the National Cemetery and beyond the privately owned almond orchard. South of the site is a State Wildlife Area, managed by the California Department of Fish and Wildlife. The western edge of the site contains hilly rangeland, and to the north are a private residence and ranch buildings. Interstate 5 and the Highway 33 interchange is located southeast of the National Cemetery, where fast food restaurants, motel, gas stations, and a truck stop exist (Reclamation, 2005).

C. Del Puerto Water District

Del Puerto is located in San Joaquin, Stanislaus, and Merced Counties on the west side of the San Joaquin Valley north of San Luis Reservoir (Figure 3). The majority of the district area lies

within Stanislaus County. A portion of the Delta-Mendota Canal is located within the Del Puerto boundaries. It extends from near the City of Vernalis in the north to near the City of Santa Nella in the south. Elevations in Del Puerto range from 100 to 400 feet, with gently rolling alluvial fans. Del Puerto was founded in 1947 to contract for and administer delivery of water supplies to landowners within its geographic boundaries as part of Reclamation's CVP. In 1995, it was reorganized through a formal consolidation with 10 other local, similarly contracted districts. Del Puerto provides agricultural irrigation water to approximately 45,000 acres of farmland (U.S. Bureau of Reclamation et. al, 2015). Agricultural lands include both orchards and row crops, which over the years have produced over 30 different fresh food crops.

Del Puerto has a long-term water service contract (Contract No. 14-06-200-922-LTR1) with Reclamation for up to 140,210 acre-feet per year. This contract water supply, which is delivered directly from the Delta-Mendota Canal, is the district's main source of supply. Privately developed groundwater is available on a limited basis throughout the district, some of which is stored and/or conveyed under the terms of temporary Warren Act Contracts between the Del Puerto and Reclamation. There is some groundwater pumped by private landowners; however, its quantity and quality is highly variable throughout the District.

Del Puerto does not own any conveyance or storage facilities for the water it manages. All water deliveries to Del Puerto are made through turnouts installed and owned by Reclamation along the Delta-Mendota Canal and licensed for Del Puerto's use. All pumps, pipelines, and ditches in the district are maintained and operated by private landowners, while Del Puerto owns and operates any subsidiary water meters needed to account for deliveries at turnouts with multiple Landowners. Del Puerto's existing infrastructure connected to the Delta-Mendota Canal is old, overprescribed, and costly to replace; the existing infrastructure is therefore inadequate to deliver existing CVP water allocations.

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Initial Study Environmental Checklist

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

ENVIRONMENTAL ISSUES

Potentially Significant Impact
 Less Than Significant with Mitigation Incorporated
 Less Than Significant Impact
 No Impact

II. Agriculture and Forest Resources.

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.

In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:

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

ENVIRONMENTAL ISSUES

Potentially Significant Impact
 Less Than Significant with Mitigation Incorporated
 Less Than Significant Impact
 No Impact

III. Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied on to make the following determinations.

Are significance criteria established by the applicable air district available to rely on for significance determinations? Yes No

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ENVIRONMENTAL ISSUES

Potentially Significant Impact
 Less Than Significant with Mitigation Incorporated
 Less Than Significant Impact
 No Impact

IV. Biological Resources.				
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ENVIRONMENTAL ISSUES

Potentially Significant Impact **Less Than Significant with Mitigation Incorporated** **Less Than Significant Impact** **No Impact**

V. Cultural Resources.				
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VI. Energy.				
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ENVIRONMENTAL ISSUES

Potentially Significant Impact
 Less Than Significant with Mitigation Incorporated
 Less Than Significant Impact
 No Impact

VII. Geology and Soils.				
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	<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 California Geological Survey 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 type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

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

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XI. Land Use and Planning.				
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XII. Mineral Resources.				
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<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"/>
XIII. Noise.				
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ENVIRONMENTAL ISSUES

Potentially Significant Impact **Less Than Significant with Mitigation** **Less Than Significant Impact** **No Impact**

