RECLAMATION
Managing Water in the West

FINDING OF NO SIGNIFICANT IMPACT

Warren Act Contracts for Banta-Carbona Irrigation District, Byron-Bethany Irrigation District, and Patterson Irrigation District

FONSI-14-021

U.S. Department of the Interior
Bureau of Reclamation

January 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-14-021

Warren Act Contracts for Banta-Carbona Irrigation District, Byron-Bethany Irrigation District, and Patterson Irrigation District

Prepared by: Rain L. Emerson
Supervisory Natural Resources Specialist

01/26/2015
Date

Concurred by: Jennifer L. Lewis
Wildlife Biologist

01/26/2015
Date

for Approved by: Michael Jackson, P.E.
Area Manager

02/12/2015
Date

Introduction

In accordance with section 102(2)(c) of the National Environmental Policy Act (NEPA) 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 issuance of temporary Warren Act contracts to Banta-Carbona Irrigation District (BCID), Byron Bethany Irrigation District (BBID), and Patterson Irrigation District (PID) for the conveyance and storage of up to 10,000 acre-feet per year (AFY) of non-Central Valley Project (CVP) surface water in the Delta-Mendota Canal (DMC). This Findings of No Significant Impact (FONSI) is supported by Reclamation's Environmental Assessment (EA)-14-021, *Warren Act Contracts for Banta-Carbona Irrigation District, Byron-Bethany Irrigation District, and Patterson Irrigation District*, and is hereby incorporated by reference.

Reclamation provided the public with an opportunity to comment on the Draft FONSI and Draft EA between December 5, 2014 and December 26, 2014. One comment letter was received from the California Department of Water Resources. The comment letter and Reclamation's response to comments is included in Appendix E of EA-14-021.

Background

BBID, BCID, and PID have existing five year Warren Act contracts for the conveyance and storage of up to 10,000 acre-feet AFY of non-CVP surface water in the DMC. As the five-year Warren Act contracts will expire February 28, 2016, the districts have requested new Warren Act contracts.

Proposed Action

Reclamation proposes to issue a series of five-year Warren Contracts from January 2015 through December 2045 for BBID and BCID and from September 2015 through August 2046 for PID. Conveyance and storage of non-CVP water under a Warren Act Contract would be permitted only when the action would not impact the CVP and State Water Project and subject to available capacity and water quality requirements. Specific details by contractor are included in Section 2.2 of EA-14-021.

Environmental Commitments

BBID, BCID, PID, and any of the CVP contractors that may receive water from the Proposed Action through transfer or exchange shall implement the environmental protection measures listed in Table 1 of EA-14-050 to reduce or

avoid environmental consequences associated with the Proposed Action. In addition, Reclamation, the San Luis Delta-Mendota Water Authority, and South-of-Delta (SOD) water districts would monitor the quality of water in the DMC to confirm that the non-CVP water would be suitable for downstream users. 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-14-021, 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: land use, cultural resources, Indian Sacred Sites, Indian Trust Assets, socioeconomic resources, environmental justice, air quality or global climate.

Water Resources

Under the Proposed Action, Reclamation would allow the continued annual introduction and conveyance of up to 5,000 AF of BBID's and up to 10,000 AF of BCID's non-CVP surface water in federal facilities through a series of 5-year Warren Act contracts ending on December 31, 2045. Reclamation would also allow the continued annual introduction of up to 10,000 AF of PID's non-CVP surface water through August 31, 2046. Introduced non-CVP water may be stored within federal facilities for later use depending on available capacity. All of the non-CVP water would be delivered either directly or via exchange from existing turnouts within the SOD CVP facilities described in Section 3.2.1. The introduction, conveyance, and storage of non-CVP water would utilize existing facilities and would not require new infrastructure, modifications of existing facilities, or ground disturbing activities. In addition, the introduction, conveyance, and storage of non-CVP water is dependent on available capacity and operational constraints; therefore, the Proposed Action would not interfere with the normal operations of federal facilities nor would it impede any CVP obligations to deliver water to other contractors or to local fish and wildlife habitat.

As described in Sections 2.2.1, 2.2.2, and 2.2.3 of EA-14-021, portions of the contractors' non-CVP water may be transferred to other CVP contractors. Any transfer would use existing facilities and would also be dependent on available capacity. At this time the contractors have not identified specific proposals or actions to make a portion of their non-CVP water available for transfer. Any water proposed for transfer would require either a reduction in consumptive use, land fallowing, and/or groundwater substitution by the respective district in order

to make the water available. The delivery of up to 2,000 AFY of BBID's and up to 10,000 AFY of BCID's and PID's non-CVP water to other CVP contractors would not impact the district's ability to service their customers as this water is only a portion of their existing pre-1914 water rights entitlement and would not impact the availability or use of other available water supplies. In addition, the ability to make this water available either via reduction in consumptive use, land fallowing, and/or groundwater substitution would be within the each district's existing farming practice and would, therefore, not have an adverse impact on water supplies within the districts.

The use of federal facilities for introduction, conveyance and storage of non-CVP water provides needed flexibility and reliability to the districts, especially during the summer growing season when water demand is at its peak. Potential delivery of the non-CVP water to other SOD CVP contractors would also help alleviate reduced water supplies in water shortage years. The non-CVP water would be used for existing purposes and no native or untilled land (fallow for three years or more) would be cultivated with this water.

All waters introduced and conveyed within federal facilities must meet Reclamation's water quality standards. If, through monitoring, the non-CVP water fails to meet the criteria for discharging non-CVP water into federal facilities, the water would not be introduced until subsequent testing has demonstrated that the water quality has been met by the criteria as outlined in Reclamation's then current water quality standards (Reclamation 2014). Therefore, there would be no adverse impacts to water quality as a result of the Proposed Action.

Biological Resources

The Proposed Action would introduce, convey, and/or store non-CVP water through existing CVP facilities. All water would be delivered to existing agricultural lands or existing urbanized areas. No ground disturbance or modification of existing facilities would occur in order to introduce, convey or store the non-CVP water. As a result, there would be no disturbance of ecologically sensitive lands due to construction activities. Since water would only be used to meet existing needs, no land use changes would occur from increased or decreased cultivation activities or fallowing of fields.

Because there would be no disturbance or land use changes associated with this Proposed Action, and existing coverage (as described in Section 3.3 of EA-14-021) is in place for the greater "use" of existing facilities, there will be *No Effect* to listed species or designated critical habitats under the Endangered Species Act (16 U.S.C. §1531 et. seq.), and *No Take* of birds protected under the Migratory Bird Treaty Act (16 U.S.C. §703 et. seq.).

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.

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 as 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 this critically dry year.

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 customers' demands and available water supplies and timing, while attempting to minimize costs. Farmers irrigate and grow crops based on these conditions and factors, and myriad water service actions are approved and executed each year to facilitate water needs. It is likely that during the drought, more districts will request exchanges, transfers, and Warren Act contracts (conveyance of non-CVP water in CVP facilities) due to hydrologic conditions. Each water service transaction involving Reclamation undergoes environmental review prior to approval.

The Proposed Action and other similar projects would not hinder the normal operations of the CVP and Reclamation's obligation to deliver water to its contractors or to local fish and wildlife habitat. Since the Proposed Action would not involve construction or modification of facilities, nor interfere with CVP operations, there would be no cumulative impacts to existing facilities or other contractors.

Capacity in the DMC is limited, and if many water actions were scheduled to take place concurrently they could cumulatively compete for space. However, non-CVP water would only be allowed to enter the DMC for conveyance and storage within federal facilities if excess capacity is available. As such, the Proposed Action would not limit the ability of other users to make use of the facilities and no cumulative impacts will occur.

