

RECLAMATION

Managing Water in the West

Draft Environmental Assessment

Del Puerto Water District Alternate Points of Delivery on the California Aqueduct

Draft EA-13-033



U.S. Department of the Interior
Bureau of Reclamation
Mid Pacific Region
South-Central California Area Office
Fresno, California

August 2013

Mission Statements

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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Section 1 Introduction

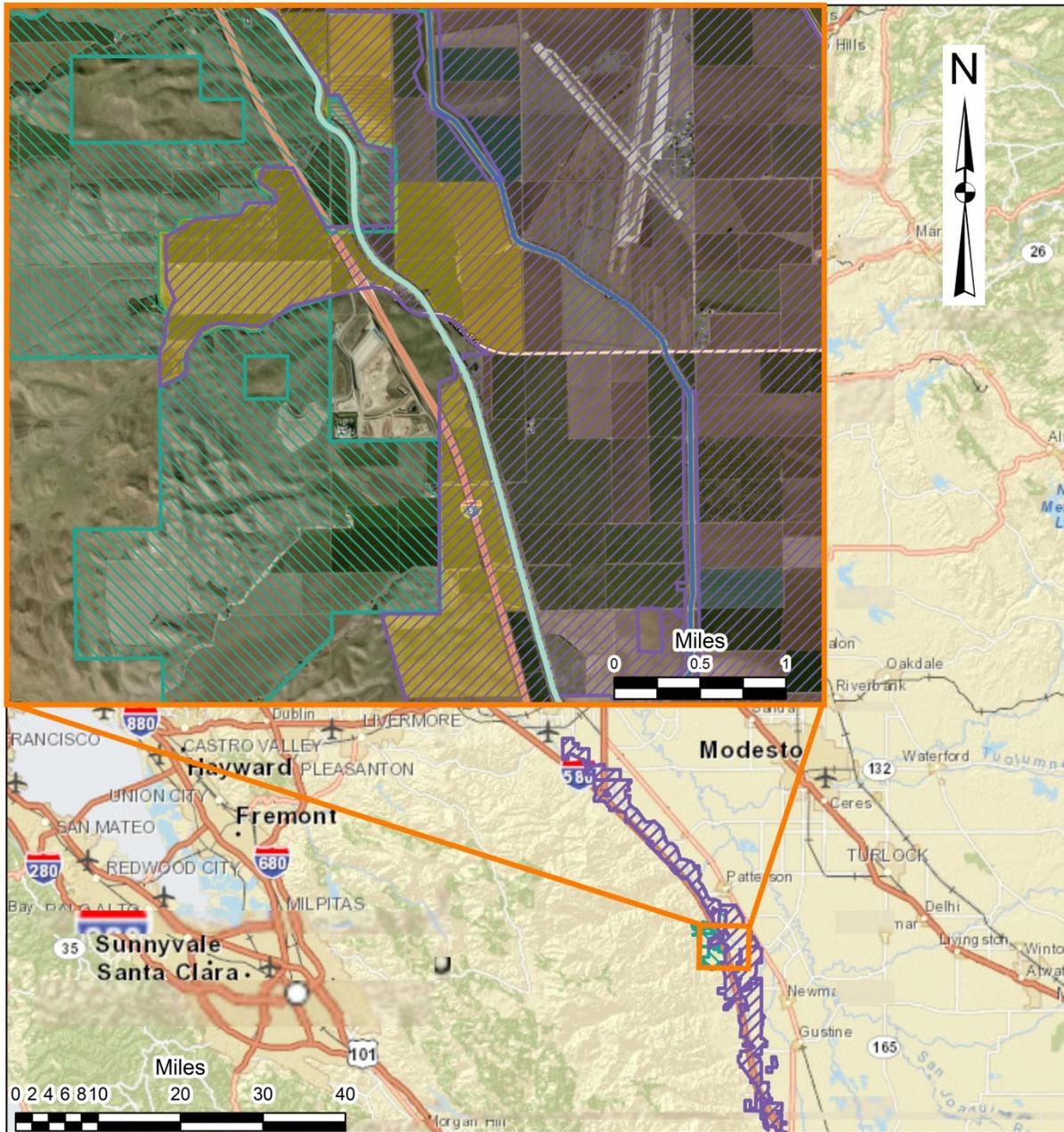
1.1 Background

Del Puerto Water District (Del Puerto) is a Central Valley Project (CVP) water service contractor that receives water from turnouts on the Delta-Mendota Canal. Oak Flat Water District (Oak Flat) is a neighboring district that is a State Water Project (SWP) contractor that receives water from turnouts on the California Aqueduct, which is a SWP facility. Both Districts are within the CVP/SWP Consolidated Place of Use.