ENVIRONMENTAL ISSUES				
	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XIV. Population and Housing.				
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XV. Public Services.				
Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
i) Fire protection?	<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"/>
XVI. Recreation.				
Would the project result in:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XVII. Transportation.				
Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XVIII. Tribal Cultural Resources.				
Has a California Native American Tribe requested consultation in accordance with Public Resources Code section 21080.3.1(b)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ENVIRONMENTAL ISSUES

Potentially Significant Impact
Less Than Significant with Mitigation
Less Than Significant Impact
No Impact

XIX. Utilities and Service Systems.				
Would the project:				
a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ENVIRONMENTAL ISSUES

Potentially Significant Impact **Less Than Significant with Mitigation** **Less Than Significant Impact** **No Impact**

XX. Wildfire.

Is the project located in or near state responsibility areas or lands classified as high fire hazard severity zones? Yes No

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XXI. Mandatory Findings of Significance.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that 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"/>

Initial Study Environmental Checklist Discussion

The following information further explains items in the Environmental Checklist.

I. Aesthetics

All of the long-term exchanges described in this Project would use existing facilities, would involve no construction, and will not change existing views. The Project will not alter scenic vistas, or impact aesthetic resources, and will have no impact on aesthetics.

II. Agriculture and Forestry Resources

The long-term exchanges will provide up to 800 acre-feet of water to Musco and up to 850 acre-feet of water to the National Cemetery for M&I uses. The Project will also provide up to 3, 966 acre-feet of water to Del Puerto for agricultural uses. The Project will not increase SWP or CVP diversions or allocations, will not convert any farmland to non-agricultural uses, conflict with agricultural zoning, or interfere with Williamson Act contracts. The proposed project will support continuation of historic use on the lands within the three service areas. There will be no change in existing uses as a result of this project.

The Project areas do not include forest land will not cause a loss or conversion of forest land resources. The Project will not impact agriculture or forestry resources.

III. Air Quality

The Project involves long-term exchanges of water allocated consistent with SWP and CVP allocation criteria. The Project will not change CVP or SWP allocations or exports through the Delta pumping facilities. Conveyance of this water will be to existing turnouts on the Aqueduct. The Project does not involve construction of new facilities, improvements to conveyance facilities, or any increases in pumping. Because DWR and Reclamation will convey the exchanged water using existing facilities without an increase in pumping, the Project will not result in air quality impacts. The Project will not change any existing agricultural or M&I activities.

IV. Biological Resources

The Project involves long-term exchanges of water that has already been allocated; conveyance of this water will be to existing turnouts on the Aqueduct. The Project will not involve construction or changes in pumping from the Delta. DWR and Reclamation would only use the exchanged water to support existing M&I and agricultural land uses and would only convey the

water to areas that have already been receiving the allocations. The Project will not modify any habitats including riparian and wetland habitats. Because the amount of the exchanged water will be consistent with the allocations received in the past, and because DWR and Reclamation will convey the exchange water to existing turnouts, the Project will not interfere with fish or wildlife corridors, native nursery sites, or any adopted biological resource plans.

The projects will continue to be operated consistent with all existing operational requirements placed on the SWP and CVP including the BOs and D1641. The proposed project will not affect listed fish species (green sturgeon, delta smelt, Central California Coastal steelhead, Central Valley steelhead, Central Valley spring-run Chinook salmon, winter-run Chinook salmon), or critical habitat, beyond the effects currently addressed under the BOs (FWS, 2008 and NMFS, 2009). DWR and Reclamation will implement the Project in compliance with the BOs and will not cause significant impacts to special status fish species or habitat. The biological resources impacts associated with this Project will be less than significant.

The following information concerning federal and California State special-status species was obtained on February 2, 2016 and updated on December 5, 2018 (FWS Consultation Codes: 08ESMF00-2016-SLI-0755, 08FBTD00-2016-SLI-0056 and 08EVEN00-2016-SLI-0207) for Merced, San Joaquin and Stanislaus counties utilizing the FWS Database: <http://ecos.fws.gov/ipac> and also the California Department of Fish and Wildlife California Natural Diversity Database (CNDDB).