Biological Resources

As the Proposed Action is not expected to result in any direct or indirect impacts to biological resources, there would be no cumulative impacts.

RECLAMATION
Managing Water in the West

Final Environmental Assessment

Warren Act Contracts for Banta-Carbona Irrigation District, Byron-Bethany Irrigation District, and Patterson Irrigation District

EA-14-021

U.S. Department of the Interior
Bureau of Reclamation

January 2015

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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 December 5, 2014 and December 26, 2014. One comment letter was received from the California Department of Water Resources. The comment letter and Reclamation's response to comments is included in Appendix E. 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

The State of California is currently experiencing unprecedented water management challenges due to severe drought in recent years. Both the State and Federal water projects are forecasting very low storage conditions in all major reservoirs. In addition, South-of-Delta (SOD) Central Valley Project (CVP) contractors experienced reduced water supply allocations from 2007 to 2014 due to hydrologic conditions and regulatory requirements.

In December 2010, the Bureau of Reclamation (Reclamation) executed five-year Warren Act Contracts with Banta-Carbona Irrigation District (BCID), Byron Bethany Irrigation District (BBID), and Patterson Irrigation District (PID) for the conveyance and storage of up to 10,000 acre-feet per year (AFY) of non-CVP surface water in the Delta-Mendota Canal (DMC) through February 28, 2016. The environmental effects of the five-year Warren Act Contracts were analyzed in Environmental Assessment (EA)-09-156 (Reclamation 2010) and a Finding of No Significant Impact (FONSI) was issued March 2, 2010. FONSI/EA-09-156 is hereby incorporated by reference into this EA.

In April 2012, Reclamation received a request from BBID to approve delivery of up to 5,000 AFY of their non-CVP water to Westlands Water District (WWD) via the San Luis Canal (SLC). The delivery of BBID's non-CVP water to WWD was analyzed in EA-12-052 (Reclamation 2012a) and a FONSI issued on June 15, 2012. FONSI/EA-12-052 is hereby incorporated by reference into this EA.

In June 2012, Reclamation received a request from PID to approve delivery of up to 10,000 AFY of their non-CVP water to Del Puerto Water District (DPWD) via the DMC. The delivery of PID's non-CVP water to DPWD was analyzed in EA-12-054 (Reclamation 2012b) and a FONSI issued on July 17, 2012. FONSI/EA-12-054 is hereby incorporated by reference into this EA.

As the five-year Warren Act Contracts will expire February 28, 2016, BBID, BCID, and PID have requested new Warren Act Contracts.

1.2 Need for the Proposed Action

BBID, BCID, PID, and other SOD CVP contractors need to find ways to maximize available water supplies in order to supplement their CVP supply, especially during potential water shortage years. The purpose of the Proposed Action is to provide needed flexibility to BCID, BBID, and PID by using excess capacity in CVP facilities.

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 a series of five-year Warren Act contracts to BBID, BCID, and PID. The districts would continue to divert their non-CVP pre-1914 surface water through their existing points of diversion.

2.2 Proposed Action

Reclamation proposes to issue a series of five-year Warren Contracts from January 2015 through December 2045 for BBID and BCID and from September 2015 through August 2046 for PID. Conveyance and storage of non-CVP water under a Warren Act Contract would be permitted only when the action would not impact the CVP and State Water Project and subject to available capacity and water quality requirements. Specific details by contractor are included below.

2.2.1 Byron-Bethany Irrigation District

BBID proposes to introduce, convey and/or store up to 5,000 AFY of its non-CVP water through CVP facilities for delivery for agricultural and municipal and industrial (M&I) purposes within the non-hatched District Boundary shown in Figure 1. BBID diverts their non-CVP pre-1914 water rights water from the Sacramento-San Joaquin Delta (Delta) at milepost (MP) 1.83 of the intake channel to the Harvey O. Banks Pumping Plant under a settlement agreement with the California Department of Water Resources (DWR). The point of introduction for the non-CVP water would be at MP 3.71R on the DMC. The point of delivery for the non-CVP water would be at MP 8.71 on the DMC. The non-CVP water would only be delivered to the non-hatched area shown in Figure 1 identified as the District Boundary per BBID's agreement with DWR. Additionally, up to 2,000 AFY of the 5,000 AFY non-CVP water may be delivered to WWD at existing points of delivery on the SLC or DMC as it has in the past. However, prior to Reclamation approving this additional point of delivery, BBID would need to identify how they are making the water available (e.g., consumptive use reduction, groundwater substitution, etc.) pursuant to the then-current "Draft

Technical Information for Preparing Water Transfer Proposals" also known as the "Water Transfer White Paper" developed jointly by DWR and Reclamation (located at http://www.water.ca.gov/watertransfers). In addition, Reclamation acknowledges that for BBID to transfer its non-CVP water to another entity or convey the water to storage in federal facilities, they must have DWR's approval. DWR's approval of the transfer or storage and associated documentation must be transmitted by BBID to Reclamation prior to approval of these actions.

Figure 1 BBID's Contractor's Service Area and District Boundary Map

2.2.2 Banta-Carbona Irrigation District

BCID proposes to introduce, convey and/or store up to 10,000 AFY of non-CVP water through CVP facilities for delivery for agricultural and M&I purposes. BCID diverts their non-CVP pre-1914 water rights water from the San Joaquin River at river mile 63.5 pursuant to their notice of appropriation dated August11, 1911, as reported to the State Water Resources Control Board (State Water Board). The point of introduction for the non-CVP water would be at MP 20.42L on the DMC. The points of delivery for the non-CVP water would be at MP 20.42-L1 and 20.42-L2 within the BCID service area. Additionally, BCID may transfer this non-CVP water to contractors within the Delta or San Felipe divisions, the San Luis Unit, Friant Division, including Cross Valley contractors, or exchange the non-CVP water for CVP water upon request and written approval of Reclamation. At this time BCID has not identified specific proposals or actions to make a portion of their non-CVP water available for transfer. Should BCID identify specific proposal(s) or action(s) to make water available for transfer, they will need to identify how they are making the water available (e.g., consumptive use reduction, groundwater substitution, etc.) pursuant to the then-current "Draft Technical Information for Preparing Water Transfer Proposals" also known as the "Water Transfer White Paper" developed jointly by DWR and Reclamation (located at http://www.water.ca.gov/watertransfers). After review, if the transfer proposal is found to not significantly affect the human environment, complies with the California Water Code, and will not impact Reclamation's water rights, Reclamation may approve the transfer proposal and amend the Warren Act contract by adding a new point of delivery, as appropriate.

2.2.3 Patterson Irrigation District

PID proposes to introduce, convey and/or store up to 10,000 AFY of non-CVP water through CVP facilities for delivery for agricultural purposes. PID diverts their non-CVP pre-1914 water rights water from the San Joaquin River at river mile 98.5 pursuant to their notice of appropriation dated February 10, 1909, as reported to the State Water Board. The point of introduction for the non-CVP water would be at MP 42.53L on the DMC. The points of delivery for the non-CVP water would be between MPs 25.63R and 59.50R of the DMC within the PID service area. Additionally, Patterson may transfer this non-CVP water to contractors within the Delta or San Felipe divisions, the San Luis Unit, Friant Division, including Cross Valley contractors, or exchange the non-CVP water for CVP water upon request and written approval of Reclamation. At this time PID has not identified specific proposals or actions to make a portion of their non-CVP water available for transfer. Should PID identify specific proposal(s) or action(s) to make water available for transfer, they will need to identify how they are making the water available (e.g., consumptive use reduction, groundwater substitution, etc.) pursuant to the then-current "Draft Technical Information for Preparing Water Transfer Proposals" also known as the "Water Transfer White Paper" developed jointly by DWR and Reclamation (located at http://www.water.ca.gov/watertransfers). After review, if the transfer proposal is found to not significantly affect the human environment, complies with the

California Water Code, and will not impact Reclamation's water rights, Reclamation may approve the transfer proposal and amend the Warren Act contract by adding a new point of delivery, as appropriate.