Del Puerto and Oak Flat share several landowners and water users in common. Water delivery to certain Del Puerto lands (Figure 1-1) would be more efficient if delivered through Oak Flat's existing SWP turnouts and facilities, due to their location relative to the California Aqueduct and configuration existing landowner distribution systems.

1.2 Need for the Proposed Action

Del Puerto has a need to conserve energy and facilitate efficient water deliveries to its customers. Reclamation has a need to promote efficient delivery and use of water resources.



**Del Puerto Water District Alternate PODs
Lands in Proposed Action**



Aerial Photo Source: Esri, i-cubed

Figure 1-1 Water Districts and Lands Involved in the Proposed Action

Section 2 Alternatives Including the Proposed Action

This environmental assessment considers two possible actions: the No Action Alternative and the Proposed Action. The No Action Alternative reflects future conditions without the Proposed Action and serves as a basis of comparison for determining potential effects to the human environment.

2.1 No Action Alternative

Under the No Action Alternative, Reclamation would not allow exchanges and additional points of delivery for Del Puerto's CVP supply

2.2 Proposed Action

Under the Proposed Action, Reclamation would approve exchanges and additional points of delivery of Del Puerto's CVP supply. In particular, Reclamation and the California Department of Water Resources would approve SWP Turnouts #B, #C, and # D in reach 2B of the California Aqueduct as alternate points of delivery for up to 3,966 acre-feet per year of water supplies for delivery to CVP contracted lands within Del Puerto's boundaries, while concurrently exchanging a like amount of CVP supply back to the SWP at O'Neill Forebay.

2.2.1 Environmental Commitments

Reclamation, Del Puerto, Oak Flat, and the associated landowners must implement the following environmental protection measures to reduce environmental consequences associated with the Proposed Action (Table 2-1). Environmental consequences for resource areas assume the measures specified would be fully implemented. Copies of all reports would be submitted to Reclamation.

Table 2-1 Environmental Protection Measures and Commitments

Resource	Protection Measure
Biological Resources	The Proposed Action does not include, nor does this EA evaluate, the conversion of any land fallowed and untilled for three or more years. The Proposed Action must not change the land use patterns of cultivated or fallowed fields that may have some value to listed species or birds protected by the Migratory Bird Treaty Act.
Biological Resources	To avoid effects to fish and wildlife, or their habitats, the Proposed Action cannot alter the flow regime of natural water bodies such as rivers, streams, creeks, ponds, pools, wetlands, etc.
Biological Resources	The water involved in the Proposed Action shall be conveyed using only existing facilities; no new construction or modification of existing facilities is permitted.

Section 3 Affected Environment and Environmental Consequences

This section identifies the potentially affected environment and the environmental consequences involved with the Proposed Action and the No Action Alternative, in addition to environmental trends and conditions that currently exist.

3.1 Resources Eliminated from Further Analysis

Reclamation analyzed the affected environment and determined that neither Proposed Action nor the No Action Alternative have the potential to cause direct, indirect, or cumulative effects to the resources listed in Table 3-1.