The compiled list identifies species that may potentially occur in the counties in which the project area is located but does not mean that any of the species actually occur within the project footprint.

Table 1: List of Special-status Species and Critical Habitat

Species	Status
Crustaceans	
<i>Branchinecta conservation</i> Conservancy Fairy Shrimp	FE, X
<i>Lepidurus packardi</i> vernal pool tadpole shrimp	FE, X
<i>Branchinecta longiantenna</i> longhorn fairy shrimp	FE, X
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	FT, X
Insects	
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	FT, X
<i>Elaphrus viridis</i> delta green ground beetle	FT, X
<i>Incisalia mossii bayensis</i> San Bruno elfin butterfly	FE
Fish	
<i>Acipenser medirostris</i> green sturgeon	FT, NMFS, X
<i>Oncorhynchus mykiss</i> Central Valley steelhead	FT, NMFS, X
South Central California steelhead	FT, NMFS, X
<i>Oncorhynchus tshawytscha</i> Central Valley spring-run chinook salmon	FT, NMFS, X
Winter-run chinook salmon	FE, NMFS, X
<i>Hypomesus transpacificus</i> Delta smelt	FT, SE, X
<i>Spirinchus thaleichthys</i> longfin smelt	ST
Amphibians	
<i>Ambystoma californiense</i> California tiger salamander	FT, ST, X
<i>Rana draytonii</i> California red-legged frog	FT, X
<i>Rana boylei</i> Foothill yellow-legged frog	Candidate ST
Reptiles	
<i>Gambelia sila</i> blunt-nosed leopard lizard	FE, SE
<i>Masticophis lateralis euryxanthus</i> Alameda whipsnake	FT, ST, X
<i>Thamnophis gigas</i> giant garter snake	FT, ST
Birds	
<i>Agelaius tricolor</i> tricolored blackbird	Candidate SE
<i>Buteo swainsoni</i>	ST

Species	Status
Swainson's hawk	
<i>Coccyzus americanus occidentalis</i>	FT, SE
Western yellow-billed cuckoo	
<i>Gymnogyps californianus</i>	FE, X
California condor	
<i>Haliaeetus leucocephalus</i>	SE
bald eagle	
<i>Laterallus jamaicensis coturniculus</i>	ST
California black rail	
<i>Rallus longirostris obsoletus</i>	FE
California clapper rail	
<i>Riparia riparia</i>	ST
bank swallow	
<i>Vireo bellii pusillus</i>	FE, SE, X
Least Bell's Vireo	
Mammals	
<i>Ammospermophilus nelson</i>	ST
Nelson's antelope squirrel	
<i>Dipodomys ingens</i>	FE, SE
giant kangaroo rat	
<i>Dipodomys nitratooides exilis</i>	FE, X
Fresno kangaroo rat	
<i>Neotoma fuscipes riparia</i>	FE
riparian (=San Joaquin Valley) woodrat	
<i>Sylvilagus bachmani riparius</i>	FE, SE
riparian brush rabbit	
<i>Vulpes macrotis mutica</i>	FE, ST
San Joaquin kit fox	
Plants	
<i>Amsinckia grandiflora</i>	FE, SE, X
large-flowered fiddleneck	
<i>Arctostaphylos myrtifolia</i>	FT
lone manzanita	
<i>Brodiaea pallida</i>	FT
Chinese Camp brodiaea	
<i>Castilleja campestris</i> var. <i>succulent</i>	FT, SE, X
Fleshy owl's-clover	
<i>Chamaesyce hooveri</i>	FT, X
Hoover's spurge	
<i>Chloropyron palmatum</i>	FE, SE
palmate-bracted bird's-beak	
<i>Dudleya setchellii</i>	FE
Santa Clara Valley dudleya	
<i>Eryngium racemosum</i>	SE
Delta button-celery	
<i>Gratiola heterosepala</i>	SE
Boggs Lake hedge-hyssop	
<i>Neostapfia colusana</i>	FT, SE, X
Colusa grass	