2.2.4 Environmental Commitments

BBID, BCID, PID, and any of the CVP contractors that may receive water from the Proposed Action through transfer or exchange would implement the following environmental protection measures to reduce or avoid potential 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
Biological Resources	No native or untilled land (fallow for three consecutive years or more) may be cultivated with this water without additional environmental analysis and approval.
	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.
	The Proposed Action shall not change the land use patterns of the cultivated or fallowed fields that do have some value to federally listed species under the Endangered Species Act (ESA) or birds protected under the Migratory Bird Treaty Act (MBTA).
Water Resources	The Proposed Action must comply with Reclamation's then current water quality requirements (Reclamation 2014).
	The Proposed Action would not affect CVP or State Water Project operations; all supplies would be previously scheduled for delivery points SOD, and do not require additional Delta exports.
	The water would only be used for beneficial purposes and in accordance with Federal Reclamation law and guidelines.
Various Resources	Use of the water shall comply with all federal, state, local, and tribal law, and requirements imposed for protection of the environment and Indian Trust Assets.
	No land conversions may occur as a result of the Proposed Action.
	No new construction or modification of existing facilities may occur in order to complete the Proposed Action.

Water Quality Monitoring

Reclamation, the San Luis Delta-Mendota Water Authority, and SOD water districts would monitor the quality of water in the DMC to confirm that the non-CVP water would be suitable for downstream users.

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
Land Use	None of the CVP contractors that may receive water from the Proposed Action, including BBID, BCID, and PID, would change historic land and water management practices. BBID's, BCID's, and PID's non-CVP water would move through existing facilities for use within either their respective district boundaries or to other CVP contractors for ongoing agricultural and M&I purposes. The water would not be used to place untilled or new lands into production, or to convert undeveloped land to other uses.
Cultural Resources	Reclamation has determined that the Proposed Action does not have the 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.
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. See Appendix B for Reclamation's determination.
Socioeconomics	The Proposed Action would have beneficial impacts on socioeconomic resources as the non-CVP water would be used for M&I purposes and to help sustain existing crops and maintain farming within any recipient district.
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.
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. No air emissions are anticipated outside normal operational fluctuations.
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.

3.2 Water Resources

3.2.1 Affected Environment

The affected environment for BBID, BCID, and PID is the same as described in Section 3.1 of EA-09-156 (Reclamation 2010). In addition, the affected environment for WWD is the same as described in Section 3.1 of EA-12-052 (Reclamation 2012a). Rather than repeating the same information that has been incorporated by reference into this document, the affected environment and environmental consequences section in this EA will focus on updates or changes to the previously analyzed affected environment.

Central Valley Project

As shown in Table 3, SOD CVP agricultural allocations averaged 47 percent from 2005 to 2014. A 100 percent allocation was only received once in the last 10 years. Over the last five years the average agricultural allocation was 37 percent with a range of 0 to 80 percent. M&I allocations averaged 78 percent between 2005 and 2014. Over the last five years, the average M&I allocation was reduced slightly to 74 percent with a range of 50 to 100 percent.

Table 3 SOD CVP Allocations 2005 to 2014

Contract Year[1]	Agricultural Allocations (%)[2]	M&I Allocations[2]
2014	0	50
2013	20	70
2012	40	75
2011	80	100
2010	45	75
2009	10	60
2008	40	75
2007	50	75
2006	100	100
2005	85	100
Average	**47**	**78**

[1]A Contract Year is from March 1 of a given year through February 28/29 of the following year.
[2]As percentage of Water Service Contract total or as allocated under M&I Historic use
Source: http://www.usbr.gov/mp/cvo/vungvari/water_allocations_historical.pdf and http://www.usbr.gov/newsroom/newsrelease/index.cfm

SOD CVP Contractors

As described in Section 2.2, CVP contractors located within the Delta Division, San Felipe Division, San Luis Unit, or Friant Division, including Cross Valley contractors[1] may be recipients of the non-CVP water either through direct conveyance or via exchange. A list of potential recipients is included in Appendix C.

[1] County of Fresno (including its subcontractors: Fresno County Service Areas #5, #10, and #14 and Fresno County Water Works #34), Hills Valley Irrigation District, Kern-Tulare Water District (previously combined with Rag Gulch Water District), Lower Tule River Irrigation District, Pixley Irrigation District, Tri-Valley Water District, and County of Tulare (including its subcontractors: Alpaugh Irrigation District, Atwell Island Water District, City of Lindsay, Hills Valley Irrigation District, Saucelito Irrigation District, Stone Corral Irrigation District, Strathmore Public Utilities District, Styrotek, Inc., and City of Visalia).

SOD CVP Facilities

A general diagram of SOD CVP facilities proposed for use under the Proposed Action is shown in Figure 2. Facilities include those within the Delta Division, San Luis Unit, San Felipe Division, and the Friant Division. Proposed facilities also include the non-federal Cross Valley Canal and associated infrastructure.

