

RECLAMATION

Managing Water in the West

FINDING OF NO SIGNIFICANT IMPACT

Contra Costa Water District Exchange with Alameda County Water District and Zone 7

FONSI-14-060



U.S. Department of the Interior
Bureau of Reclamation

October 2015

Mission Statements

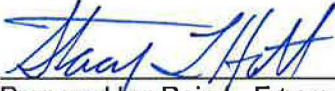
The mission of the Department of the Interior is to protect and manage the Nation's natural resources and cultural heritage; provide scientific and other information about those resources; and honor its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated 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.

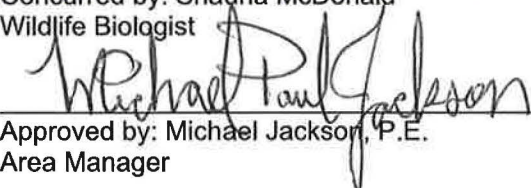
BUREAU OF RECLAMATION
South-Central California Area Office, Fresno, California

FONSI-14-060

**Contra Costa Water District Exchange
with Alameda County Water District and
Zone 7**

for 
Prepared by: Rain L. Emerson
Supervisory Natural Resources Specialist
Date 10/28/2015


Concurred by: Shauna McDonald
Wildlife Biologist
Date 11/4/15


Approved by: Michael Jackson, P.E.
Area Manager
Date 11/10/2015

Introduction

In accordance with section 102(2)(c) of the National Environmental Policy Act of 1969, as amended, the South-Central California Area Office of the Bureau of Reclamation (Reclamation), has determined that an environmental impact statement is not required for the approval of an exchange of up to 5,000 acre-feet (AF) of water between Contra Costa Water District (Contra Costa WD), Alameda County Water District (Alameda County WD), and Zone 7 of the Alameda County Flood Control and Water Conservation District (Zone 7). This Finding of No Significant Impact (FONSI) is supported by Reclamation's Environmental Assessment (EA)-14-060, *Contra Costa Water District Exchange with Alameda County Water District and Zone 7*, and is hereby incorporated by reference.

Reclamation provided the public with an opportunity to comment on the Draft FONSI and Draft EA between September 11, 2015 and October 13, 2015. No comments were received.

Background

Alameda County WD and Zone 7 are State Water Project (SWP) contractors located in Alameda County (see Figure 1 in EA-14-060). Both districts have banked SWP water stored in Semitropic Water Storage District (Semitropic). In addition, Zone 7 has banked SWP water in Cawelo Water District (Cawelo). Under their banking programs, Alameda County WD's and Zone 7's previously banked SWP water is pumped into the California Aqueduct (Aqueduct) for use by SWP water users located south of Semitropic and Cawelo, in exchange, the districts are delivered an equal amount of SWP water from the San Joaquin-Sacramento River Delta (Delta) via the Banks Pumping Plant as they are located north of Semitropic and Cawelo. Due to the ongoing drought in California, low water supply allocations, and periodic capacity limitations in Semitropic and Cawelo, the two districts are seeking additional methods for return of their previously banked water. Consequently, the districts have entered into an agreement with Contra Costa WD in order to exchange their previously banked SWP water for an equal amount of Contra Costa WD's Central Valley Project (CVP) water. This one-for-one exchange would take place in two parts: the first step is the transfer of Alameda County WD and Zone 7's SWP water to Contra Costa WD, and the second step is the transfer of Contra Costa WD's CVP water to Alameda County WD and Zone 7.

Under the agreement, as the first step of the one-for-one exchange, Alameda County WD and Zone 7 would each transfer up to 2,500 AF (5,000 AF total) of SWP water that will be exchanged with the California Department of Water Resources (DWR) for their previously banked SWP water. The exchanged SWP water would then be diverted by Contra Costa WD from the Delta at Contra Costa WD's Old and/or Middle River Intakes for use within its service area rather than delivering a like amount of stored water from Los Vaqueros Reservoir. The like amount of stored water in Los Vaqueros Reservoir would then be set aside for Alameda County WD and Zone 7 for later use when needed.

Proposed Action

Reclamation proposes to approve an exchange of up to 5,000 AF of water between Contra Costa WD and Alameda County WD and Zone 7. The exchange would be executed as described in Section 2.2 of EA-14-060.

Environmental Commitments

Contra Costa, Alameda County WD, and Zone 7 shall implement the environmental protection measures listed in Table 1 of EA-14-060 in order to avoid or reduce environmental consequences associated with the Proposed Action. Environmental consequences for resource areas assume the measures specified would be fully implemented.

Findings

Reclamation's finding that implementation of the Proposed Action will result in no significant impact to the quality of the human environment is supported by the following findings:

Resources Eliminated from Detailed Analysis

As described in Table 2 of EA-14-060, Reclamation analyzed the affected environment and determined that the Proposed Action does not have the potential to cause direct, indirect, or cumulative adverse effects to the following resources: air quality, cultural resources, environmental justice, global climate change, Indian Sacred Sites, Indian Trust Assets, land use, or socioeconomic resources.

Water Resources

Under the Proposed Action, Alameda County WD's and Zone 7 would exchange up to 5,000 AF of their previously banked SWP water in Semitropic and Cawelo with DWR. The banked water would be pumped into the California Aqueduct and delivered to SWP contractors located downstream of the introduction points for existing M&I purposes in exchange for SWP water from the Delta. Pursuant to the agreement between Alameda County WD, Zone 7, and Contra Costa WD, the SWP water in the Delta would be diverted by Contra Costa WD through their existing diversion points and used in-district in lieu of CVP water that would have been released from Los Vaqueros Reservoir. The water (up to 5,000 AF) in Los Vaqueros would then be set aside for Alameda County WD and Zone 7 for later exchange. The exchanged water would not increase pumping in the Delta as the water would have been pumped with or without this action.

