

# RECLAMATION

*Managing Water in the West*

## **Environmental Assessment**

### **Acquisition of Up to 3,331 Acre-Feet of Water from Merced Irrigation District for the East Bear Creek Unit of the San Luis National Wildlife Refuge (2017)**

**EA-17-19-MP**



U.S. Department of the Interior  
Bureau of Reclamation  
Mid-Pacific Region

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## **Mission Statements**

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

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

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# List of Acronyms and Abbreviations

AF	Acre-feet
Agreement	Agreement No. 12-WC-20-4319
CFR	Code of Federal Regulations
CVPIA	Central Valley Project Improvement Act
EA	Environmental Assessment
IL4	Incremental Level 4
ITA	Indian Trust Assets
L2	Level 2
L4	Level 4
MBTA	Migratory Bird Treaty Act
MID	Merced Irrigation District
NEPA	National Environmental Policy Act
Reclamation	Bureau of Reclamation
Refuge	East Bear Creek Unit of the San Luis National Wildlife Refuge Complex
RWSP	Department of the Interior Refuge Water Supply Program
Service	U.S. Fish and Wildlife Service
USGS	United States Geological Survey

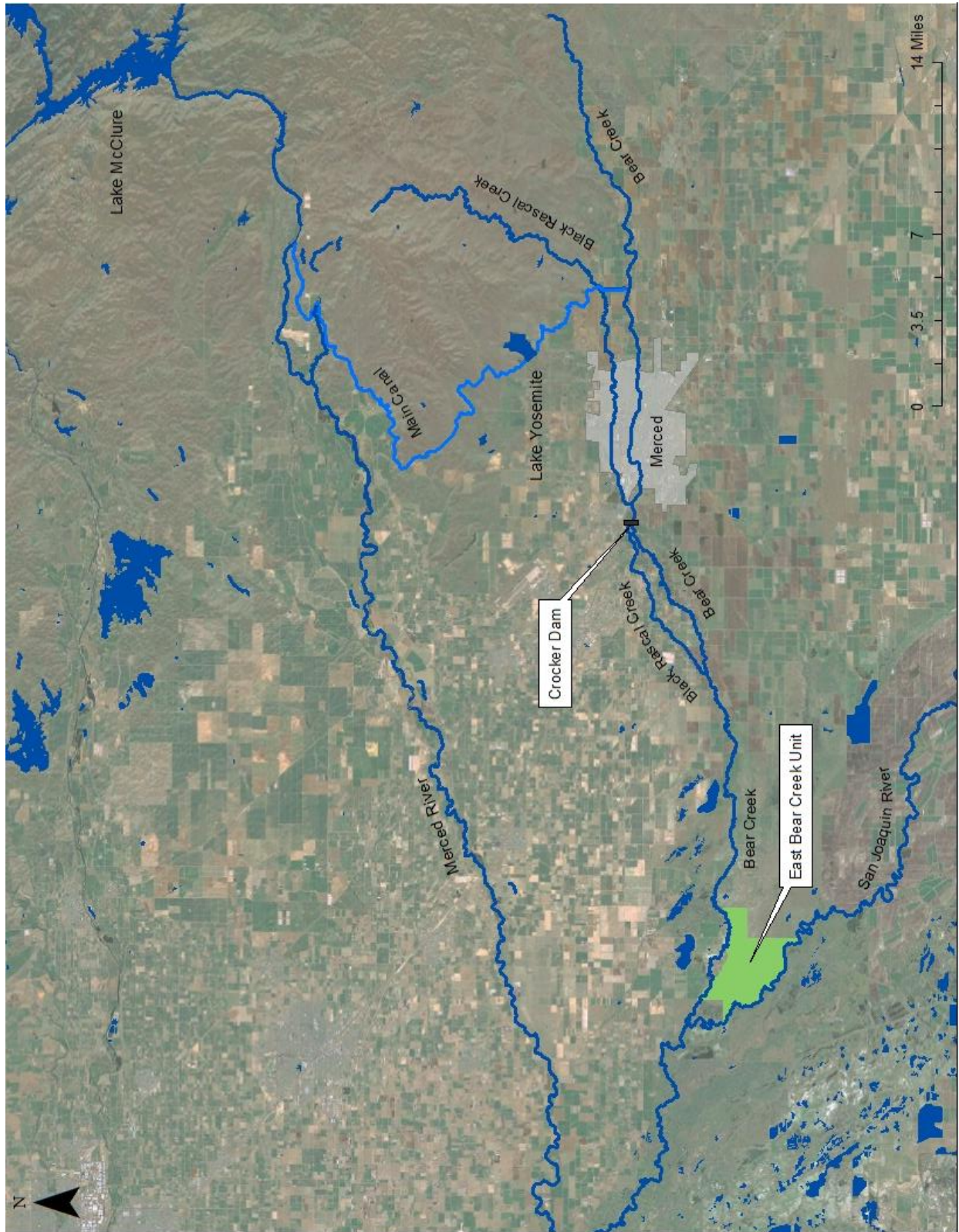
# Section 1.0 Introduction

## 1.1 Background

This Environmental Assessment (EA) examines the environmental effects of the Department of the Interior Refuge Water Supply Program's (RWSP) acquisition of up to 3,331 acre-feet (AF) of water from the Merced Irrigation District (MID) for the East Bear Creek Unit of the San Luis National Wildlife Refuge Complex (Refuge). The proposed acquisition is being undertaken pursuant to, and would be in full compliance with, Sections 3406(b)(3) and 3406(d)(2) of Title XXXIV of the Act of October 1992 (106 Stat. 4706) Central Valley Project Improvement Act (CVPIA), which authorizes new water supply contracts for fish and wildlife purposes. The proposed acquisition would provide water to the Refuge through October 31, 2017.

Section 3406(d)(1) of the CVPIA requires the Secretary of the Interior to provide firm delivery of Level 2 and Level 4 water supplies to the various wetland habitat areas identified in the Bureau of Reclamation's (Reclamation) *Report on Refuge Water Supply Investigations* (Reclamation, 1989) and the *San Joaquin Basin Action Plan/Kesterson Mitigation Plan* (Interior, 1989). These reports describe water needs and delivery requirements for each wetland habitat area to accomplish the stated refuge management objectives. In the Reclamation report (1989), the average annual historical supplies were termed "Level 2" (L2), and the supplies needed for optimum habitat management were termed "Level 4" (L4). L2 