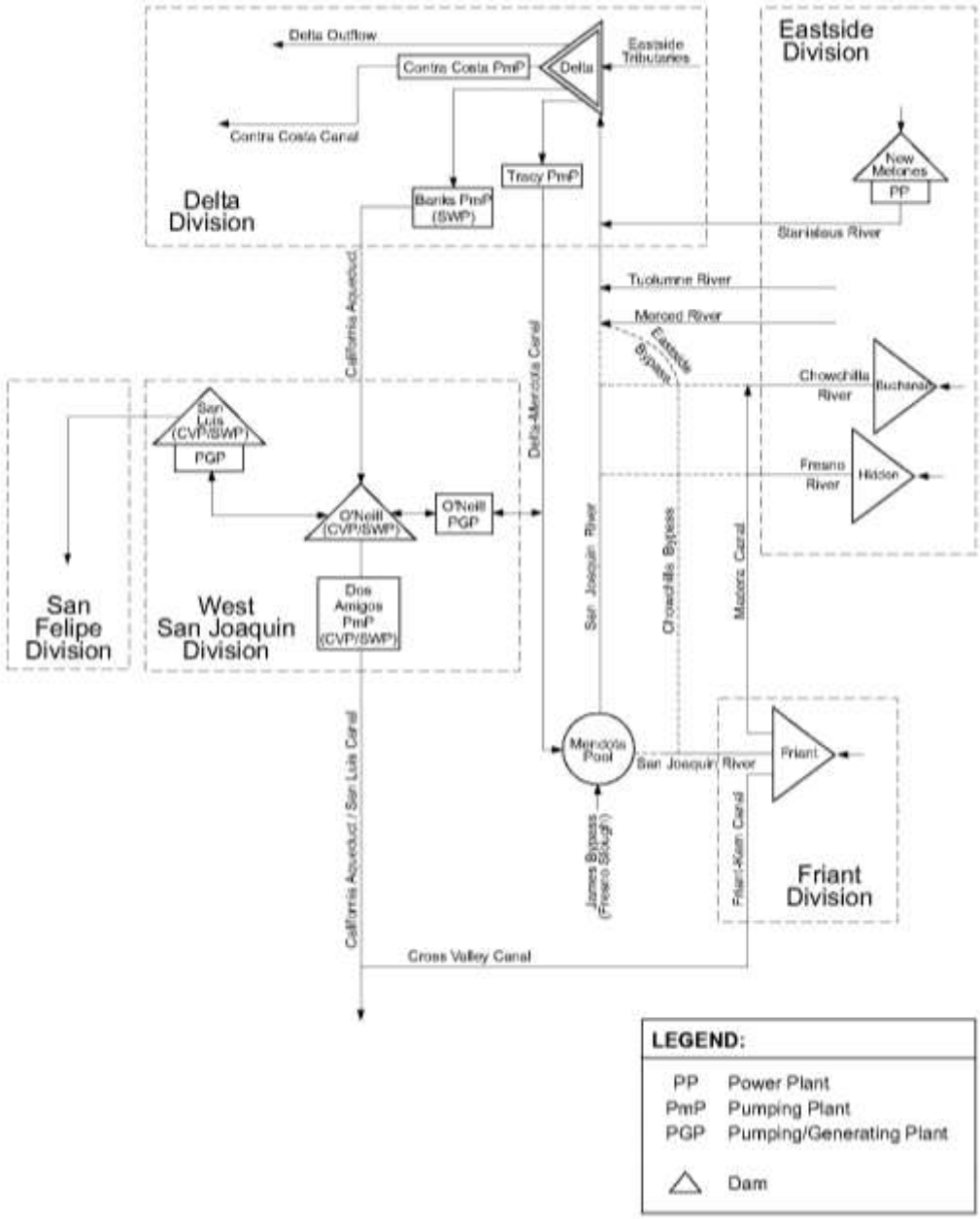

Figure 2 SOD CVP Facilities by Division (Source: Reclamation 1999, page III-19)

Delta Division The Delta Division transports water from the Delta through the central portion of the Central Valley for agricultural and M&I purposes. The main features of the division are the Delta Cross Channel, Contra Costa Canal, Jones Pumping Plant, and the DMC.

San Luis Unit The San Luis Unit includes Federal as well as joint Federal and State water storage and conveyance facilities that provide water to CVP contractors in the San Joaquin Valley and in the San Felipe Division. Major facilities include San Luis Dam and Reservoir, O'Neill Dam and Forebay, the SLC, Coalinga Canal, Los Banos and Little Panoche Detention dams and reservoirs, and the San Luis Drain.

San Felipe Division CVP water from the Delta is provided to the San Felipe Division via the DMC, O'Neill Forebay, and the San Luis Reservoir. CVP water from San Luis Reservoir is transported to the Santa Clara-San Benito County service areas for agricultural and M&I uses via the Pacheco Tunnel and other project features which include 48.5 miles of closed conduits, two pumping plants, and one small reservoir. Provisions for future construction of about 25 miles of closed conduit to Santa Cruz and Monterey counties are included in the division features.

Friant Division The Friant Division is an integral part of the CVP, but is hydrologically independent and therefore operated separately from the other divisions of the CVP. Major facilities of the Friant Division include Friant Dam and Millerton Lake, the Madera Canal and the Friant-Kern Canal (FKC). As shown in Table 4, Friant Division CVP contractors have recently experienced reduced water supply allocations due to hydrologic conditions, regulatory actions, and implementation of the Stipulation of Settlement in *NRDC, et al., v. Kirk Rodgers, et al*.

Table 4 Friant Division Allocations 2005 to 2014

Contract Year	Class 1 Allocation (%)	Class 2 Allocation (%)
2014*	0	0
2013	62	0
2012	50	0
2011	100	20
2010	100	15
2009	100	15
2008	100	5
2007	65	0
2006	100	10
2005	100	10
Average	**77.7**	**7.5**

Source: Reclamation's Water Allocations (Historical) http://www.usbr.gov/mp/cvo/
*Initial 2014 allocation as of February 21, 2014.

Cross Valley Canal

The Cross Valley Canal was constructed in the mid-1970s by CVP Cross Valley contractors, Kern County Water Agency, Cawelo Water District, and Rosedale-Rio Bravo Water Storage District. The canal was expanded by Kern County Water Agency, Arvin-Edison Water Storage District, and Kern Delta Water District in 2008. The Cross Valley Canal allows water to flow in both directions between the California Aqueduct and the FKC. In 2008, an Intertie was

constructed between the Cross Valley Canal and the FKC that allows water to flow in both directions between the Cross Valley Canal and the FKC.

3.2.2 Environmental Consequences

No Action

Under the No Action Alternative, BBID, BCID, and PID would continue to divert their non-CVP surface water through their existing diversion points pursuant to their pre-1914 water rights. The districts would no longer be able to use CVP facilities to maximize their available water supplies to meet demands during CVP water shortage years as they have over the last five years. No additional supplemental water supplies would be made available to other CVP SOD contractors as proposed. Depending on hydrologic years and regulatory constraints in future years, water supplies may not be sufficient to meet demands. If years are similar to what has occurred recently, it is possible that M&I needs could be reduced to health and safety uses only and landowners would not have supplies to meet irrigation demands. Landowners may need to abandon crops or fallow lands beyond what has been part of their historic practice if water demands cannot be met in a given year.

Proposed Action

Under the Proposed Action, Reclamation would allow the continued annual introduction and conveyance of up to 5,000 AF of BBID's and up to 10,000 AF of BCID's non-CVP surface water in federal facilities through a series of 5-year Warren Act contracts ending on December 31, 2045. Reclamation would also allow the continued annual introduction of up to 10,000 AF of PID's non-CVP surface water through August 31, 2046. Introduced non-CVP water may be stored within federal facilities for later use depending on available capacity. All of the non-CVP water would be delivered either directly or via exchange from existing turnouts within the SOD CVP facilities described in Section 3.2.1. The introduction, conveyance, and storage of non-CVP water would utilize existing facilities and would not require new infrastructure, modifications of existing facilities, or ground disturbing activities. In addition, the introduction, conveyance, and storage of non-CVP water is dependent on available capacity and operational constraints; therefore, the Proposed Action would not interfere with the normal operations of federal facilities nor would it impede any CVP obligations to deliver water to other contractors or to local fish and wildlife habitat.

As described in Sections 2.2.1, 2.2.2, and 2.2.3, portions of the contractors' non-CVP water may be transferred to other CVP contractors. Any transfer would use existing facilities and would also be dependent on available capacity. At this time the contractors have not identified specific proposals or actions to make a portion of their non-CVP water available for transfer. Any water proposed for transfer would require either a reduction in consumptive use, land fallowing, and/or groundwater substitution by the respective district in order to make the water available. The delivery of up to 2,000 AFY of BBID's and up to 10,000 AFY of

BCID's and PID's non-CVP water to other CVP contractors would not impact the district's ability to service their customers as this water is only a portion of their existing pre-1914 water rights entitlement and would not impact the availability or use of other available water supplies. In addition, the ability to make this water available either via reduction in consumptive use, land fallowing, and/or groundwater substitution would be within the each district's existing farming practice and would, therefore, not have an adverse impact on water supplies within the districts.

The use of federal facilities for introduction, conveyance and storage of non-CVP water provides needed flexibility and reliability to the districts, especially during the summer growing season when water demand is at its peak. Potential delivery of the non-CVP water to other SOD CVP contractors would also help alleviate reduced water supplies in water shortage years. The non-CVP water would be used for existing purposes and no native or untilled land (fallow for three years or more) would be cultivated with this water.