When the water stored in Los Vaqueros is needed by Alameda County WD and Zone 7, Contra Costa WD would take delivery of the water and use it to meet in-district demands. In exchange for the water stored in Los Vaqueros Reservoir, Contra Costa WD would reduce its CVP diversions from the Delta by an amount (rate) equivalent to the delivery to Alameda County WD and Zone 7. Contra Costa WD's normal points of diversion for this CVP water are at its Rock Slough Intake, Old River Intake, and Middle River Intake at Victoria Canal. Under the Proposed Action, a portion of the water which would normally have been diverted at the Rock Slough, Old River, or Middle River Intakes would instead be diverted at the SWP's Clifton Court Forebay and conveyed to Alameda County WD and Zone 7 by way of the State's South Bay Aqueduct. When the CVP water is diverted into Clifton Court Forebay for pumping at the Banks Pumping

Plant, the overall pumping from the Delta would not be increased from what would have occurred absent this exchange. In addition, flows in the Old and Middle Rivers north of Contra Costa WD's Old River and Middle River intakes would not change as a result of the Proposed Action.

Since storage in Los Vaqueros Reservoir at the end of this one-for-one exchange will be the same as it would be absent the exchange, no refill actions are required.

The place of use for the CVP water would be the Alameda County WD and Zone 7 water service areas. The Alameda County WD service area is within the federal CVP service area as identified on maps obtained from the State Water Resource Control Board's files. However, water will not be delivered into a small area zoned open space by City ordinance in the southeastern part of Alameda County. Zone 7 is partially within the CVP place of use; however, prior to delivery the rest of their service area will need to be added temporarily in order to deliver the CVP water as proposed. On September 28, 2015, the State Water Resources Control Board approved the temporary change for the Proposed Action for a one year period (SWRCB 2015).

No new construction would be necessary to convey the exchanged water. Each district would only deliver water to its existing customers by way of existing facilities.

Biological Resources

Under the Proposed Action, there would be no additional impacts to migratory birds, federally listed species or their critical habitat, or to Essential Fish Habitat, beyond those previously addressed by the Biological Opinions issued to Reclamation for the Coordinated Long-Term Operations of the CVP and SWP (USFWS 2008, NMFS 2009). No lands fallowed and untilled for three years or more would be brought into production and no new facilities would be constructed. In addition, there would be no net change in deliveries of CVP and SWP water, and the water would move only through existing facilities and be put to existing uses. Therefore, Reclamation has determined that the Proposed Action would have no take of migratory birds and no effect on any federally listed or proposed species or their critical habitat beyond those previously covered and no further consultation is required.

Cumulative Impacts

Cumulative impacts result from incremental impacts of the Proposed Action when added to other past, present, and reasonably foreseeable future actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment.

Water Resources

Reclamation has reviewed existing or foreseeable projects in the same geographic area that could affect or could be affected by the Proposed Action since Reclamation and CVP contractors have been working on various drought-related projects, including this one, in order to manage limited water supplies due to current hydrologic conditions and regulatory requirements. This and similar projects would have a cumulative beneficial effect on water supply during these critically dry years.

As in the past, hydrological conditions and other factors are likely to result in fluctuating water supplies which drive requests for water service actions. Water districts provide water to their customers based on available water supplies and timing, while attempting to minimize costs. Farmers irrigate and grow crops based on these conditions and factors, and a myriad of water service actions are approved and executed each year to facilitate water needs. It is likely that over the course of the Proposed Action, districts will request various water service actions, such as transfers, exchanges, and Warren Act contracts (conveyance of non-CVP water in CVP facilities). Each water service transaction involving Reclamation undergoes environmental review prior to approval.

A wide variety of demands are placed on the water supply in the Delta, with the potential for cumulative effects on water supply, water quality, and the environment. For this reason, Delta flows are actively managed under several regulatory authorities. The water to be conveyed from the Delta under the Proposed Action does not represent a new source of water, new diversion, or increased diversion; it only represents a new point of diversion for Delta water already allocated for use by Contra Costa WD and the SWP. Therefore, the overall water balance of the Delta would be unaffected. No cumulative impacts from the Proposed Action are anticipated beyond those already evaluated as part of overall CVP and SWP Delta operations.

The Proposed Action and other similar projects would not hinder the normal operations of the CVP or SWP as exchanges would be coordinated by Reclamation and DWR in advance. In addition, there would be no effect on Reclamation's obligation to deliver water to its contractors or to local fish and wildlife habitat as the supplies exchanged would be one-for-one exchanges from existing supplies. Since the Proposed Action would not involve construction or modification of facilities, nor interfere with CVP or SWP operations, there would be no cumulative impacts to water supplies, existing facilities, or other contractors.

Biological Resources

As the Proposed Action would result in no impacts beyond those previously addressed, it would also not contribute cumulatively to any additional impacts to biological resources.

RECLAMATION

Managing Water in the West

Final Environmental Assessment

Contra Costa Water District Exchange with Alameda County Water District and Zone 7

EA-14-060



U.S. Department of the Interior
Bureau of Reclamation

October 2015

Mission Statements

The mission of the Department of the Interior is to protect and manage the Nation's natural resources and cultural heritage; provide scientific and other information about those resources; and honor its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated 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.

Contents

	Page
Section 1 Introduction	1
1.1 Background	1
1.2 Need for the Proposed Action	2
Section 2 Alternatives Including the Proposed Action	5
2.1 No Action Alternative	5
2.2 Proposed Action	5
2.2.1 Environmental Commitments	6
Section 3 Affected Environment and Environmental Consequences	9
3.1 Resources Eliminated from Further Analysis	9
3.2 Water Resources	10
3.2.1 Affected Environment	10
3.2.2 Environmental Consequences	10
3.3 Biological Resources	13
3.3.1 Affected Environment	13
3.3.2 Environmental Consequences	15
Section 4 Consultation and Coordination	17
4.1 Public Review Period	17
Section 5 Preparers and Reviewers	19
Section 6 References	21
Figure 1 Participating Water Districts	3
Figure 2 Water Conveyance Facilities	6
Table 1 Environmental Protection Measures and Commitments	7
Table 2 Resources Eliminated from Further Analysis	9
Table 3 Federally Protected Species List for the Proposed Action Area	13
Appendix A Cultural Resources Determination	

THIS PAGE LEFT INTENTIONALLY BLANK

Section 1 Introduction

The Bureau of Reclamation (Reclamation) provided the public with an opportunity to comment on the Draft Finding of No Significant Impact (FONSI) and Draft Environmental Assessment (EA) between September 11, 2015 and October 13, 2015. No comments were received. Changes between this Final EA and the Draft EA, which are not minor editorial changes, are indicated by vertical lines in the left margin of this document.

