

# RECLAMATION

*Managing Water in the West*

**Environmental Assessment 18-02-MP**

## **Water Exchange Agreement with San Luis and Grassland Water Districts**

**Refuge Water Supply Program  
Bureau of Reclamation, Mid-Pacific Region  
Sacramento, California**



April 2018

## **Mission Statements**

The Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors 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.

# Section 1 Introduction

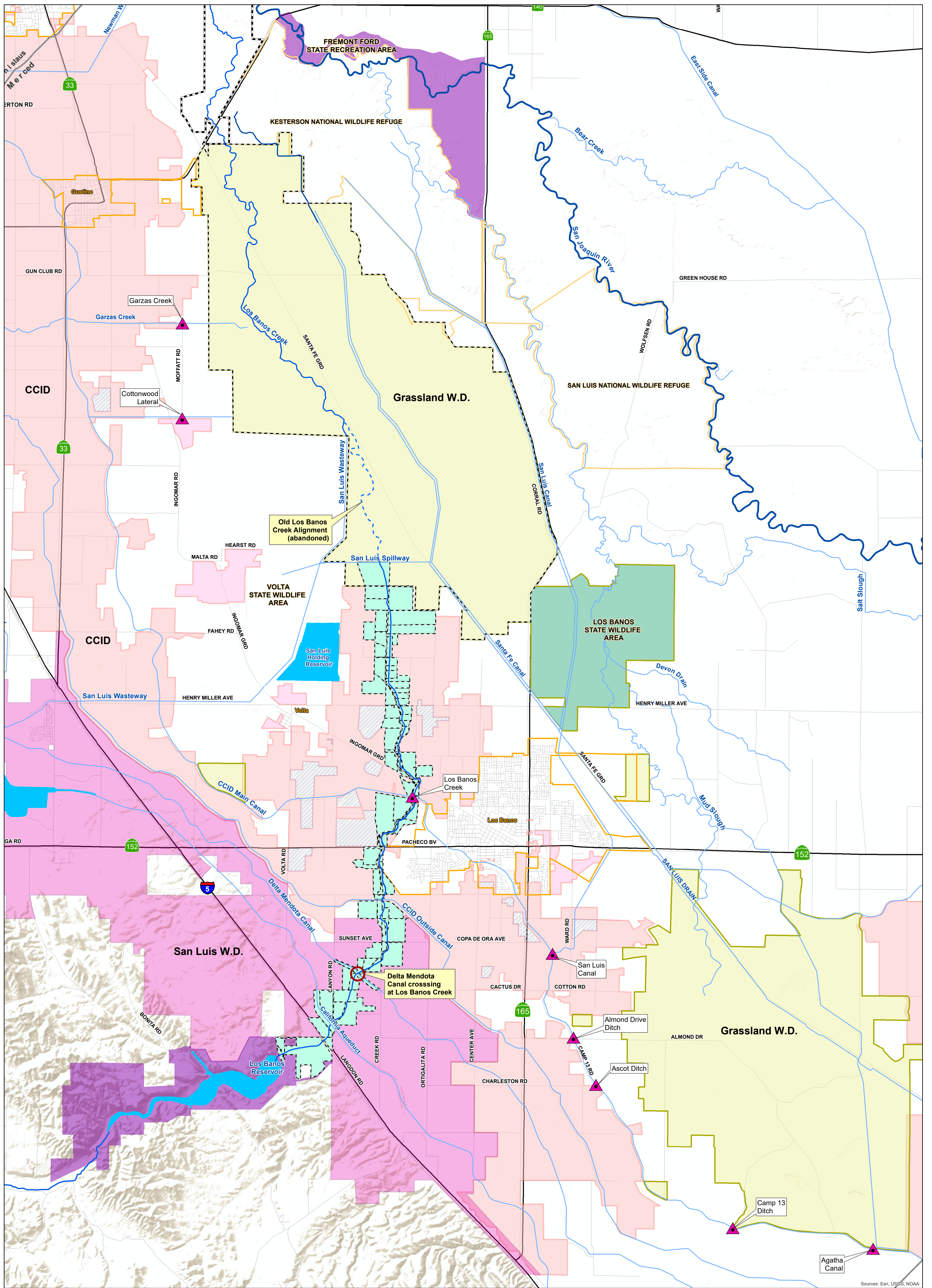
In conformance with the National Environmental Policy Act of 1969 (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR 1500-1508), and Department of the Interior (DOI) Regulations (43 CFR Part 46), the Bureau of Reclamation (Reclamation) has prepared this Environmental Assessment (EA) to evaluate and disclose any potential environmental impacts associated with the San Luis Water District's (SLWD) and Grassland Water District's (GWD) proposed Los Banos Creek Level 4 (L4) Refuge Water Exchange Project (Proposed Action). The Proposed Action is located in Merced and Fresno counties, California (see Figure 1).