All waters introduced and conveyed within federal facilities must meet Reclamation's water quality standards. If, through monitoring, the non-CVP water fails to meet the criteria for discharging non-CVP water into federal facilities, the water would not be introduced until subsequent testing has demonstrated that the water quality has been met by the criteria as outlined in Reclamation's then current water quality standards (Reclamation 2014). Therefore, there would be no adverse impacts to water quality as a result of the Proposed Action.

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 as 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 this critically dry year.

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 customers' demands and available water supplies and timing, while attempting to minimize costs. Farmers irrigate and grow crops based on these conditions and factors, and myriad water service actions are approved and executed each year to facilitate water needs. It is likely that during the drought, more districts will request exchanges, transfers, and Warren Act contracts (conveyance of non-CVP water in CVP facilities) due to hydrologic conditions. Each water service transaction involving Reclamation undergoes environmental review prior to approval.

The Proposed Action and other similar projects would not hinder the normal operations of the CVP and Reclamation's obligation to deliver water to its contractors or to local fish and wildlife habitat. Since the Proposed Action would not involve construction or modification of facilities, nor interfere with CVP operations, there would be no cumulative impacts to existing facilities or other contractors.

Capacity in the DMC is limited, and if many water actions were scheduled to take place concurrently they could cumulatively compete for space. However, non-CVP water would only be allowed to enter the DMC for conveyance and storage within federal facilities if excess capacity is available. As such, the Proposed Action would not limit the ability of other users to make use of the facilities and no cumulative impacts would occur.

3.3 Biological Resources

3.3.1 Affected Environment

The Proposed Action area includes the CVP service areas of BBID, BCID, and PID as well as CVP contractors located within the Delta Division, San Felipe Division, San Luis Unit, or Friant Division, including Cross Valley contractors that may be recipients of the non-CVP water either through direct conveyance or via exchange. As such, the Proposed Action area includes CVP contractors' service areas within the following counties: Alameda, Contra Costa, Fresno, Kern, Kings, Madera, Merced, Monterey, San Benito, San Joaquin, Santa Clara, Santa Cruz, and Stanislaus.

Prior to widespread agriculture, land within the Proposed Action area provided habitat for a variety of plants and animals. With the advent of irrigated agriculture and urban development over the last 100 years, many species have become threatened and endangered because of habitat loss. Of the approximately 5.6 million acres of valley grasslands and San Joaquin saltbrush scrub, the primary natural habitats across the valley, less than 10 percent remains today. Much of the remaining habitat consists of isolated fragments supporting small, highly vulnerable populations (Reclamation 1999). The Proposed Action area is dominated by agricultural habitat that includes field crops, orchards, and pasture.

The vegetation is primarily crops and frequently includes weedy non-native annual and biennial plants.

Special-Status Species

Reclamation requested an official species list from the U.S Fish and Wildlife Service (USFWS) Sacramento Field Office's website: http://www.fws.gov/sacramento/ES_Species/Lists/es_species_lists-form.cfm (Document Number 141201022746) on December 1, 2014, for the counties within the Proposed Action area (Appendix D). Because all non-CVP water would be introduced, conveyed, and/or stored through CVP facilities for agriculture and M&I purposes, through existing conveyance or supply facilities, potential impacts to special-status species are covered under existing biological opinions (BOs).

Existing Biological Opinions

Reclamation and certain CVP contractors are subject to commitments from existing BOs from the USFWS and NOAA National Marine Fishery Service (NMFS) that govern Warren Act contracts, water transfers and exchanges, among other things. The existing affects coverage in the CVPIA and Continued Operation and Maintenance of the CVP (USFWS 2000), and Continued Long-term Operations of the CVP/State Water Project (SWP) (USFWS 2008, NMFS 2009) was considered for the Proposed Action.

A brief summary of some of the commitments included in the BOs are listed below. Please reference the original BOs for a complete list of requirements (USFWS 2000, 2008, NMFS 2009).

CVPIA Biological Opinion (USFWS 2000) The proposed Warren Act contracts would be consistent with requirements of (§3408(c) of the CVPIA, in that those participating SOD CVP contractors would comply with their existing long-term or interim renewal contracts. Proposals providing for the delivery and/or conveyance of non-CVP water through CVP facilities which are not covered in those documents must contact Reclamation for subsequent environmental review and approval.

Transfers will be consistent with section §3405(a)(1) of the CVPIA in that, among other considerations: (1) no transfer will be authorized unless the transfer is consistent with State law, including but not limited to provisions of the California Environmental Quality Act (§3405(a)(1)(D)); (2) no transfer will be authorized if it has a significant adverse impact on the ability to deliver CVP contract water or fish and wildlife obligations under the CVPIA because of limitations in conveyance or pumping capacity (§3405(a)(1)(H)); and (3) no transfer will be authorized if it results in a significant reduction in quantity or quality of water currently used for fish and wildlife purposes, unless it is determined that such adverse effects would be more than offset by the benefits of the proposed transfer. In the event of such a determination, mitigation activities will be developed and implemented as integral and concurrent elements of any such transfer, so as to

provide fish and wildlife benefits substantially equivalent to those lost as a consequence of such transfer (§3405(a)(1)(L)).

Coordinated Operation of the CVP and SWP (USFWS 2008, NMFS 2009)
The introduction, conveyance, and storage of non-CVP water would not affect CVP or SWP operations; all supplies would be previously scheduled for delivery points SOD, and do not require additional Delta exports.

Transfers are dependent on availability of capacity at the CVP or SWP pumping facilities and subject to other operational requirements. These actions must continue to be coordinated through Reclamation and DWR. The key current operational parameter of the BOs applicable to conveyance of transfer water includes: (1) transfer water will be conveyed through Banks Pumping Plant and Jones Pumping Plant during the July through September period only (USFWS 2008). Pumping within this window can be further reduced based on specific hydrologic conditions, biological conditions, or water quality issues.

3.3.2 Environmental Consequences

No Action

Under the No Action Alternative, the districts would continue to divert their non-CVP pre-1914 surface water through their existing diversions. BBID, BCID, and PID would not be able to use existing CVP facilities to maximize the use of their existing water supplies and may not be able to fulfill demands during water shortage years. If water demands cannot be met, some agricultural lands within CVP district service areas may be fallowed. If crops are fallowed, there is potential for some federally protected species to temporarily move through, or forage in, the fallowed areas. Newly fallowed fields may provide temporary low quality habitat, but it is unlikely that federally listed species would move into these areas on a long-term basis.

Proposed Action

The Proposed Action would introduce, convey, and/or store non-CVP water through existing CVP facilities. All water would be delivered to existing agricultural lands or existing urbanized areas. No ground disturbance or modification of existing facilities would occur in order to introduce, convey or store the non-CVP water. As a result, there would be no disturbance of ecologically sensitive lands due to construction activities. Since water would only be used to meet existing needs, no land use changes would occur from increased or decreased cultivation activities or fallowing of fields.

Because there would be no disturbance or land use changes associated with this Proposed Action, and existing coverage is in place for the greater “use” of existing facilities, there will be *No Effect* to listed species or designated critical habitats under the Endangered Species Act (16 U.S.C. §1531 et. seq.), and *No Take* of birds protected under the Migratory Bird Treaty Act (16 U.S.C. §703 et. seq.).

Cumulative Impacts

As the Proposed Action is not expected to result in any direct or indirect impacts to biological resources, there would be no cumulative impacts.