1.1 Background

Alameda County Water District (Alameda County WD) and Zone 7 of the Alameda County Flood Control and Water Conservation District (Zone 7) are State Water Project (SWP) contractors located in Alameda County (see Figure 1). Both districts have banked SWP water stored in Semitropic Water Storage District (Semitropic). In addition, Zone 7 has banked SWP water in Cawelo Water District (Cawelo). Under their banking programs, Alameda County WD's and Zone 7's previously banked SWP water is pumped into the California Aqueduct (Aqueduct) for use by SWP water users located south of Semitropic and Cawelo, in exchange, the districts are delivered an equal amount of SWP water from the San Joaquin-Sacramento River Delta (Delta) via the Banks Pumping Plant as they are located north of Semitropic and Cawelo. Due to the ongoing drought in California, low water supply allocations, and periodic capacity limitations in Semitropic and Cawelo, the two districts are seeking additional methods for return of their previously banked water. Consequently, the districts have entered into an agreement with Contra Costa Water District (Contra Costa WD) in order to exchange their previously banked SWP water for an equal amount of Contra Costa WD's Central Valley Project (CVP) water. This one-for-one exchange would take place in two parts: the first step is the transfer of Alameda County WD and Zone 7's SWP water to Contra Costa WD, and the second step is the transfer of Contra Costa WD's CVP water to Alameda County WD and Zone 7.

Under the agreement, as the first step of the one-for-one exchange, Alameda County WD and Zone 7 would each transfer up to 2,500 AF (5,000 AF total) of SWP water that will be exchanged with the California Department of Water Resources (DWR) for their previously banked SWP water. The exchanged SWP water would then be diverted by Contra Costa WD from the Delta at Contra Costa WD's Old and/or Middle River Intakes for use within its service area rather than delivering a like amount of stored water from Los Vaqueros Reservoir. The like amount of stored water in Los Vaqueros Reservoir would then be set aside for Alameda County WD and Zone 7 for later use when needed.

Los Vaqueros Reservoir is located within Contra Costa WD and stores water from the Delta, under Reclamation's CVP water rights (redirection of CVP storage releases) and Contra Costa WD's 1994 Los Vaqueros Project water right. As of August 23, 2015, Los Vaqueros Reservoir holds approximately 96,000 AF of water diverted under both of these rights.

At this time, the only existing direct conveyance mechanism to deliver Contra Costa WD's CVP water from Los Vaqueros Reservoir to Alameda County WD and Zone 7 would involve wheeling the water through Contra Costa WD's intertie with East Bay Municipal Utility District, and then through East Bay Municipal Utility District's interties with Dublin San Ramon Services District, which is within Zone 7's service area. However, this conveyance mechanism is capacity-limited, and would require coordination with additional third parties. Therefore Alameda County WD, Zone 7, and Contra Costa WD have proposed to transfer Contra Costa WD's CVP water from the Delta in lieu of direct conveyance from Los Vaqueros, in order to complete the second step of the one-for-one exchange. To execute the transfer, Contra Costa WD would deliver in-district up to 5,000 AF of water stored in Los Vaqueros Reservoir on behalf of Alameda County WD and Zone 7, in return, Alameda County WD and Zone 7 would take delivery of an equal volume of Contra Costa WD's CVP water from the Delta, diverted through the Banks Pumping Plant and delivered via the South Bay Aqueduct. Since this transfer would require conveyance of CVP water to a non-CVP contractor, by way of SWP facilities, approval is required from Reclamation and DWR.

1.2 Need for the Proposed Action

The State of California has been and continues to experience unprecedented water management challenges due to severe drought in recent years. On January 17, 2014, the Governor proclaimed a Drought State of Emergency (State of California 2014). On December 22, 2014, provisions within this proclamation were extended until May 31, 2016. On April 1, 2015, following the lowest snowpack ever recorded in California and the ongoing drought, the Governor proclaimed a second Drought State of Emergency and directed the State Water Resources Control Board to implement mandatory water reductions in cities and towns across California to reduce water usage by 25 percent (State of California 2015a). On April 23, 2015 and May 1, 2015 the State Water Resources Control Board issued curtailment notices to junior water rights holders in the San Joaquin River watershed and the Delta, respectively. The curtailment notices require junior water rights holders to stop diverting water from the watershed in order to allow it to flow to more senior water-right holders, as required by state law (State of California 2015a). On June 12, 2015, the State Water Resources Control Board issued curtailment notices to senior water rights holders with a priority date of 1903 or later in the San Joaquin and Sacramento watersheds and the Delta (2015b).

Alameda County WD and Zone 7 have a need to deliver water to support existing municipal and industrial (M&I) uses within their service areas. The districts have an agreement with Contra Costa WD to exchange up to 5,000 AF of their SWP water for CVP water stored in Los Vaqueros Reservoir; however, the currently available conveyance path to deliver the CVP water from Los Vaqueros to their service area would be inefficient and requires coordination with additional external parties. The purpose of the proposed exchange is to provide a means to deliver an equivalent volume of water to Alameda County WD and Zone 7 by a simpler and more efficient conveyance mechanism.