Reclamation proposes to enter into an agreement with SLWD and GWD to provide South of Delta refuges with additional Refuge L4 Water in exchange with SLWD for Refuge L2 water. The Proposed Action would further the goals and objectives of the Refuge Water Supply Program (RWSP) by improving refuge water availability South of the Delta.

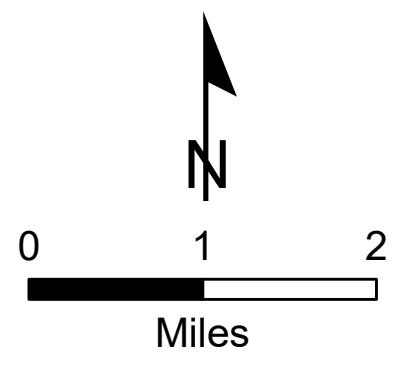
## 1.1 Background

The Central California Irrigation District (CCID), Columbia Canal Company, Firebaugh Canal Water District, and San Luis Canal Company, collectively referred to as San Joaquin River Exchange Contractors Water Authority (SJRECWA), SLWD and GWD constructed the Los Banos Creek Water Diversion Project (LBC Diversion Project or Project), in 2017. The LBC Diversion Project included the installation of infrastructure in Los Banos Creek and the Delta-Mendota Canal (DMC) for diversion of flood water released from Los Banos Creek Detention Dam for beneficial use on riparian lands in the SJRECWA, SLWD and GWD. The three entities have executed a 25-year cost sharing agreement in which all are entitled to their respective portions of the LBC Diversion Project water and all agreed that one party to the agreement may forbear delivery of its share of the LBC Diversion Project water in favor of another party.

Reclamation will conduct unequal L2 Refuge Water exchanges with SLWD for the respective shares of the LBC Diversion Project water for SLWD and GWD (2 for 1 exchange). First, an unequal exchange will be conducted with SLWD for the forbearance of SLWD's share of the LBC Diversion Project water delivered by GWD to riparian lands in the Grassland Resource Conservation District (GRCD) as Refuge Level 4 (L4) Water. Second, an unequal exchange with SLWD will be conducted for GWD's share of the LBC Diversion Project water for SLWD's funding of GWD's Project O&M costs. A portion of the water made available by the LBC Diversion Project will be made available to GWD to help Reclamation meet its obligation to provide Refuge L4 Water Supplies under the CVPIA.



Sources: Esri, USGS, NOAA



- ▲ GWD Point of Delivery
- County
- City Boundaries
- Parcels Along Creek
- San Luis National Wildlife Refuge
- San Luis State Recreation Area
- Grassland W.D.
- CCID Boundary
- Island - Not part of CCID
- Island Out - Part of CCID
- San Luis W.D. Boundary
- Los Banos Creek Riparian Lands

**Figure 1**

Los Banos Creek Diversion  
Riparian Land and Points of Delivery

Exchange Agreement No. 17-WC-20-5056

## **1.2 Need for the Proposed Action**

The need for the Proposed Action is to provide Refuge L4 Water to the refuges in accordance with requirements under Section 3406(d) of the Central Valley Improvement Act (CVPIA) and to provide additional water supplies to SLWD.

## **1.3 Previous Environmental Analysis**

The construction and operation of the LBC Diversion Project was analyzed in Reclamation's 2015 *Los Banos Creek Diversion Project Environmental Assessment (EA) and Finding of No Significant Impact (FONSI 12-060)* (Reclamation 2015 EA/FONSI). The document analyzed constructing and operating a weir in Los Banos Creek to divert available water from Los Banos Creek into the Delta Mendota Canal (DMC). These documents and the environmental analyses they contain are hereby incorporated by reference as they include the same Proposed Action area.