Species	Status
<i>Orcuttia inaequalis</i> San Joaquin Valley Orcutt grass	FT, SE, X
<i>Orcuttia pilosa</i> hairy Orcutt grass	FE, SE, X
<i>Orcuttia viscida</i> Sacramento Orcutt grass	FE, X
<i>Pseudobahia bahiifolia</i> Hartweg's golden sunburst	FE, SE
<i>Sidalcea keckii</i> Keck's checker-mallow	FE, X
<i>Tuctoria greenei</i> Greene's tuctoria	FE, State Rare, X
<i>Verbena californica</i> Red Hills Vervain	FT
Note:	
FE: Listed as Endangered under the Federal Endangered Species Act (FESA).	
FT: Listed as Threatened under FESA.	
SE: Listed as Endangered under the California Endangered Species Act (CESA).	
ST: Listed as Threatened under CESA.	
X: Critical habitat designated for this species under FESA.	
NMFS: Listed by National Marine Fisheries Service.	

V. Cultural Resources

The Project will not result in any impacts to archeological or paleontological resources. The project will only use existing conveyance facilities and points of diversion, no improvements to these facilities are included in the Project and no new construction or earth moving will occur, and no cemeteries or human remains will be disturbed. DWR will convey the exchange water through the Aqueduct to existing turnouts. No substantial adverse change in the significance of the Aqueduct or its immediate surroundings will occur as a result of this Project. The Project will not impact cultural resources.

VI. Energy

The Project involves long-term exchanges of water that has been allocated consistent with DWR and Reclamation criteria; conveyance of this water will be to existing turnouts on the Aqueduct. The Project does not involve construction of new facilities, improvements to conveyance facilities, or any increases in SWP or CVP allocations or pumping. Because DWR and Reclamation will convey the exchanged water using existing facilities without an increase in pumping, the Project will not result in conflicts with state or local plans for renewable energy or energy efficiency. Any energy resources would not be used wastefully or inefficiently.

VII. Geology and Soils

Because the Project will use existing conveyance facilities and established turnouts to convey the exchange water, the Project will not expose people or structures to earthquake activity or landslides. The Project is not located on expansive soils and will not result in the loss of topsoil. Water disposal systems are not part of this Project. The Project will not result in impacts to geology and soils.

VIII. Greenhouse Gas Emission

In May 2012, DWR adopted the DWR Climate Action Plan-Phase I: Greenhouse Gas Emissions Reduction Plan (GGERP), which details DWR's efforts to reduce its greenhouse gas (GHG) emissions consistent with Executive Order S-3-05 and the Global Warming Solutions Act of 2006 (Assembly Bill (AB) 32). DWR also adopted the Initial Study/Negative Declaration prepared for the GGERP in accordance with the CEQA Guidelines review and public process. Both the GGERP and Initial Study/Negative Declaration are incorporated herein by reference and are available at: <https://water.ca.gov/LegacyFiles/climatechange/docs/Final-DWR-ClimateActionPlan.pdf>. The GGERP provides estimates of historical (back to 1990), current, and future GHG emissions related to operations, construction, maintenance, and business practices (e.g. building-related energy use). The GGERP specifies aggressive 2020 and 2050 emission reduction goals and identifies a list of GHG emissions reduction measures to achieve these goals.

DWR specifically prepared its GGERP as a "Plan for the Reduction of Greenhouse Gas Emissions" for purposes of CEQA Guidelines §15183.5. That section provides that such a document, which must meet certain specified requirements, "may be used in the cumulative impacts analysis of later projects." Because global climate change, by its very nature, is a global cumulative impact, an individual project's compliance with a qualifying GHG Reduction Plan may suffice to mitigate the project's incremental contribution to that cumulative impact to a level that is not "cumulatively considerable." (See CEQA Guidelines, § 15064, subd. (h)(3).)