Figure 1 Participating Water Districts

THIS PAGE LEFT INTENTIONALLY BLANK

Section 2 Alternatives Including the Proposed Action

This EA 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 approve the exchange of up to 5,000 AF of water between Contra Costa WD and Alameda County WD and Zone 7. Contra Costa WD would take delivery of its available CVP water from the Delta as usual. However, it is possible that Alameda County WD, Zone 7, and Contra Costa WD may continue with an exchange that does not involve Reclamation approval or facilities. If this were to occur, similar to the Proposed Action, Alameda County WD and Zone 7 would each transfer up to 2,500 AF (5,000 AF total) of SWP water that will be exchanged with DWR for their previously banked SWP water. The SWP water would then be diverted by Contra Costa WD from the Delta at Contra Costa WD's Old and/or Middle River Intakes for use within its service area rather than delivering a like amount of stored water from Los Vaqueros Reservoir. The like amount of stored water in Los Vaqueros Reservoir would then be set aside for Alameda County WD and Zone 7 for later use when needed. Delivery of this water to Alameda County WD and Zone 7 would occur through Contra Costa WD's intertie with East Bay Municipal Utility District and then through East Bay Municipal Utility District's interties with Dublin San Ramon Services District, which is within Zone 7's service area.

2.2 Proposed Action

Reclamation proposes to approve an exchange of up to 5,000 AF of water between Contra Costa WD and Alameda County WD and Zone 7. Under the exchange, Alameda County WD and Zone 7 would each transfer up to 2,500 AF (5,000 AF total) of SWP water that was exchanged with DWR for their previously banked SWP water. The SWP water would then be diverted by Contra Costa WD from the Delta at Contra Costa WD's Old and/or Middle River Intakes for use within its service area rather than delivering a like amount of stored water from Los Vaqueros Reservoir. The like amount of stored water in Los Vaqueros Reservoir would then be set aside for Alameda County WD and Zone 7 for later use when needed.

When called upon, the stored water in Los Vaqueros would be exchanged with Contra Costa WD. The water in Los Vaqueros would be delivered to Contra Costa WD's in-district customers. In return, Alameda County WD and Zone 7 would take delivery of an equal amount of Contra Costa WD's CVP water from the Delta. Contra Costa WD's normal points of diversion for its CVP water are at the Rock Slough Intake, Old River Intake, and Middle River

Intake at Victoria Canal. Under the Proposed Action, the CVP water would instead be diverted at the SWP's Clifton Court Forebay, and conveyed to Alameda County WD and/or Zone 7 by way of the South Bay Aqueduct. This would require a temporary change in the point of diversion/redirection for CVP water. In addition, since portions of Zone 7 are outside the CVP place of use, a change in the place of use will also be required. On September 28, 2015, the State Water Resources Control Board approved the temporary change for the Proposed Action for a one year period (SWRCB 2015).

The proposed exchange would occur in late 2015 or 2016 and could take anywhere from fifteen days to three or more months to complete. The timing and rate of the water exchanges would be determined in close coordination among Alameda County WD, Zone 7, Contra Costa WD, Reclamation, and DWR. No construction or modification of state or federal facilities would be required. See Figure 2 for a depiction of water conveyance facilities proposed for use under the Proposed Action.

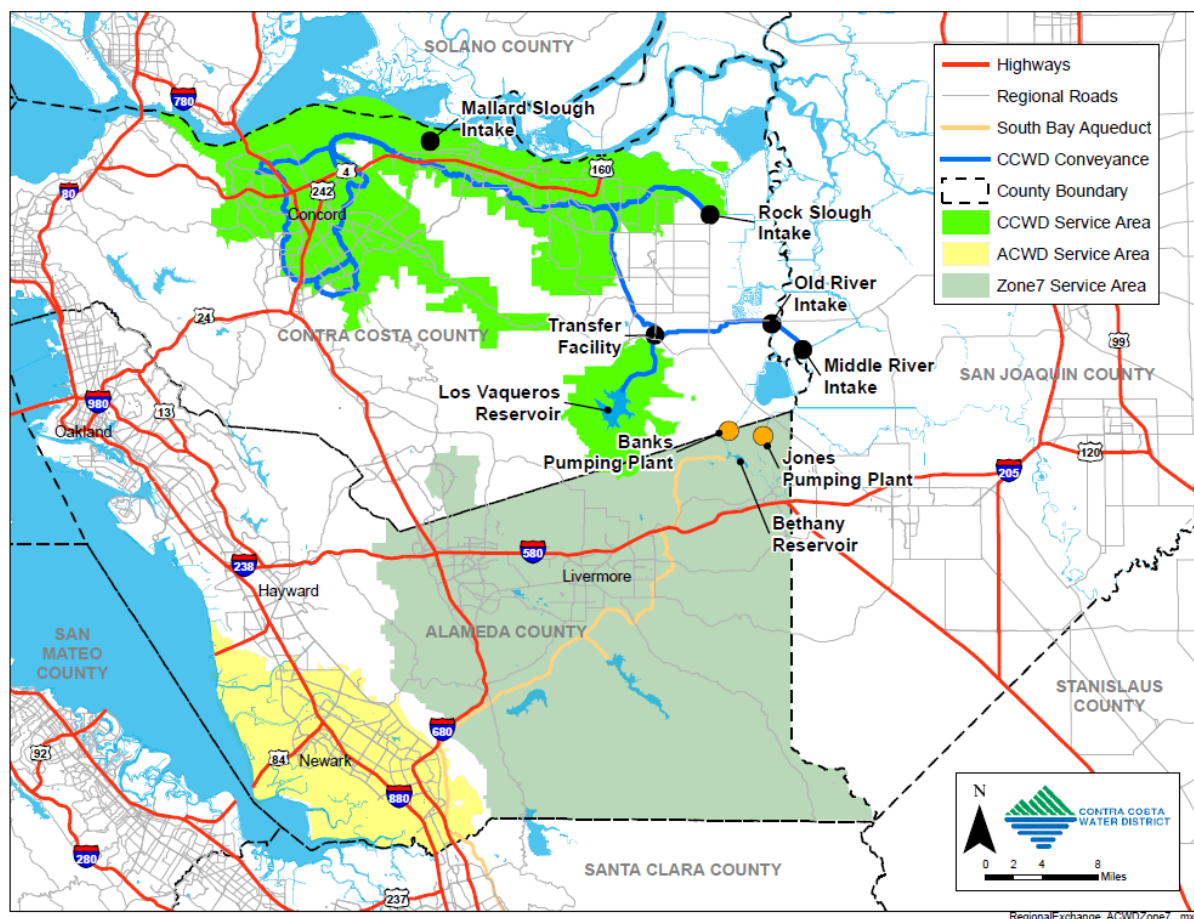


Figure 2 Water Conveyance Facilities

2.2.1 Environmental Commitments

Contra Costa, Alameda County WD, and Zone 7 shall implement the following environmental protection measures to avoid and/or reduce environmental consequences associated with the Proposed Action (Table 1). Environmental consequences for resource areas assume the measures specified would be fully implemented.