water is derived primarily from the Central Valley Project's annual yield and equals approximately 422,000 acre-feet (AF). L4 water is equal to approximately 555,000 AF with the incremental difference of 133,000 AF between the two supplies being called "Incremental Level 4" (IL4) water. The RWSP acquires IL4 water supplies from willing sellers. The overall general impacts of implementing the CVPIA, including providing L4 water supplies is addressed in a Final Programmatic Environmental Impact Statement (Interior, 1999).

Figure 1 – Project Location



## **1.2 Need for the Proposal**

The purpose of the water acquisition is to enhance and maintain wetland habitats for the benefit of migratory waterfowl and wetland-dependent wildlife in the San Joaquin Valley. The notable difference between obtaining water supplies for optimum management (L4) and average annual deliveries (L2) is that L4 water supplies allow for the management of habitat diversity. Habitat management includes timing and duration of fall and late winter flooding, summer water for food production, and permanent wetland habitat maintenance (Reclamation, 2000).

Under the Section 3406(d)(1) of the CVPIA, the Secretary of the Interior is authorized and directed to acquire and provide sufficient water supplies necessary to meet L2 and L4 refuge water needs as identified in the *San Joaquin Basin Action Plan/Kesterson Mitigation Plan* (Interior, 1989). Reclamation has determined that this acquisition of water from MID would allow Reclamation to increase the supply of water available to meet the needs of the Refuge.

## **1.3 Potential Resource Issues**

This EA will analyze the affected environment of the Proposed Action and No Action alternatives in order to determine the potential impacts and cumulative effects to the following environmental resources:

- Water Resources
- Biological Resources

## **1.4 Resources Not Analyzed in Detail**

Department of the Interior Regulations, Executive Orders, and Reclamation guidelines require a discussion of the following items when preparing environmental documentation.

### **1.4.1 Cultural Resources**

No significant impacts to historic properties would result from the Proposed Action. This is the type of undertaking that does not have the potential to cause effects to historic properties pursuant to 36 CFR Part 800.3(a)(1). There would be no new construction or ground-disturbing activities and no changes in land use as a result of this action. In such cases Reclamation has no further obligations pursuant to Section 106 of the National Historic Preservation Act of 1966 and consultation with the California State Historic Preservation Officer is not required.