Section 4 Consultation and Coordination

4.1 Public Review Period

Reclamation provided the public with an opportunity to comment on the Draft FONSI and Draft EA between December 5, 2014 and December 26, 2014. One comment letter was received from the California Department of Water Resources. The comment letter and Reclamation's response to comments is included in Appendix E.

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Section 5 Preparers and Reviewers

Rain L. Emerson, M.S., Supervisory Natural Resources Specialist, SCCAO
Jennifer L. Lewis, PhD., Wildlife Biologist, SCCAO
BranDee Bruce, Architectural Historian, MP-153
Patricia Rivera, Native American Affairs Specialist, MP-400
George Bushard, Repayment Specialist, SCCAO – reviewer
Scott Taylor, Acting Supervisory Repayment Specialist, SCCAO – reviewer
David E. Hyatt, Supervisory Wildlife Biologist, SCCAO – reviewer
Rena Ballew, Acting Resources Management Division Chief – reviewer

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Section 6 References

Bureau of Reclamation (Reclamation). 1999. Central Valley Project Improvement Act, Final Programmatic Environmental Impact Statement and Record of Decision. Mid-Pacific Region South-Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 2010. *Five-year Warren Act Contracts for Banta-Carbona Irrigation District, Byron-Bethany Irrigation District, Patterson Irrigation District, and West Stanislaus Irrigation District.* (Final FONSI/EA-09-156). South-Central California Area Office. Fresno, CA. http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=5198.

Bureau of Reclamation (Reclamation). 2012a. *Additional Point of Delivery for Byron-Bethany Irrigation District's Non-Central Valley Project Water to Westlands Water District.* (Final FONSI/EA-12-052). South-Central California Area Office. Fresno, CA. http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=5198.

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Bureau of Reclamation (Reclamation). 2014. Table 5 and Table 6 in *2014 Delta-Mendota Canal Groundwater Pump-in Program Water Quality Monitoring Plan*. South-Central California Area Office. Fresno, CA.

U.S. Fish and Wildlife Service (USFWS). 1991. Biological Opinion for the Friant Division Water Contract Renewals (1-1-91-F-22). Sacramento Fish and Wildlife Office, California. October and Amended May 1992.

U.S. Fish and Wildlife Service (USFWS). 2000. Biological Opinion on U.S. Bureau of Reclamation Implementation of the CVPIA and Continued Operation and Maintenance of the CVP (1-1-98-F-0124). Sacramento Fish and Wildlife Office, California. November.

U.S. Fish and Wildlife Service (USFWS). 2001. Biological Opinion on U.S. Bureau of Reclamation Long Term Contract Renewal of Friant Division and Cross Valley Unit Contracts (1-1-01-F-0027). Sacramento Fish and Wildlife Office, California. January.

U.S. Fish and Wildlife Service (USFWS). 2005. Formal Endangered Species Consultation on the Operations and Maintenance Program Occurring on Bureau of Reclamation Lands within the South-Central California Area Office (1-1-04-0368). Sacramento Fish and Wildlife Office, California. February.

Appendix A

Reclamation's Cultural Resources Determination

CULTURAL RESOURCES COMPLIANCE
Mid-Pacific Region
Division of Environmental Affairs
Cultural Resources Branch

MP-153 Tracking Number: 15-SCAO-028

Project Name: EA-14-021 Series of Five-Year Warren Act (WA) Contracts between the United States and the Byron Bethany Irrigation District (BBID), Banta-Carbona Irrigation District (BCID), and Patterson Irrigation District (PID)

NEPA Document: EA

MP 153 Cultural Resources Reviewer: BranDee Bruce, Architectural Historian

Date: November 26, 2014

Reclamation proposes to enter into a series of five-year WA contracts with BBID, BCID, and PID from September 2015 through December 2045 to convey up to 5,000 acre-feet (af), 10,000 af, and 10,000 af per year, respectively, of non-Project water (i.e., water not part of the Central Valley Project) through Reclamation facilities (including the Delta Mendota Canal, Delta and San Felipe Divisions, the San Luis Unit, and Friant Division of the Central Valley Project). All water will be delivered within existing water service area boundaries utilizing existing water conveyance features.

Authorization of the proposed action constitutes an undertaking as defined in Section 301(7) of the National Historic Preservation Act (NHPA) (16 USC 470 *et seq.*). Upon review, Reclamation has determined that this undertaking involves the type of activity that does not have the potential to cause effects on historic properties listed or eligible for listing on the National Register of Historic Places. As such, Reclamation has no further obligations under Section 106 of the NHPA pursuant to 36 CFR 36 CFR § 800.3(a)(1).

This document 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 proposed action, additional NHPA Section 106 review, possibly including consultation with the State Historic Preservation Officer, may be necessary.

Appendix B

Reclamation's Indian Trust Assets Determination

Emerson, Rain <remerson@usbr.gov>

Re: PD for Review (EA-14-021)

RIVERA, PATRICIA <privera@usbr.gov> Tue, Nov 25, 2014 at 4:32 PM
To: "Emerson, Rain" <remerson@usbr.gov>
Cc: Kristi Seabrook <kseabrook@usbr.gov>, "Williams, Mary D (Diane)" <marywilliams@usbr.gov>

Rain,

I reviewed the proposed action to issue a series of five-year Warren Contracts from January 2015 through December 2045 for Byron-Bethany Irrigation District (BBID) and Banta-Carbona Irrigation District (BCID) and from September 2015 through August 2046 for Patterson Irrigation District (PID). Conveyance and storage of non-CVP water under a Warren Act contract would be subject to available capacity. Specific details by contractor are included below.

BBID proposes to introduce, convey and/or store up to 5,000 acre-feet per year (AFY) of non-CVP water through CVP facilities for delivery for agricultural and municipal and industrial (M&I) purposes. BBID diverts their non-CVP pre-1914 water rights water from the Delta at milepost (MP) 1.83 of the intake channel to the Harvey O. Banks Pumping Plant under a settlement agreement with the State of California, Department of Water Resources (DWR). The point of introduction for the non-CVP water would be at MP 3.71R on the Delta-Mendota Canal (DMC). The point of delivery for the non-CVP water would be at MP 8.71 on the DMC within the BBID service area. Additionally, up to 2,000 of the 5,000 AFY of the non-CVP water would be delivered to Westlands Water District at existing points of delivery on the San Luis Canal (SLC) or DMC.

BCID proposes to introduce, convey and/or store up to 10,000 AFY of non-CVP water through CVP facilities for delivery for agricultural and M&I purposes. BCID diverts their non-CVP pre-1914 water rights water from the San Joaquin River at river mile 63.5 pursuant to State Board notice of appropriation dated August 11, 1911. The point of introduction for the non-CVP water would be at MP 20.42L on the DMC. The points of delivery for the non-CVP water would be at MP 20.42-L1 and 20.42-L2 within the BCID service area. Additionally, BCID may transfer this non-CVP water to contractors within the Delta or San Felipe divisions, the San Luis Unit, Friant Division, including Cross Valley contractors, or exchange the non-CVP water for CVP water upon request and written approval of Reclamation.

PID proposes to introduce, convey and/or store up to 10,000 AY of non-CVP water through CVP facilities for delivery for agricultural purposes. PID diverts their non-CVP pre-1914 water rights water from the San Joaquin River at river mile 98.5 pursuant to State Board notice of appropriation dated February 10, 1909. The point of introduction for the non-CVP water would be at MP 42.53L on the DMC. The points of delivery for the non-CVP water would be between MPs 25.63R and 59.50R of the DMC within the PID service area. Additionally, Patterson may transfer this non-CVP water to contractors within the Delta or San Felipe divisions, the San Luis Unit, Friant Division, including Cross Valley contractors, or exchange the non-CVP water for CVP water upon request and written approval of Reclamation.