Table 1 Environmental Protection Measures and Commitments

Resource	Protection Measure
Water Resources	Water under the Proposed Action may only be served within the Consolidated Place of Use and/or within areas consistent with approved State Water Resources Control Board petitions.
Biological Resources	No native or untilld land (fallow for three consecutive years or more) may be cultivated with CVP water without additional environmental analysis and approval.
	No new construction or modification of existing facilities may occur in order to complete the Proposed Action.
	The Proposed Action cannot alter the flow regime of natural waterways or natural watercourses such as rivers, streams, creeks, ponds, pools, wetlands, etc., so as to have a detrimental effect on fish or wildlife or their habitats.
Various Resources	The Proposed Action must comply with all applicable Federal, State and local laws, regulations, permits, guidelines and policies.
	The Proposed Action would not increase or decrease water supplies that would result in development.

THIS PAGE LEFT INTENTIONALLY BLANK

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 the Proposed Action did not have the potential to cause direct, indirect, or cumulative adverse effects to the resources listed in Table 2.

Table 2 Resources Eliminated from Further Analysis

Resource	Reason Eliminated
Air Quality	No construction or modification of facilities is proposed. Some pumping would be required to move water under the Proposed Action, but power usage would be within the typical range for the facilities involved.
Cultural Resources	As the Proposed Action would facilitate the flow of water through existing facilities to existing users and no construction or modification of these facilities would be needed in order to complete the Proposed Action, Reclamation has determined that these activities have no potential to cause effects to historic properties pursuant to 36 Code of Federal Regulations Part 800.3(a)(1). See Appendix A for Reclamation's determination.
Environmental Justice	The Proposed Action would not cause dislocation, changes in employment, or increase flood, drought, or disease, nor would it disproportionately impact economically disadvantaged or minority populations.
Global Climate	No construction or modification of facilities is proposed. Some pumping would be required to move water under the Proposed Action, but power usage would be within the typical range for the facilities involved. No greenhouse gas emissions are anticipated outside normal operational fluctuations. Global climate change is expected to have some effect on the snow pack of the Sierra Nevada and the runoff regime. Current data are not yet clear on the hydrologic changes and how they will affect the San Joaquin Valley. CVP water allocations are made dependent on hydrologic conditions and environmental requirements. Since Reclamation operations are flexible, any changes in hydrologic conditions due to global climate change would be addressed within Reclamation's operation flexibility.
Indian Sacred Sites	The Proposed Action would not limit access to or ceremonial use of Indian sacred sites on federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites.
Indian Trust Assets	The Proposed Action would not impact Indian Trust Assets as there are none in the Proposed Action area.
Land Use	The Proposed Action would not change historic land and water management practices. Water would move through existing facilities for delivery to the districts for existing M&I purposes. The water would not be used to place untillied or new lands into production, or to convert undeveloped land to other uses.
Socioeconomics	Water would move through existing facilities for delivery to the districts for existing M&I purposes. As such, no change in socioeconomic conditions is expected from the Proposed Action.

3.2 Water Resources

3.2.1 Affected Environment

Contra Costa Water District

Contra Costa WD is a federal CVP contractor located in central and eastern Contra Costa County. Contra Costa WD relies completely on the Delta for its water supply, and diverts water at its four intakes in the Delta: Rock Slough, Mallard Slough, Old River and Middle River at Victoria Canal. Using these last two intakes, Contra Costa WD can also divert water to storage in Los Vaqueros Reservoir for later use. Contra Costa WD diverts water under its own rights (Mallard Slough and Los Vaqueros Reservoir) and under a CVP contract (all but Mallard Slough).

Los Vaqueros Reservoir

Los Vaqueros Reservoir is a 160,000 AF off-stream reservoir operated by Contra Costa WD. The storage capacity provided by the reservoir allows Contra Costa WD to manage water quality for its customers and adjust timing of Delta diversions to accommodate the life cycles of Delta aquatic species. Water is diverted to storage under water rights held by Reclamation or Contra Costa WD.

Alameda County Water District

Alameda County WD is a non-CVP water district serving mostly commercial, residential and industrial customers in Alameda County. On average, Alameda County WD receives approximately 40 percent of its water supply from the SWP, 20 percent from the San Francisco Public Utilities Commission, and 40 percent from Alameda Creek watershed runoff (Alameda County WD 2010).

Zone 7

Zone 7's surface water comes mostly from the SWP, supplemented by other imported supplies, local rainfall runoff, and pumped groundwater. Untreated water is delivered to approximately 3,500 acres for irrigation, and treated drinking water is delivered to retailers serving approximately 220,000 people in Pleasanton, Livermore, Dublin, and the Dougherty Valley area of San Ramon. Zone 7 also provides flood protection to 425 square miles in eastern Alameda County (Zone 7 2010).

3.2.2 Environmental Consequences

No Action

Under the No Action Alternative, Contra Costa WD would take delivery of its CVP water from the Delta as usual.

An alternative mechanism for delivery would be to wheel the water from Los Vaqueros Reservoir storage through Contra Costa WD's intertie with East Bay Municipal Utility District and then through East Bay Municipal Utility District's interties with Dublin San Ramon Services District, which is within Zone 7's service area. This alternative would use existing non-federal facilities that are owned and operated by local agencies and not subject to Reclamation's jurisdiction. This alternative, while feasible, requires coordination among multiple agencies to

physically wheel the water through interties with very limited physical capacities; the Proposed Action is not subject to the same constraints.