# **Section 2 Proposed Action and Alternatives**

## **2.1 No Action Alternative**

Under the No Action Alternative, Reclamation would not enter into an agreement with SLWD and GWD to exchange Refuge L2 Water with SLWD for SLWD's forbearance of its share of water produced by the LBC Diversion Project for delivery to GWD and for funding GWD's share of the O&M of the LBC Diversion Project. SLWD would not be able to utilize exchanged Refuge L2 Water, and the Refuge L4 Water portion of this exchange would not provide additional water to the RWSP.

## **2.2 Proposed Action Alternative**

Reclamation proposes to enter into an agreement with SLWD and GWD to exchange Refuge L2 Water with SLWD for water made available via SLWD's forbearing the diversion of their share of Los Banos Creek riparian rights water and for funding GWD's O&M costs. The LBC Diversion Project could generate up to 15,082 acre-feet per year (AFY) in wet years and 3,162 AFY on average (includes both SLWD and GWD shares of the Project Yield). However, during dry and critically dry years the LBC Diversion Project may not produce any water. The Proposed Action would further the goals and objectives of the RWSP by improving refuge water availability South of the Delta. Another benefit of the Proposed Action is that it would enable delivery of water to SLWD for agricultural use. GWD would take delivery of SLWD's Los Banos Creek riparian water rights water as Refuge L4 Water.

Under the Proposed Action, SLWD would exchange its share of the LBC Diversion Project Yield with Reclamation, SLWD's forbearance water would be delivered to GWD riparian land within the GRCD, and Refuge L2 Water at a rate of 2 AF of Project Yield (SLWD's share) delivered to GWD for 1 AF of Refuge L2 Water delivered to SLWD. Refuge L2 water would also be made available at a rate of 2 AF of Project Yield (GWD's share) delivered to GWD as reimbursement for SLWD's funding of GWD's share of future Project Routine O&M costs on an annual basis. If SLWD, with the approval of Reclamation, funds GWD's share of any non-routine O&M, the exchange rate would be temporarily changed to 1 to 1 until such time as SLWD is compensated with Refuge L2 Water for costs incurred to fund the non-routine O&M. SLWD, GWD and Reclamation may mutually agree in writing to adjust the volume of L2 Water to be exchanged on a monthly or seasonal basis, provided that the amount of L2 Water to be exchanged shall not exceed the exchange rates over any 24-month period.

The Proposed Action will increase the water supply available to refuge lands within the GRCD. Reclamation and GWD would not be required to take delivery of Project Yield or exchange L2 Water if there is no refuge water demand at the time SLWD's share of Project Yield is made available or L2 Water is not available for exchange.

The proposed term of the initial Exchange Agreement is five years from the date of execution and may be extended upon written consent of SLWD, GWD and Reclamation for up to 25 years. This EA is intended to cover the entire 25 year period in anticipation that the initial five year agreement may be extended.

## **Section 3 Affected Environment and Environmental Consequences**

This section discusses the affected environment and environmental consequences of the Proposed Action and the No Action Alternative, in addition to environmental trends and conditions that currently exist. The Proposed Action does not involve any construction or ground disturbance, but rather includes the forbearance of riparian water and funding of O&M in exchange for Refuge L2 Water. Potential impacts to the following resources were considered in the Los Banos Creek Diversion Project EA and were found to be minor. Since the Proposed Action is within this same area, that document is hereby incorporated by reference. Brief explanations are provided below:

- Indian Trust Assets (ITA): The Proposed Action would not impact ITAs as there are none in the Proposed Action area.
- Indian Sacred Sites: The Proposed Action would not affect and/or prohibit access to and ceremonial use of Indian sacred sites.

- Cultural Resources: Reclamation has determined that the Proposed Action is the type of undertaking that does not have the potential to cause effects on historic properties, should such properties be present, pursuant to 36 CFR § 800.3(a)(1). As such, Reclamation has no further obligations under 54 U.S.C. § 306108, commonly known as Section 106 of the National Historic Preservation Act (NHPA).
- Environmental Justice: No significant changes in refuge management or in agricultural communities or practices would result from the Proposed Action. Accordingly, the Proposed Action would not have disproportionately negative impacts on low-income or minority populations within the study area.

Potential impacts to the following resources were considered in the Los Banos Creek Diversion Project EA and since the Proposed Action is within this same area, analysis within this EA comes from that previous EA:

- Water Resources
- Biological Resources

## **3.1 Water Resources**

### **3.1.1 Affected Environment**

Los Banos Creek is an intermittent creek that is dammed at Reclamation's Los Banos Detention Dam. The dam was constructed as a flood control facility and is operated pursuant to the U.S. Army Corps of Engineers' operating criteria and in accordance with License 12134 from the State Water Resources Control Board (SWRCB). The reservoir, with a capacity of 34,000 AF, is a joint-use facility owned by Reclamation and operated and maintained by DWR.