Table 3-1 Resources Eliminated from Further Analysis

Resource	Reason Eliminated
Land Use	There would be no impact to land use under the No Action Alternative as conditions would remain the same as existing conditions. The water exchanged and used under the Proposed Action would otherwise be used to irrigate the same lands as the No Action Alternative. The water would not be used to place untilled or new lands into production, or to convert undeveloped land to other uses. Therefore, there would be no change to land use.
Cultural Resources	There would be no modification of CVP storage or conveyance facilities and no activities that would result in ground disturbance under the Proposed Action or No Action Alternative. On May 31, 2013, Reclamation's Mid-Pacific Region, Cultural Resources Branch, determined that the Proposed Action and No Action Alternative involve the type of activity that has no potential to cause effects on historic properties, pursuant to 36 CFR Part 800.3(a)(1) (Appendix A).
Indian Sacred Sites	No impact to Indian Sacred Sites would occur under the No Action alternative as conditions would remain the same as existing conditions. The Proposed Action would not limit access to ceremonial use of Indian sacred sites on federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites, since no new construction or ground disturbing activities would occur as part of the Proposed Action. Therefore, there would be no impacts to Indian Sacred Sites as a result of the Proposed Action.
Indian Trust Assets	No impact to Indian Trust Assets would occur under the No Action Alternative as conditions would remain the same as existing conditions. Reclamation determined on May 31, 2013 that the Proposed Action would not impact Indian Trust Assets as there are none in the Proposed Action area (Appendix B).
Environmental Justice	No impact to minority or low-income populations would occur under the No Action Alternative as conditions would remain the same as existing conditions. The Proposed Action does not propose any features that would result in adverse human health or environmental effects, have any physical effects on minority or low-income populations, and/or alter socioeconomic conditions of populations that reside or work in the vicinity of the Proposed Action.
Air Quality	No emissions would occur under the No Action Alternative since conditions would remain the same. No new facilities would be needed as a result of the Proposed Action, so no construction-related emissions would be produced. The water in the Proposed Action would move via gravity, hence there would be no emissions from pumping. As a result, there would be no impacts to air quality as a result of either the Proposed Action or the No Action Alternative, and a conformity analysis is not required.

3.2 Water Resources

3.2.1 Affected Environment

Delta-Mendota Canal

The Delta-Mendota Canal, completed in 1951, carries water southeasterly from the C.W. "Bill" Jones Pumping Plant along the west side of the San Joaquin Valley for irrigation supply, for use in the Delta Division and San Luis Unit, and to replace San Joaquin River water stored at Friant Dam and used in the Friant-Kern and Madera systems. The canal is about 117 miles long and terminates at the Mendota Pool, about 30 miles west of Fresno. The initial diversion capacity is 4,600 cubic feet per second, which is gradually decreased to 3,211 cubic feet per second at the terminus.

California Aqueduct

Water is pumped by Banks Pumping Plant into the 444-mile-long California Aqueduct. Water then enters Bethany Reservoir, then flows south by gravity into the San Luis Joint-Use Complex, which was designed and constructed by Reclamation and is operated and maintained by the California Department of Water Resources. Within the complex are O'Neill Forebay, B.F. Sisk Dam and San Luis Reservoir, the nation's largest offstream reservoir, the Gianelli Pumping-Generating Plant, Dos Amigos Pumping Plant, and the San Luis Canal, which serves both the SWP and the CVP.

3.2.2 Environmental Consequences

No Action

Under the No Action Alternative, the farmlands in Figure 1-1 would continue to receive deliveries from the Delta-Mendota Canal, through Del Puerto's licensed turnouts, and Del Puerto landowner existing systems where necessary. Some pumping would be necessary to bring the water to the lands. There would be no change to SWP or CVP operations.

Proposed Action

Under the Proposed Action, up to 3,966 acre-feet of water per year would be delivered to the farmlands in Figure 1-1 via SWP Turnouts #B, #C, and # D in reach 2B of the California Aqueduct, and Oak Flat's existing systems where necessary. The water could more easily flow via gravity, rather than pumping. Between the lands and O'Neill Forebay, there would be a negligible decrease in flows in the California Aqueduct and a negligible increase in flows in the DMC. There would be no net changes in either SWP or CVP water supplies. There would be no major changes necessary in CVP and SWP operations.

Cumulative Impacts

Since there would be no net changes in water supplies, only slight changes in water flow in the two canals and no major changes to operations, there would be no cumulative impacts to water supplies as a result of the Proposed Action.