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

Patricia Rivera
Native American Affairs Program Manager
US Bureau of Reclamation
Mid-Pacific Region
2800 Sacramento, California 95825
(916) 978-5194

Kristi please log in. No further action needed. Thanks

Appendix C

Potential SOD CVP Recipients

Potential Recipients - SOD CVP Contractors by Division

Delta Division

- Banta-Carbon Irrigation District
- Byron Bethany Irrigation District
- City of Tracy
- Coelho Family Trust
- Del Puerto Water District
- Department of Veteran's Affairs – San Joaquin Valley National Cemetery
- Dos Palos Joint Power Authority
- Dudley & Indart
- Eagle Field Water District
- Fresno Slough Water District
- James Irrigation District
- Laguna Water District
- Lempesis, Virginia L. (Carvalho, Kenneth)
- Mercy Springs Water District
- Meyers Farming
- Oro Loma Water District
- Pajaro Valley Water Management Agency
- Pacheco Water District
- Panoche Water District
- Patterson Irrigation District
- Reclamation District No. 1606
- San Joaquin River Exchange Contractors including: Central California Irrigation District, Columbia Canal Company, Firebaugh Canal Water District, and San Luis Canal Company
- San Luis Water District
- The West Side Irrigation District
- Tranquillity Irrigation District
- Tranquillity Public Utility District
- West Stanislaus Irrigation District

San Luis Unit

- City of Avenal
- City of Coalinga
- City of Huron
- California Department of Fish and Wildlife
- Westlands Water District
- Westlands Water District Distribution District No. 1
- Westlands Water District Distribution District No. 2
- Pacheco Water District
- Panoche Water District
- San Luis Water District

San Felipe Division

- San Benito County Water District
- Santa Clara Valley Water District

Friant Division

- Arvin-Edison Water Storage District
- Chowchilla Water District
- City of Fresno
- City of Lindsay
- City of Orange Cove
- County of Madera
- Delano-Earlimart Irrigation District
- Exeter Irrigation District
- Fresno County Waterworks #18
- Fresno Irrigation District
- Garfield Water District
- Gravelly Ford Water District
- Hills Valley Irrigation District
- International Water District
- Ivanhoe Irrigation District
- Kaweah Delta Water Conservation District
- Kern-Tulare Water District
- Lewis Creek Water District
- Lindmore Irrigation District
- Lindsay-Strathmore Irrigation District
- Lower Tule River Irrigation District
- Madera Irrigation District
- Orange Cove Irrigation District
- Porterville Irrigation District
- Saucelito Irrigation District
- Shafter-Wasco Irrigation District
- Southern San Joaquin Municipal Utility District
- Stone Corral Irrigation District
- Tea Pot Dome Water District
- Terra Bella Irrigation District
- Tri-Valley Water District
- Tulare Irrigation District

Cross Valley Contractors

- County of Fresno (including its subcontractors: Fresno County Service Areas #5, #10, and #14 and Fresno County Water Works #34)
- Hills Valley Irrigation District
- Kern-Tulare Water District (previously combined with Rag Gulch Water District)
- Lower Tule River Irrigation District

- Pixley Irrigation District
- Tri-Valley Water District
- County of Tulare (including its subcontractors: Alpaugh Irrigation District, Atwell Island Water District, City of Lindsay, Hills Valley Irrigation District, Saucelito Irrigation District, Stone Corral Irrigation District, Strathmore Public Utilities District, Styrotek, Inc., and City of Visalia).

Appendix D

Special-Status Species List

U.S. Fish & Wildlife Service

Sacramento Fish & Wildlife Office

Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 141201022746

Current as of: December 1, 2014

No quad species lists requested.

County Lists

Listed Species

Invertebrates

Apodemia mormo langei
Lange's metalmark butterfly (E)
S

Branchinecta conservatio
Conservancy fairy shrimp (E)
Critical habitat, Conservancy fairy shrimp (X)
S

Branchinecta longiantenna
Critical habitat, longhorn fairy shrimp (X)
longhorn fairy shrimp (E)
S

Branchinecta lynchi
Critical habitat, vernal pool fairy shrimp (X)
vernal pool fairy shrimp (T)
S

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)
S

Elaphrus viridis
delta green ground beetle (T)
S

Euphydryas editha bayensis
bay checkerspot butterfly (T)
Critical habitat, bay checkerspot butterfly (X)
S

Euproserpinus euterpe
Kern primrose sphinx moth (T)
S

Haliotes cracherodii
black abalone (E) (NMFS)
S

Haliotes sorenseni
white abalone (E) (NMFS)
S

Icaricia icarioides missionensis
mission blue butterfly (E)
S

Lepidurus packardi
Critical habitat, vernal pool tadpole shrimp (X)
vernal pool tadpole shrimp (E)
S

Speyeria callippe callippe
callippe silverspot butterfly (E)
S

Syncaris pacifica
California freshwater shrimp (E)
S

Fish

Acipenser medirostris
green sturgeon (T) (NMFS)
S

Eucyclogobius newberryi
critical habitat, tidewater goby (X)
tidewater goby (E)
S

Gila bicolor snyderi
Owens tui chub (E)
S

Hypomesus transpacificus
Critical habitat, delta smelt (X)
delta smelt (T)
S

Oncorhynchus (=Salmo) clarki henshawi
Lahontan cutthroat trout (T)
S

Oncorhynchus (=Salmo) clarki seleniris
Paiute cutthroat trout (T)
S

Oncorhynchus kisutch
coho salmon - central CA coast (E) (NMFS)
Critical habitat, coho salmon - central CA coast (X) (NMFS)
S

Oncorhynchus mykiss
Central California Coastal steelhead (T) (NMFS)
Central Valley steelhead (T) (NMFS)
Critical habitat, Central California coastal steelhead (X) (NMFS)
Critical habitat, Central Valley steelhead (X) (NMFS)
South Central California steelhead (T) (NMFS)
S

Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)
Critical Habitat, Central Valley spring-run chinook (X) (NMFS)
Critical habitat, winter-run chinook salmon (X) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)
S

Amphibians

Ambystoma californiense

California tiger salamander, central population (T)
Critical habitat, CA tiger salamander, central population (X)
S

Rana draytonii
California red-legged frog (T)
Critical habitat, California red-legged frog (X)
S

Rana muscosa
Mountain yellow legged frog (PX)
S

Rana sierrae
Mountain yellow legged frog (PX)
S

Reptiles

Caretta caretta
loggerhead turtle (T) (NMFS)
S

Chelonia mydas (incl. agassizi)
green turtle (T) (NMFS)
S

Dermochelys coriacea
leatherback turtle (E) (NMFS)
S

Gambelia (=Crotaphytus) sila
blunt-nosed leopard lizard (E)
S

Lepidochelys olivacea
olive (=Pacific) ridley sea turtle (T) (NMFS)
S

Masticophis lateralis euryxanthus
Alameda whipsnake [=striped racer] (T)
Critical habitat, Alameda whipsnake (X)
S

Thamnophis gigas
giant garter snake (T)
S

Thamnophis sirtalis tetrataenia
San Francisco garter snake (E)
S

Birds

Brachyramphus marmoratus
Critical habitat, marbled murrelet (X)
marbled murrelet (T)
S