CCID, GWD and SLWD have historically delivered surface water from the CVP and Los Banos Creek to the riparian lands along Los Banos Creek. Delivered water has been and continues to be used for crop production as well as maintenance of wetlands, waterfowl habitat, and vegetation growth. The delivery of surface water to these riparian lands benefits wildlife and reduces groundwater extraction by riparian landowners. Until approximately the early 1960s, a control structure existed at the junction of Los Banos Creek and the CCID Main Canal and Outside Canal that intercepted water flowing in Los Banos Creek for conveyance to the riparian lands located within CCID or within GWD. In the 1960s, the weir structures were replaced with siphons that pass under Los Banos Creek stopping re-regulation of these flows.

CCID measures groundwater levels throughout the Los Banos Creek groundwater subarea at regular intervals. Depth to water ranges from less than 10 feet beneath the northwest, northeast, and southeast part of the Los Banos Creek groundwater subarea (north of Highway 152), to more than 130 feet in the area west of the DMC and south of Los Banos Creek. Depth to water exceeds about 60 feet in most of the Los Banos Creek subarea. Groundwater flow direction varies based upon wet or dry climatic conditions that determine the amount of releases from the Los Banos Detention Reservoir into Los Banos Creek. During wet years a groundwater mound builds along the course of Los Banos Creek due to infiltration of surface water in the stream channel. The groundwater mound dissipates during dry years (Reclamation 2015).

### **3.1.2 Environmental Consequences**

#### ***No Action***

Under the No Action Alternative, Reclamation would not enter into an agreement with SLWD and GWD for SLWD to forbear its share of water produced by the LBC Diversion Project for delivery to GWD and to fund GWD's share of the O&M of the LBC Diversion Project in exchange for Refuge L2 Water. The SLWD would not be able to utilize exchanged Refuge L2 Water, and the Refuge IL4 Water portion of this exchange would not provide additional water to the RWSP. Non-riparian landowners within SLWD would not be able to receive the portion of CVP water that could have been delivered to them under the Proposed Action. GWD would continue to need to release previously delivered water from wetlands within the District in order to accommodate the additional flows from Los Banos Creek when reservoir releases are made or shutdown all deliveries and route the flood releases to the San Joaquin River through its conveyance and drainage system.

#### ***Proposed Action***

With the availability of water from Los Banos Creek, CVP water that would have been delivered to the riparian lands would instead be available for distribution to other landowners within CCID, GWD and SLWD, providing additional water supply reliability for landowners within the districts. The Proposed Action would not interfere with 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.

#### ***Cumulative Impacts***

As has historically been the case, hydrological conditions and other factors are likely to result in fluctuating water supplies which drives requests for water service actions. It is likely that during drought, more districts would request exchanges, transfers and Warren Act contracts (conveyance of non-CVP water in CVP facilities) due to hydrologic conditions and regulatory actions affecting water supplies. Each water service transaction involving Reclamation undergoes environmental review prior to approval.



Capacity in the DMC is limited, and if many water actions were scheduled to take place concurrently they could cumulatively compete for capacity. However, non-CVP water would be allowed to enter the DMC for conveyance through Federal facilities if excess capacity is available. As such, the Proposed Action would not likely limit the ability of other users to make use of the facilities.

No adverse cumulative impacts to water quality are expected as non-CVP water is required to meet Reclamation's water quality standards prior to introduction into the DMC.

## **3.2 Biological Resources**

### **3.2.1 Affected Environment**

Los Banos Creek tends to be ephemeral, dry except during floods in the more upstream reaches, but receives water from some discharges and drains in the lower reaches (Reclamation 2015). Riparian vegetation in the project area are either very sparse, or very dense, herbaceous wetland vegetation is generally lacking, and most of these areas are dry except during rain events. As such, they don't provide high quality habitat for giant garter snakes which need adequate water during their active season to support a prey base, and which generally are found in areas with emergent herbaceous wetland vegetation.

Managed wetlands in the GRCD provide habitat for a variety of wintering waterfowl and many other waterbirds, as well as brood habitat for year-round species, such as mallards. The wetlands in the GRCD are managed to allow support forage for several duck species as well as habitat for some shorebirds (Reclamation 2015).