Proposed Action

Under the Proposed Action, Alameda County WD's and Zone 7's would exchange up to 5,000 AF of their previously banked SWP water in Semitropic and Cawelo with DWR. The banked water would be pumped into the California Aqueduct and delivered to SWP contractors located downstream of the introduction points for existing M&I purposes in exchange for SWP water from the Delta. Pursuant to the agreement between Alameda County WD, Zone 7, and Contra Costa WD, the SWP water in the Delta would be diverted by Contra Costa WD through their existing diversion points and used in-district in lieu of CVP water that would have been released from Los Vaqueros Reservoir. The water (up to 5,000 AF) in Los Vaqueros would then be set aside for Alameda County WD and Zone 7 for later exchange. The exchanged water would not increase pumping in the Delta as the water would have been pumped with or without this action.

When the water stored in Los Vaqueros is needed by Alameda County WD and Zone 7, Contra Costa WD would take delivery of the water and use it to meet in-district demands. In exchange for the water stored in Los Vaqueros Reservoir, Contra Costa WD would reduce its CVP diversions from the Delta by an amount (rate) equivalent to the delivery to Alameda County WD and Zone 7. Contra Costa WD's normal points of diversion for this CVP water are at its Rock Slough Intake, Old River Intake and Middle River Intake at Victoria Canal. Under the Proposed Action, a portion of the water which would normally have been diverted at the Rock Slough, Old River, or Middle River Intakes would instead be diverted at the SWP's Clifton Court Forebay, and conveyed to Alameda County WD and Zone 7 by way of the State's South Bay Aqueduct. When the CVP water is diverted into Clifton Court Forebay for pumping at the Banks Pumping Plant, the overall pumping from the Delta would not be increased from what would have occurred absent this exchange. In addition, flows in the Old and Middle Rivers north of Contra Costa WD's Old River and Middle River intakes would not change as a result of the Proposed Action.

Since storage in Los Vaqueros Reservoir at the end of this one-for-one exchange will be the same as it would be absent the exchange, no refill actions are required.

The place of use for the CVP water would be the Alameda County WD and Zone 7 water service areas. The Alameda County WD service area is within the federal CVP service area as identified on maps obtained from the State Water Resource Control Board's files. However, water will not be delivered into a small area zoned open space by City ordinance in the southeastern part of Alameda County. Zone 7 is partially within the CVP place of use; however, prior to delivery the rest of their service area will need to be added temporarily in order to deliver the CVP water as proposed. On September 28, 2015, the State Water Resources Control Board approved the temporary change for the Proposed Action for a one year period (SWRCB 2015).

No new construction would be necessary to convey the exchanged water. Each district would only deliver water to its existing customers by way of existing facilities.

Cumulative Impacts

Cumulative impacts result from incremental impacts of the Proposed Action or No Action alternative when added to other past, present, and reasonably foreseeable future actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. To determine whether cumulatively significant impacts are anticipated from the Proposed Action or the No Action alternative, the incremental effect of both alternatives were examined together with impacts from past, present, and reasonably foreseeable future actions in the same geographic area.

Reclamation has reviewed existing or foreseeable projects in the same geographic area that could affect or could be affected by the Proposed Action since Reclamation and CVP contractors have been working on various drought-related projects, including this one, in order to manage limited water supplies due to current hydrologic conditions and regulatory requirements. This and similar projects would have a cumulative beneficial effect on water supply during these critically dry years.

As in the past, hydrological conditions and other factors are likely to result in fluctuating water supplies which drive requests for water service actions. Water districts provide water to their customers based on available water supplies and timing, while attempting to minimize costs. Farmers irrigate and grow crops based on these conditions and factors, and a myriad of water service actions are approved and executed each year to facilitate water needs. It is likely that over the course of the Proposed Action, districts will request various water service actions, such as transfers, exchanges, and Warren Act contracts (conveyance of non-CVP water in CVP facilities). Each water service transaction involving Reclamation undergoes environmental review prior to approval.

A wide variety of demands are placed on the water supply in the Delta, with the potential for cumulative effects on water supply, water quality, and the environment. For this reason, Delta flows are actively managed under several regulatory authorities. The water to be conveyed from the Delta under the Proposed Action does not represent a new source of water, new diversion, or increased diversion; it only represents a new point of diversion for Delta water already allocated for use by Contra Costa WD and the SWP. Therefore the overall water balance of the Delta would be unaffected. No cumulative impacts from the Proposed Action are anticipated beyond those already evaluated as part of overall CVP and SWP Delta operations.

The Proposed Action and other similar projects would not hinder the normal operations of the CVP or SWP as exchanges would be coordinated by Reclamation and DWR in advance. In addition, there would be no effect on Reclamation's obligation to deliver water to its contractors or to local fish and wildlife habitat as the supplies exchanged would be one-for-one exchanges from existing supplies. Since the Proposed Action would not involve construction or modification of facilities, nor interfere with CVP or SWP operations, there would be no cumulative impacts to water supplies, existing facilities, or other contractors.

3.3 Biological Resources

3.3.1 Affected Environment

Reclamation requested an official species list from the U.S. Fish and Wildlife Service (Service) via <http://ecos.fws.gov/ipac/>, on April 14, 2015. The list is for Contra Costa and Alameda Counties (Service 2015). These are the quadrangles that overlap or are adjacent to the districts involved in the Proposed Action. The aquatic species that occur in the waterways involved in the Proposed Action are on the species list for the two districts, as the quadrangles that occur in Contra Costa County overlap a relatively large part of the Delta. Reclamation further queried the California Department of Fish and Wildlife California Natural Diversity Database (CNDDB) for records of protected species within 10 miles of the Proposed Action (CNDDB 2015). Table 3 lists other federally listed fishes and the southern resident killer whale, which are present in the Proposed Action Area but were not included on the species list.