DWR and agencies using DWR facilities that were analyzed in the GGERP may rely on the GGERP in the cumulative impacts analyses of later project-specific environmental documents. "An environmental document that relies on a greenhouse gas reduction plan for a cumulative impacts analysis must identify those requirements specified in the plan that apply to the project, and, if those requirements are not otherwise binding and enforceable, incorporate those

requirements as mitigation measures applicable to the project.” (CEQA Guidelines § 15183.5, subd. (b)(2).)

The proposed project will use SWP facilities and power resources to convey and/or store water. The energy associated with the operation of these facilities will likely result in the emission of GHGs. However, DWR as part of the analysis provided in the GGERP has fully described and analyzed the potential for GHG emissions from operations associated with use of SWP facilities by other agencies to convey and/or store water and has committed to overall near-term and long-term GHG emissions reductions that will ensure that no significant environmental impact will occur as a result of DWR’s emissions.

The Project does not propose any new construction or modification to existing facilities. The Project requires pumping to convey the exchange water, but this water is associated with existing allocations and the power usage and greenhouse gas emissions would be within the typical range for the facilities involved. Additionally, based on the analysis provided in the DWR GGERP, GHG emissions associated with the use of SWP facilities for this Project will not constitute a cumulatively considerable contribution to atmospheric levels of GHG emissions and are therefore less than significant.

IX. Hazards and Hazardous Materials

The Project will use existing CVP and SWP facilities, and will not transport, use, or dispose of hazardous materials. The Project involves using the SWP and O’Neill to convey exchange water; these existing facilities are not located near schools or airports. The Project will not induce fires or other hazardous situations and will not interfere with adopted emergency response plans. No impacts associated with hazards or hazardous materials will occur as a result of this Project.

X. Hydrology and Water Quality

The Project will use existing DWR and Reclamation facilities to convey exchange water. There will be no increase in SWP or CVP diversions or allocations as a result of this project. Because there will be no change in contract amounts, source of water, or mechanism of conveyance. The SWP and CVP will continue to be operated consistent with the diversion requirements and water quality objectives contained in D1641. The Project will not impact hydrology or water quality.

XI. Land Use and Planning

The Project will use existing DWR and Reclamation facilities to convey the exchange water. Since there will be no expansion of facilities, the Project will not divide an established community, conflict with land use plans, or conflict with habitat or conservation plans. The Project does not include any changes in existing land use and will not impact land use or planning.

XII. Mineral Resources

The Project will not involve construction or changes in water allocation or delivery systems, therefore the Project will not result in the loss of mineral resources or in the loss of a mineral recovery site. The Project will not impact mineral resources.

XIII. Noise

The Project will use existing SWP and CVP facilities and turnouts and will not involve construction. The Project will rely on existing pumps and facilities, and because there will be no increase in the use of the facilities, there will be no increase in exposure to sensitive receptors nor will there be a temporary or permanent increase in noise in the Project vicinity above existing noise levels.

XIV. Population and Housing

The Project will use existing SWP and CVP facilities to exchange existing allocations of water. Because the Project will not increase water supplies, it will not induce substantial population growth and will not impact population or housing.

XV. Public Services

The Project will use existing SWP and CVP facilities to convey the exchange water. Since there will be no construction or expansion of facilities, the Project will not create a need for additional public services and will not interfere with service ratio or response times. The Project will not impact public services.

XVI. Recreation

The Project will use existing SWP and CVP facilities to convey the exchange water. Portions of these facilities are unofficially used for recreation, especially for fishing. Since there will be no construction or expansion of facilities, the Project will neither reduce nor increase recreational opportunities or the need for recreational facilities. The Project will not cause recreational impacts.