Section 3406(d)(2) of the CVPIA requires that Reclamation provide full Refuge L4 Water supplies to all refuges starting in 2002. However, due to constraining issues including availability of water for L4 acquisition, funding and inadequate external conveyance capacity, Reclamation has not yet been able to fully meet that goal (Reclamation 2015).

### **3.2.2 Environmental Consequences**

#### ***No Action***

Under the No Action Alternative, Reclamation would not enter into an agreement with SLWD and GWD to exchange Refuge L2 Water with SLWD for SLWD's forbearance of its share of water produced by the LBC Diversion Project for delivery to GWD and for funding GWD's share of the O&M of the LBC Diversion Project. SLWD would not be able to utilize exchanged Refuge L2 Water, and the Refuge L4 Water portion of this exchange would not provide additional water to the RWSP.

### ***Proposed Action***

According to the February 20, 2015 informal consultation with USFWS and Reclamation for the LBC Diversion Project, all introduced water may only be used on the riparian lands associated with Los Banos Creek in CCID, North GWD, and SLWD. Delivery to the riparian lands must occur within 30 days of introduction and any Los Banos Creek water not delivered within the 30 days would be placed back into Los Banos Creek near Check 15 or from existing CCID or GWD facilities. This would allow for additional groundwater recharge as it is conveyed into the GWD through Los Banos Creek. With the LBC Diversion Project, flood waters which would normally flow into Los Banos Creek and then into GWD would be diverted into the DMC. Up to 250 cfs would be diverted into the DMC via the connection structure when flood waters are being released. The amounts actually diverted would be dependent on demand and available capacity in the DMC. In order to match historic groundwater recharge in the area between the Los Banos Creek Detention Dam and CCID's Main Canal crossing, a minimum of 50 cfs would be maintained in this portion of Los Banos Creek during diversion events. Water quality monitoring will be conducted in accordance with Reclamation's current water quality standards (USFWS February 2015 consultation letter included as appendix to Reclamation 2015 EA). Los Banos Creek is generally dry except for intermittent flows during rainfall events, and canals in the area are lined with concrete and devoid of emergent vegetation or other cover and therefore, habitat quality for giant garter snake is considered low. By diverting waters into the DMC, project operation would reduce the flow entering GWD from Los Banos Creek during flood releases, typically at a time when habitat managers are attempting to drain the marsh and initiate the growing season. The volume of water diverted into the DMC would be delivered within 30 days, to provide additional irrigations during the growing season and provide additional habitat for the giant garter snakes. These effects of operation may benefit the snake.

The Proposed Action would benefit waterfowl and other birds that utilize the wetland habitats in the Project area by providing additional water for habitat and to support foraging.

### ***Cumulative Impacts***

The Proposed Action will have little to no cumulative impacts to biological resources.

## **Section 4 Consultation and Coordination**

### **4.1 Public Involvement**

The public review period for the draft Water Exchange Agreement EA is April 2, 2018 through April 9, 2018. Any comments received will be included and addressed in the Final EA.

### **4.2 National Historic Preservation Act (54 U.S.C. § 300101 et seq.)**

54 U.S.C. § 304108, commonly known as Section 106 of the NHPA, requires that Federal agencies take into consideration the effects of their undertakings on historic properties. Historic properties are cultural resources that are included in, or eligible for inclusion in, the National Register. The 36 CFR Part 800 regulations implement Section 106 of the NHPA and outline the procedures necessary for compliance with the NHPA. Compliance with the Section 106 process follows a series of steps that are designed to identify if significant cultural resources are present in the proposed action project area and to what level they would be affected by the proposed Federal undertaking.

Reclamation determined that the proposed action is the type of undertaking that does not have the potential to cause effects on historic properties, should such properties be present, pursuant to 36 CFR § 800.3(a)(1). As such, Reclamation has no further obligations under Section 106 of the NHPA. Reclamation cultural resources staff has reviewed the draft Environmental Assessment for this project and agrees the current language in the EA is sufficient for cultural resources analysis. No additional language will be provided. The proposed action would have no impacts on cultural resources.

## **Section 5 References**

Bureau of Reclamation. 2015. Los Banos Creek Diversion Project Final Environmental Assessment (EA-12-060) and Finding of No Significant Impact (FONSI-12-060). February 2015.