3.3 Biological Resources

3.3.1 Affected Environment

On July 22, 2013 Reclamation requested an official species list from the United States Fish and Wildlife Service via the Sacramento Field Office's website. The list is for the Howard Ranch, San Luis Dam, Crows Landing, Patterson, Orestimba Peak, and Newman U.S. Geological Survey (USGS) 7½-minute quadrangles (Quads). The California Department of Fish and Wildlife's California Natural Diversity Database was also queried for records of protected species within 10 miles of the Proposed Action Area. Reclamation's files were searched for any additional information on species in the area. All of the above information sources were combined to create Table 3-2.

Table 3-2 Federally Protected Species with the Potential to Occur in the Action Area

Common Name	Scientific Name	Status ^Δ	Effects [#]
Invertebrates			
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	T	NE
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	T	NE
Vernal pool tadpole shrimp	<i>Lepidurus packardi</i>	E	NE
Fish			
Green sturgeon	<i>Acipenser medirostris</i>	T, NMFS	NE
Delta smelt	<i>Hypomesus transpacificus</i>	T	NE
Central Valley Steelhead	<i>Oncorhynchus mykiss</i>	T, X, NMFS	NE
Central Valley spring-run Chinook salmon	<i>Oncorhynchus tshawytscha</i>	T, NMFS	NE
Winter-run Chinook salmon Sacramento River	<i>Oncorhynchus tshawytscha</i>	E, NMFS	NE
Amphibians			
California tiger salamander	<i>Ambystoma californiense</i>	T	NE
California red-legged frog	<i>Rana draytonii</i>	T, X	NE
Reptiles			
Blunt-nosed leopard lizard	<i>Gambelia (Crotaphytus) sila</i>	E	NE
Giant garter snake	<i>Thamnophis gigas</i>	T	NE
Birds			
Tri-colored blackbird	<i>Agelaius tricolor</i>	MBTA	NE
Swainson's hawk	<i>Buteo swainsoni</i>	MBTA	NE

Burrowing owl	<i>Athene cunicularia</i>	MBTA	NE
Mammals			
Fresno kangaroo rat	<i>Dipodomys nitratooides exilis</i>	E	NE
San Joaquin kit fox	<i>Vulpes macrotis mutica</i>	E	NE
<p>Δ Status= Status of federally protected species protected under federal Endangered Species Act E: Listed as Endangered under the federal Endangered Species Act T: Listed as Threatened under the federal Endangered Species Act NMFS: Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. MBTA: Species protected under the Migratory Bird Treaty Act X: Critical habitat designated under the federal Endangered Species Act C: Candidate proposed for listing # Effects = Effect determination NE: No Effect to federally listed species anticipated as a result of the Proposed Action</p>			

3.3.2 Environmental Consequences

No Action

Under the No Action Alternative, the baseline conditions of the Action Area would not change, so there would be no effects to biological resources.

Proposed Action

The effects of the Proposed Action are similar to the No Action alternative. A majority of the Action Area consists of active farmlands that no longer provide suitable habitat for federally protected species. The remainder of the Action Area consists of grazing lands with some small fragmented pieces of natural land that could potentially provide habitat for some species listed in Table 3-2. The water involved in the Proposed Action would be used to irrigate the same lands as the No Action Alternative. Fallowed lands that have been untilled for three or more consecutive years would not be converted as a result of the Proposed Action. The land use patterns of cultivated and fallowed fields that could provide suitable habitat for listed species or birds protected under the Migratory Bird Treaty Act would not be changed as a result of the Proposed Action. Therefore, there would be no take of migratory birds as a result of the Proposed Action. No natural stream courses would be altered to carry out the Proposed Action, so there would be no effects to federally protected fish species. No critical habitat occurs within the Action Area, so none would be affected by the Proposed Action. The Proposed Action does not include any construction or other ground-disturbing activities. With the implementation of the environmental commitments listed in Table 2-1, Reclamation has determined that there would be No Effect to listed species or designated critical habitat under the Endangered Species Act (16 U.S.C. §1531 et. seq.) resulting from the Proposed Action.

Cumulative Impacts

Existing loss of habitat from urbanization and the expansion of agricultural lands, that cumulatively impacts listed species and their habitats, is expected to occur regardless of whether or not the Proposed Action is implemented. The Proposed Action is not expected to contribute to cumulative habitat loss because the water would be used in a way that is consistent with current

practices. There would be no new cumulative impacts to biological resources as a result of the Proposed Action.