XVII. Transportation

The Project will use existing SWP and CVP facilities to convey the exchange water and does not involve use of transportation or circulation systems. Since there will be no construction or expansion of the existing facilities, the Project will not conflict with any plans, ordinances or policies addressing the circulation system, conflict with CEQA Guidelines or increase hazards. No transportation impacts will occur.

XVIII. Tribal Cultural Resources

The Project will use existing conveyance facilities and points of diversion, no improvements to these facilities will occur as part of the Project and no new construction or earth moving will occur. DWR will convey the exchange water through the Aqueduct to existing turnouts. The Project will not impact Tribal cultural resources.

XIX. Utilities and Service Systems

The Project includes the long-term exchange of water between DWR and Reclamation to assist Reclamation in providing water service of up to 5,616 acre-feet per year to three CVP Contractors located south of Banks and north of O'Neill. The Project also includes a request for a Change in Place of Use from the Water Board authorizing these exchanges.

The Project requires no construction and the proposed long-term agreements would be for conveyance only. The water supply to be exchanged, as well as the power required for conveyance, is the responsibility of Reclamation. Conveyance of CVP water supplies is subject to the availability of conveyance capacity in the Aqueduct as determined by DWR. Conveyance will not be provided if it would adversely affect the quantity and quality of water conveyed to SWP contractors.

The Project does not involve, nor will it affect, wastewater treatment facilities, or landfills, or storm water drainage facilities. The Project will not increase SWP, CVP, or any local water diversions or allocations, and will not cause the need for additional entitlements.

The Project will not impact utilities or service systems including existing water agreements.

XX. Wildfire

The California Fire Hazard Severity Zone Map was accessed on December 7, 2018 at: http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones_maps. It was determined that no area of the Project is in state responsibility areas or lands classified as high fire hazard

severity zones. Also, the project involves the movement of water therefore there is no impact or increased risk of wildfire.

XXI. Mandatory Findings of Significance

The purpose of the Project is to provide a long-term exchange of water between DWR and Reclamation to assist Reclamation in providing water service of up to 5,616 acre-feet per year to three CVP Contractors located south of Banks and north of O'Neill. All agreements would expire 15 years after execution. The Project also includes a request for a Change in Place of Use from the Water Board authorizing these exchanges. Water supplies will be conveyed using existing SWP and CVP facilities. The Project will not result in an increase in SWP or CVP water diversions or allocations.

The proposed project requires no construction or expansion of facilities or increase in facility use. Because the Project relies on the use of existing facilities and allocations, it will not degrade the quality of the environment, and would have a less than significant impact on the reduction of fish or wildlife species, or decline in a fish, wildlife, or plant population.

Ensuring compliance with all State and federal laws by the National Cemetery is the responsibility of the VA through the National Cemetery Association. As a water district, Del Puerto is considered a Special District of the State of California (special district) and is responsible for complying with all State and federal laws. Musco receives water through a contract with BBID, another special district. BBID is responsible for assuring that its contractors comply with all applicable laws; and as a business, Musco is responsible for adhering to all laws and ordinances. DWR has no authority over the operations or land uses of any of the North of O'Neill Contractors. Any impacts to biological resources, habitat, or other environmental resources caused by the Contractors' practices would be unrelated to this Project.

The Project will have a less than significant impact on the quality of the environment, will not impact cultural resources, tribal cultural resources or directly, or indirectly, adversely affect human beings.

The Project will use existing SWP and CVP facilities and will not increase water diversions or allocations. The GHG emissions generated by the Project during use of the SWP facilities are consistent with DWR's GGERP, and will not constitute a cumulatively considerable contribution to atmospheric levels of GHG emissions and are therefore considered less than significant.

The Project will not result in cumulative impacts. However, cumulative, as well as other impacts related to implementation of the Central Valley Project Improvement Act (CVPIA) have been

addressed in other documents, including the Record of Decision Central Valley Project Improvement Act Final Programmatic Environmental Impact Statement (U.S. Bureau of Reclamation, 2001).

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