Table 3 Federally Protected Species List for the Proposed Action Area

COMMON NAME	CRITICAL HABITAT	LISTING STATUS	EFFECT DETERMINATIONS
Invertebrates			
bay checkerspot butterfly	designated	threatened	no effect; no effect on critical habitat
California freshwater shrimp	no	endangered	no effect
callippe silverspot butterfly	no	endangered	no effect
Conservancy fairy shrimp	no	endangered	no effect
delta green ground beetle	no	threatened	no effect
Lange's metalmark butterfly	no	endangered	no effect
longhorn fairy shrimp	designated	endangered	no effect; no effect on critical habitat
mission blue butterfly	no	endangered	no effect
valley elderberry longhorn beetle	no	threatened	no effect
vernal pool fairy shrimp	designated	threatened	no effect; no effect on critical habitat
vernal pool tadpole shrimp	designated	endangered	no effect; no effect on critical habitat
Fish			
Central California Coast coho salmon	no	endangered	no effect
Central California Coastal steelhead	designated	threatened	no effect; no effect on critical habitat
Central Valley spring-run chinook salmon	designated	threatened	any effects on this species and its critical habitat have already been addressed
Central Valley steelhead	designated	threatened	any effects on this species and its critical habitat have already been addressed
delta smelt	designated	threatened	any effects on this species and its critical habitat have already been addressed
North American green sturgeon	designated	threatened	any effects on this species and its critical habitat have already been addressed
Sacramento River winter-run chinook salmon	designated	endangered	any effects on this species and its critical habitat have already been addressed
tidewater goby	no	endangered	no effect
Amphibians			
California red-legged frog	designated	threatened	no effect; no effect on critical habitat
California tiger salamander, Central DPS	designated	threatened	no effect; no effect on critical habitat
Reptiles			
Alameda whipsnake	designated	threatened	no effect; no effect on critical habitat
giant garter snake	no	threatened	no effect
San Francisco garter snake	no	endangered	no effect
Birds			

COMMON NAME	CRITICAL HABITAT	LISTING STATUS	EFFECT DETERMINATIONS
California Clapper Rail	no	endangered	no effect
California Least Tern	no	endangered	no effect
Northern Spotted Owl	designated	threatened	no effect; no effect on critical habitat
Western Snowy Plover	no	threatened	no effect
Mammals			
salt marsh harvest mouse	no	endangered	no effect
San Joaquin kit fox	no	endangered	no effect
southern resident killer whales	no	endangered	any effects on this species have already been addressed
Plants			
Antioch Dunes evening-primrose	designated	endangered	no effect; no effect on critical habitat
California sea blite	no	endangered	no effect
Contra Costa goldfields	designated	endangered	no effect; no effect on critical habitat
Contra Costa wallflower	designated	endangered	no effect; no effect on critical habitat
fountain thistle	no	endangered	no effect
Keck's checker-mallow	no	endangered	no effect
large-flowered fiddleneck	no	endangered	no effect
Marin dwarf-flax	no	threatened	no effect
pallid manzanita	no	threatened	no effect
palmate-bracted bird's-beak	no	endangered	no effect
Presidio clarkia	no	endangered	no effect
Santa Cruz tarplant	no	threatened	no effect
soft bird's-beak	designated	endangered	no effect; no effect on critical habitat
Tiburon jewelflower	no	endangered	no effect
Tiburon mariposa lily	no	endangered	no effect
Tiburon paintbrush	no	endangered	no effect

Migratory Birds

There are CNDDDB records of migratory birds in the Proposed Action Area. In addition to the federally-listed species in Table 3, there are records of Swainson's Hawks and Western Burrowing Owls. These species would typically only fly over the developed areas that would be receiving the Municipal and Industrial water associated with the Proposed Action, and would not otherwise use these lands.

Federally-listed Species

With the exception of the fish species that occur in the Delta (which includes all the listed fishes in Table 3 except the tidewater goby), the other species do not occur in developed areas. The southern resident killer whales are on the list due to possible effects on their Chinook salmon prey base as a result of pumping in the South Delta. Essential Fish Habitat for Chinook salmon also occurs in the Delta.

Critical Habitat

As with the case for the federally listed species, the only critical habitat in the Proposed Action Area is that for several of the fish species, as indicated in Table 3.

3.3.2 Environmental Consequences

No Action

Under the No Action Alternative, Contra Costa WD would continue to take delivery of its CVP water supply, pumped at the Rock Slough and Old and Middle River Intakes, for existing uses. There would be no change in the affected environment for biological resources.

The effects of CVP and SWP pumping on federally listed fishes and their critical habitat have been addressed by Biological Opinions issued to Reclamation for the Coordinated Long-Term Operations of the CVP and SWP (NMFS 2009, Service 2008). The Biological Opinion issued by the Service to Reclamation for the Coordinated Long-Term Operations of the CVP and SWP found that operations as proposed were likely to jeopardize the continued existence of delta smelt and adversely modify its critical habitat. The Service provided a Reasonable and Prudent Alternative (RPA) with five components. On December 15, 2008, Reclamation submitted a memo provisionally accepting the RPA. The memo also indicated that Reclamation would immediately begin implementing the RPA. The provisional acceptance of the RPA was conditioned upon the further development and evaluation of the two RPA components directed at aquatic habitats. Reclamation stated that the two RPA components, RPA Component 3 – the fall action, and RPA Component 4 – the tidal habitat restoration action, both need additional review and refinement before Reclamation would be able to determine whether implementation of these actions by the CVP and SWP is reasonable and prudent.

The Biological Opinion issued by the National Marine Fisheries Service (NMFS) determined that long term SWP and CVP operations were likely to jeopardize several species and result in adverse modification of their critical habitat. NMFS also developed an RPA and included it in the Biological Opinion. On June 4, 2009, Reclamation sent a provisional acceptance letter to NMFS, citing the need to further evaluate and develop many of the longer-term actions, but also stating that Reclamation would immediately begin implementing the near-term elements of the RPA.

Reclamation also consulted under the Magnusson-Stevens Fishery Conservation and Management Act with NMFS on the impacts to Essential Fish Habitat for Chinook salmon as a result of the pumping (NMFS 2009).