3.4 Energy Use and Global Climate

3.4.1 Affected Environment

Climate change refers to significant change in measures of climate (e.g., temperature, precipitation, or wind) lasting for decades or longer. Many environmental changes can contribute to climate change: changes in sun's intensity, changes in ocean circulation, deforestation, urbanization, burning fossil fuels, etc. (EPA 2013).

Gases that trap heat in the atmosphere are often called greenhouse gases (GHG). Some GHG, such as carbon dioxide (CO₂), occur naturally and are emitted to the atmosphere through natural processes and human activities. Other GHG (e.g., fluorinated gases) are created and emitted solely through human activities. The principal GHG that enter the atmosphere because of human activities are: carbon dioxide, methane, nitrous oxide, and fluorinated gasses (EPA 2013).

During the past century humans have substantially added to the amount of GHG in the atmosphere by burning fossil fuels such as coal, natural gas, oil and gasoline to power our cars, factories, utilities and appliances. The added gases, primarily CO₂ and CH₄, are enhancing the natural greenhouse effect, and likely contributing to an increase in global average temperature and related climate changes.

3.4.2 Environmental Consequences

No Action

The No Action Alternative would neither involve physical changes to the environment nor construction activities that could impact global climate change. Generating power plants that produce electricity to operate the electric pumps produce carbon dioxide that could potentially contribute to GHG emissions; however, water under the No Action Alternative is water that would be delivered from existing facilities and is therefore part of the existing conditions.

Proposed Action

The Proposed Action would neither involve physical changes to the environment nor construction activities that could impact global climate change. Generating power plants that produce electricity to operate the electric pumps produce carbon dioxide that could potentially contribute to GHG emissions. Compared to the No Action Alternative, the Proposed Action would require less pumping, and hence less energy use. The efficiency of pumps relies on many factors, so the reduction in greenhouse gases was not quantified, but any reduction in energy use would have a slight beneficial effect regarding global climate.

Cumulative Impacts

Since any increase in greenhouse gas emissions would result in a cumulative effect to the environment, any effects of the Proposed Action would be cumulative. As discussed under the Proposed Action, there may be a slight beneficial effect regarding energy use, and hence a slight reduction in greenhouse gas emissions.

Section 4 Consultation and Coordination

4.1 Public Review Period

Reclamation intends to provide the public with an opportunity to comment on the Draft Finding of No Significant Impact and Draft Environmental Assessment between August 15 and September 16, 2013.

4.2 SWP/CVP Coordination

Reclamation met several times between February and June 2013 with Del Puerto, Oak Flat, and DWR staff to arrange for the exchange and operational considerations.

4.3 Endangered Species Act (16 USC § 1531 et seq.)

Section 7 of the Endangered Species Act requires federal agencies, in consultation with the Secretary of the Interior and/or Commerce, to ensure that their actions do not jeopardize the continued existence of endangered or threatened species, or result in the destruction or adverse modification of the critical habitat of these species.

The Proposed Action would not result in any ground disturbing activities, change in land use patterns, alteration of natural stream courses, or modification of critical habitat. Based on the nature of the Proposed Action, and with the implementation of the provided avoidance measures, Reclamation has determined there would be *No Effect* to listed species or designated critical habitat under the Endangered Species Act from the approval of the Proposed Action.

Section 5 Preparers and Reviewers

Nicholas Kilb, Natural Resources Specialist, SCCAO – general preparer
Lisa Carlson, Biological Science Technician, SCCAO – biology preparer
William Soule, Archaeologist, MP-153 – cultural resources analysis
Patricia Rivera, Native American Affairs Specialist, MP-400 – Indian Trust Assets analysis
David Hyatt, Supervisory Biologist, SCCAO – reviewer
Anthea Hansen, Del Puerto Water District – reviewer
Mary James, Repayment Specialist, SCCAO (Tracy field office) – reviewer
Rain Healer, Natural Resources Specialist, SCCAO –reviewer
Chuck Siek, Supervisory Natural Resources Specialist, SCCAO – reviewer

Section 6 Acronyms and Abbreviations

CVP	Central Valley Project
Del Puerto	Del Puerto Water District
EPA	Environmental Protection Agency
GHG	greenhouse gases
Oak Flat	Oak Flat Water District
Reclamation	Bureau of Reclamation
SWP	State Water Project

Section 7 References

California Department of Fish and Wildlife. 2013. California Natural Diversity Database. Website: <http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp>

Environmental Protection Agency (EPA). 2013. Climate Change – Basic Information. Website: <http://www.epa.gov/climatechange/basics/>.