Charadrius alexandrinus nivosus
Critical habitat, western snowy plover (X)
western snowy plover (T)
S

Diomedea albatrus
short-tailed albatross (E)
S

Empidonax traillii extimus
Critical habitat, southwestern willow flycatcher (X)
southwestern willow flycatcher (E)
S

Gymnogyps californianus
California condor (E)
Critical habitat, California condor (X)
S

Pelecanus occidentalis californicus
California brown pelican (E)
S

Rallus longirostris obsoletus
California clapper rail (E)
S

Sternula antillarum (=Sterna, =albifrons) browni
California least tern (E)
S

Strix occidentalis caurina
northern spotted owl (T)
S

Vireo bellii pusillus
Least Bell's vireo (E)
S

Mammals

Arctocephalus townsendi
Guadalupe fur seal (T) (NMFS)
S

Balaenoptera borealis
sei whale (E) (NMFS)
S

Balaenoptera musculus
blue whale (E) (NMFS)
S

Balaenoptera physalus
finback (=fin) whale (E) (NMFS)
S

Dipodomys ingens
giant kangaroo rat (E)
S

Dipodomys nitratoides exilis
Critical habitat, Fresno kangaroo rat (X)
Fresno kangaroo rat (E)
S

Dipodomys nitratoides nitratoides
Tipton kangaroo rat (E)

S

Enhydra lutris nereis
southern sea otter (T)
S

Eubalaena (=Balaena) glacialis
right whale (E) (NMFS)
S

Eumetopias jubatus
Steller (=northern) sea-lion (T) (NMFS)
S

Neotoma fuscipes riparia
riparian (San Joaquin Valley) woodrat (E)
S

Ovis canadensis californiana
Sierra Nevada (=California) bighorn sheep (E)
S

Physeter catodon (=macrocephalus)
sperm whale (E) (NMFS)
S

Reithrodontomys raviventris
salt marsh harvest mouse (E)
S

Sorex ornatus relictus
Buena Vista Lake shrew (E)
Critical habitat, Buena Vista Lake shrew (X)
S

Sylvilagus bachmani riparius
riparian brush rabbit (E)
S

Vulpes macrotis mutica
San Joaquin kit fox (E)
S

Plants

Acanthomintha duttonii
San Mateo thornmint (E)
S

Amsinckia grandiflora
Critical habitat, large-flowered fiddleneck (X)
large-flowered fiddleneck (E)
S

Arctostaphylos myrtifolia
Ione manzanita (T)
S

Arctostaphylos pallida
pallid manzanita (=Alameda or Oakland Hills manzanita) (T)
S

Brodiaea pallida

Chinese Camp brodiaea (T)
S

Calochortus tiburonensis
Tiburon mariposa lily (T)
S

Calyptridium pulchellum
Mariposa pussy-paws (T)
S

Camissonia benitensis
San Benito evening-primrose (T)
S

Castilleja affinis ssp. neglecta
Tiburon paintbrush (E)
S

Castilleja campestris ssp. succulenta
Critical habitat, succulent (=fleshy) owl's-clover (X)
succulent (=fleshy) owl's-clover (T)
S

Caulanthus californicus
California jewelflower (E)
S

Ceanothus ferrisae
Coyote ceanothus (E)
S

Chamaesyce hooveri
Critical habitat, Hoover's spurge (X)
Hoover's spurge (T)
S

Chorizanthe robusta var. robusta
robust spineflower (E)
S

Cirsium fontinale var. fontinale
fountain thistle (E)
S

Clarkia franciscana
Presidio clarkia (E)
S

Cordylanthus mollis ssp. mollis
soft bird's-beak (E)
S

Cordylanthus palmatus
palmate-bracted bird's-beak (E)
S

Cupressus abramsiana
Santa Cruz cypress (E)
S

Dudleya setchellii

Santa Clara Valley dudleya (E)
S

Eremalche kernensis
Kern mallow (E)
S

Eriophyllum latilobum
San Mateo woolly sunflower (E)
S

Erysimum capitatum ssp. angustatum
Contra Costa wallflower (E)
Critical Habitat, Contra Costa wallflower (X)
S

Erysimum menziesii (includes ssp. yadonii)
Menzies's wallflower (E)
S

Hesperolinon congestum
Marin dwarf-flax (=western flax) (T)
S

Holocarpha macradenia
Critical habitat, Santa Cruz tarplant (X)
Santa Cruz tarplant (T)
S

Lasthenia conjugens
Contra Costa goldfields (E)
Critical habitat, Contra Costa goldfields (X)
S

Layia carnosa
beach layia (E)
S

Lupinus tidestromii
clover lupine [Tidestrom's lupine] (E)
S

Monolopia congdonii (=Lembertia congdonii)
San Joaquin woolly-threads (E)
S

Neostapfia colusana
Colusa grass (T)
Critical habitat, Colusa grass (X)
S

Oenothera deltoides ssp. howellii
Antioch Dunes evening-primrose (E)
Critical habitat, Antioch Dunes evening-primrose (X)
S

Opuntia treleasei
Bakersfield cactus (E)
S

Orcuttia inaequalis
Critical habitat, San Joaquin Valley Orcutt grass (X)

San Joaquin Valley Orcutt grass (T)
S

Orcuttia pilosa
Critical habitat, hairy Orcutt grass (X)
hairy Orcutt grass (E)
S

Orcuttia viscida
Critical habitat, Sacramento Orcutt grass (X)
Sacramento Orcutt grass (E)
S

Pentachaeta bellidiflora
white-rayed pentachaeta (E)
S

Potentilla hickmanii
Hickman's potentilla (=cinquefoil) (E)
S

Pseudobahia bahiifolia
Hartweg's golden sunburst (E)
S

Pseudobahia peirsonii
San Joaquin adobe sunburst (T)
S

Sidalcea keckii
Critical habitat, Keck's checker-mallow (X)
Keck's checker-mallow (=checkerbloom) (E)
S

Streptanthus albidus ssp. albidus
Metcalf Canyon jewelflower (E)
S

Streptanthus niger
Tiburon jewelflower (E)
S

Suaeda californica
California sea blite (E)
S

Trifolium amoenum
showy Indian clover (E)
S

Tuctoria greenei
Critical habitat, Greene's tuctoria (=Orcutt grass) (X)
Greene's tuctoria (=Orcutt grass) (E)
S

Verbena californica
Red Hills (=California) vervain (T)
S

Proposed Species

Amphibians

Anaxyrus canorus

Yosemite toad (PX)
S

Rana draytonii
Critical habitat, California red-legged frog (PX)
S

Plants

Cordylanthus mollis ssp. mollis
Critical habitat, soft bird's-beak (PX)
S

Candidate Species

Amphibians

Bufo canorus
Yosemite toad (C)
S

Rana muscosa
mountain yellow-legged frog (C)
S

Birds

Coccyzus americanus occidentalis
Western yellow-billed cuckoo (C)
S

Mammals

Martes pennanti
fisher (C)
S

Key:

(E) *Endangered* - Listed as being in danger of extinction.
(T) *Threatened* - Listed as likely to become endangered within the foreseeable future.
(P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.
(NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.
Critical Habitat - Area essential to the conservation of a species.
(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.
(C) *Candidate* - Candidate to become a proposed species.
(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
(X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our Protocol and Recovery Permits pages.

For plant surveys, we recommend using the Guidelines for Conducting and Reporting Botanical Inventories. The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

> Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal consultation with the Service.

  During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

  Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our Map Room page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning

process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. More info

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6520.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be March 01, 2015.