However, following their provisional acceptance, both Biological Opinions were subsequently challenged in Court, and following lengthy proceedings, the United States District Court for the Eastern District of California remanded the Biological Opinions, and Reclamation was ordered by the Court to comply with the National Environmental Policy Act (NEPA) before accepting the RPAs. In March and December 2014, the Biological Opinions issued by the Service and NMFS, respectively, were upheld by the Ninth Circuit Court of Appeals, although certain requirements (such as an obligation for Reclamation to follow a NEPA process) were left in place. Reclamation is currently preparing environmental documentation to comply with the Court's decisions. In the meantime, Reclamation continues to comply with the existing Biological Opinions and current Court orders.

Proposed Action

Under the Proposed Action, there would be no additional impacts to migratory birds, federally listed species or their critical habitat, or to Essential Fish Habitat, beyond those previously addressed by the Biological Opinions issued to Reclamation for the Coordinated Long-Term Operations of the CVP and SWP (USFWS 2008, NMFS 2009). No lands fallowed and untilled for three years or more would be brought into production and no new facilities would be constructed. In addition, there would be no net change in deliveries of CVP and SWP water, and the water would move only through existing facilities and be put to existing uses. Therefore, Reclamation has determined that the Proposed Action would have no take of migratory birds and no effect on any federally listed or proposed species or their critical habitat beyond those previously covered and no further consultation is required.

Cumulative Impacts

As the Proposed Action would result in no impacts beyond those previously addressed, it would also not contribute cumulatively to any additional impacts to biological resources.

Section 4 Consultation and Coordination

4.1 Public Review Period

Reclamation provided the public with an opportunity to comment on the Draft EA between September 11, 2015 and October 13, 2015. No comments were received.

THIS PAGE LEFT INTENTIONALLY BLANK

Section 5 Preparers and Reviewers

Bureau of Reclamation

Rain L. Emerson, M.S., Supervisory Natural Resources Specialist, SCCAO

Shauna McDonald, Wildlife Biologist, SCCAO

Joanne Goodsell, Archaeologist, MP-153

Richard Stevenson, Indian Trust Assets, MP-400

Scott Taylor, Repayment Specialist, SCCAO – reviewer

David E. Hyatt, Resources Management Division Chief, SCCAO – reviewer

Contra Costa Water District

Lucinda Shih, Senior Water Resources Specialist – reviewer

THIS PAGE LEFT INTENTIONALLY BLANK

Section 6 References

Alameda County Water District. 2010. Urban Water Management Plan: 2010-2015. Website: <http://www.acwd.org/index.aspx?NID=365>. Accessed: August 20, 2015.

California Natural Diversity Database (CNDDDB). 2015. California Department of Fish and Wildlife's Natural Diversity Database, March, 2015.

National Marine Fisheries Service (NMFS). 2009. Final biological opinion and conference opinion on the long-term operations of the Central Valley Project and State Water Project. June 4, 2009.

State of California. 2015a. California Drought. Website: <http://ca.gov/drought/>.

State of California. 2015b. Senior Water Rights Curtailed in Delta, San Joaquin & Sacramento Watersheds. Website: <http://ca.gov/drought/topstory/top-story-37.html>.

State of California. 2014. Governor Brown Declares Drought State of Emergency. Website: <http://gov.ca.gov/news.php?id=18368>.

State Water Resources Control Board (SWRCB). 2015. ORDER APPROVING PETITIONS FOR TEMPORARY CHANGE FOR THE TRANSFER OF WATER UNDER U.S. BUREAU OF RECLAMATION PERMITS 12721, 11967, 12722, 12723, 12725, 12726, 11315, 11316, 19968, 11969, 11971, 11973, AND 12364 (APPLICATIONS 5626, 5628, 9363, 9364, 9366, 9367, 13370, 13371, 15374, 15375, 16767, 17374, AND 17376). PDF:A005626 et al. September 28.

U.S. Fish and Wildlife Service (Service). 2008. Formal Endangered Species Act consultation on the coordinated operations of the Central Valley Project and State Water Project. December 15, 2008.

U.S. Fish and Wildlife Service (Service). 2015. IPAC Trust Resource Report for Alameda, Contra Costa, and San Joaquin Counties. May 7, 2015. Website: <http://ecos.fws.gov/ipac/>.

Zone 7 Water Agency. 2010. 2010 Urban Water Management Plan. Website: http://www.zone7water.com/images/pdf_docs/water_supply/2010_uwmp-complete.pdf. Accessed: August 20, 2015.

Appendix A

Cultural Resources Determination

CULTURAL RESOURCE COMPLIANCE
Reclamation Division of Environmental Affairs
MP-153

MP-153 Tracking Number: 15-SCAO-115

Project Name: Contra Costa Water District (CCWD) Transfer to Alameda County Water District (ACWD) and Zone 7 of the Alameda County Flood Control and Water Conservation District (Zone 7)

NEPA Document: SCCAO- EA-14-060

NEPA Contact: Ben Lawrence, Natural Resource Specialist

MP 153 Cultural Resources Reviewer: Joanne Goodsell, Archaeologist JS

Date: 04/08/2015

Reclamation proposes to approve an exchange of up to 5,000 acre-feet (AF) of water between CCWD and ACWD and Zone 7. The exchange would involve CCWD taking delivery of up to 5,000 AF of water which is currently stored in Los Vaqueros Reservoir on behalf of ACWD and Zone 7. The stored water would be delivered to CCWD's in-district customers for use. In return, ACWD and Zone 7 would take delivery of an equal amount of up to 5,000 AF of CCWD's CVP water from the Delta. This exchange would require a temporary change in the point of diversion/redirection for CVP water, but would require no new construction or modification to infrastructure or facilities.

Reclamation has determined that the proposed action is the type of undertaking that does not have the potential to cause effects to historic properties, should such historic properties be present, pursuant to the National Historic Preservation Act (NHPA) Section 106 regulations codified at 36 CFR Part 800.3(a)(1). With this determination, Reclamation has no further NHPA Section 106 obligations.

This document conveys 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.