U.S. Fish and Wildlife Service. 2013. Species List, document number 130722023015. Website: http://www.fws.gov/sacramento/es/spp_list.htm

Appendix A Cultural Resources Determination



United States Department of the Interior

BUREAU OF RECLAMATION
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, California 95825-1898

IN REPLY
REFER TO:
MP-153
ENV-3.00

VIA ELECTRONIC MAIL ONLY

May 31, 2013
MEMORANDUM

To: Nicholas Kilb
Natural Resource Specialist – South-Central California Area Office

From: William Soule
Archaeologist – Division of Environmental Affairs

Subject: 13-SCAO-201: Del Puerto Water District (DPWD) Alternate Points of Delivery on the California Aqueduct

This proposed undertaking by Reclamation is to approve exchanges and additional points of diversion of DPWD's Central Valley Project (CVP) water. This is the type of undertaking that does not have the potential to cause effects to historic properties, should such properties be present, pursuant to the National Historic Preservation Act Section 106 regulations codified at 36 CFR Part 800.3(a)(1). Reclamation has no further obligations under NHPA Section 106, pursuant to 36 CFR § 800.3(a)(1).

Under this proposed action Reclamation, and the California Department of Water Resources (DWR), would approve State Water Project (SWP) Turnouts #B, #C, and #D in Reach 2B of the California Aqueduct as alternate points of diversion for up to 3,966 acre-feet per year of water supplies for delivery to CVP contracted lands within DPWD's boundaries, while concurrently exchanging a like amount of CVP water back to the SWP at the O'Neill Forebay. This action would allow for a more efficient delivery of water to portions of the DPWD service area. Neither the Proposed Action nor the No Action Alternative would produce significant changes to the existing CVP and SWP facilities, and there will be no new ground disturbance, construction of new facilities, or change in existing land use.

After reviewing the materials provided for the Section 106 determination of effect for this undertaking, I concur with the evaluation (item 2) in Table 3.1 of EA-13-033, which states that both the Proposed Action and the No Action Alternative are the types of activities that do not have the potential to cause effects to historic properties, assuming that such properties are present, pursuant to 36 CFR § 800.3(a)(1). This memorandum is intended to convey the completion of the NHPA Section 106 process for this undertaking. Please retain a copy in the administrative record for this action. Should changes be made to this project, additional NHPA Section 106 review, possibly including consultation with the State Historic Preservation Officer, may be necessary. Thank you for providing the opportunity to comment.

CC: Cultural Resources Branch (MP-153), Anastasia Leigh – Regional Environmental Officer (MP-150)

Appendix B Indian Trust Assets Determination



Kilb, Nicholas <nkilb@usbr.gov>

Request for Determinations, Del Puerto Water District Alternate Points of Delivery on the California Aqueduct

RIVERA, PATRICIA <privera@usbr.gov>

Fri, May 31, 2013 at 7:38 AM

To: "Kilb, Nicholas" <nkilb@usbr.gov>

Cc: Mary Williams <marywilliams@usbr.gov>, Kristi Seabrook <kseabrook@usbr.gov>

Nick,

I reviewed the proposed action to approve exchanges and additional points of diversion of Del Puerto's CVP supplies. In particular, Reclamation and the California Department of Water Resources would approve SWP Turnouts #B, #C, and # D in reach 2B of the California Aqueduct as alternate points of diversion for up to 3,966 acre-feet per year of water supplies for delivery to CVP contracted lands within Del Puerto's boundaries, while concurrently exchanging a like amount of CVP supply back to the SWP at O'Neill Forebay.

The proposed action does not have a potential to affect Indian Trust Assets.

Patricia Rivera
Native American Affairs Program Manager
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2800 Sacramento, California 95825
(916) 978-5194

KRISTI THIS IS ADMIN

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