### **1.4.2 Indian Sacred Sites**

Sacred sites are defined in Executive Order 13007 (May 24, 1996) as "any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site." The proposed action would not be located on or impact any Federal lands and therefore would not affect any Indian sacred sites.

### **1.4.3 Indian Trust Assets**

The Proposed Action does not have a potential to affect Indian Trust Assets. There will be no new construction or ground-disturbing activities and no changes in land use as a result of this action. The nearest ITA is a Public Domain Allotment approximately 29 miles northeast of the project location.

### **1.4.4 Environmental Justice**

The Proposed Action would result in no significant changes in agricultural communities or practices and is therefore not likely to affect agricultural employment, which employs a higher proportion of low-income and minority workers than are employed in the general workforce. Accordingly, the Proposed Action would not have any significant or disproportionately negative impact on low-income or minority individuals within the project area.



## Section 2.0 Alternatives

### 2.1 No Action Alternative

Under the No Action Alternative, Reclamation would not purchase water from MID for delivery to the Refuge, requirements under CVPIA would not be met. Absent this water purchase, water available for acquisition from MID in 2017 would be held in storage in Lake McClure.

### 2.2 Proposed Action Alternative

The Proposed Action is for Reclamation to enter into an agreement with MID for a temporary water acquisition of up to 3,331 AF to help meet water supply needs for the Refuge through October 31, 2017. Following is the estimated water delivery schedule:

Month	Storage Water Transfer (Acre-Feet)
AUGUST	277
SEPTEMBER	677
OCTOBER	2,377
TOTAL	3,331

The acquired water would be delivered to the Refuge via Bear Creek and diverted by the Refuge's existing pumping plant on Bear Creek. Deliveries to the Refuge will cross the Eastside Canal which is owned and operated by the Stevinson Water District (SWD), therefore the supply of water between August 2017 and October 31, 2017 is dependent on an agreement between the MID and SWD.

The exact amount of water to be acquired each month will vary based upon the actual water needs of the East Bear Creek Unit as determined by the Refuge Representative and the actual amount of water made available to Reclamation by MID, and as determined by actual operations and measurements.

## Section 3.0 Affected Environment & Environmental Consequences

This section identifies the potentially affected environment and the environmental consequences involved with the Proposed Action as compared to the No Action Alternative. If Reclamation did not purchase 3,331 af of stored water from MID, there would be no change in management, and the Service would continue to manage the refuge without enhancing conditions for wildlife as required in CVPIA. There will be no further discussion of effects from the no action alternative as conditions would remain unchanged from current conditions.

### 3.1 Water Resources

#### 3.1.1 Affected Environment

The Merced River flows westerly from Yosemite National Park to the San Joaquin River. MID has a variety of Merced River water rights including pre-1914 water rights. MID's principal storage is Lake McClure, located on the Merced River, along with Lake McSwain, a regulating reservoir downstream of Lake McClure. Surface water is delivered to MID customers via a system of 790 miles of canals, laterals, and pipelines (City of Merced 2001). Lake McClure filled to capacity in 2017, and was storing 1,007,154 acre feet on July 2, 2017 (<http://www.mercedid.com/index.cfm/water/water-watch/> accessed August 21, 2017).

The Refuge is located east of the San Joaquin River, in Merced County. The Refuge includes Bear Creek and contains natural grasslands, vernal pools, riparian floodplain habitat, irrigated pasture and small-grain production lands. The Refuge is managed primarily for migratory waterfowl, shorebirds, marsh and water birds and their associated habitat types, as well as for listed species. The point of delivery between June and October is at the recorder located at Bear Creek where it intersects the Eastside Canal.

The Merced River flows into the San Joaquin River. Diversions of water at New Melones Reservoir, Millerton Lake, New Don Pedro Reservoir, and Lake McClure have significantly reduced the flows in the San Joaquin River (SWRCB, 2000). Reduced flows, combined with surface and subsurface saline discharge have caused salinity issues in the southern Delta.

#### 3.1.2 Environmental Consequences

The 3,331 AF of water purchased from MID this year represents less than four hundredths of one percent of total storage from July 2, 2017. Removing this amount of water from storage in 2017 would have no effect on how MID operates its reservoirs, and MID would continue to operate as defined in its current water rights and licenses.

The Proposed Action would result in beneficial effects on Bear Creek flows when water is sent downstream to the Refuge from Lake McClure. Due to the short-term period of this acquisition and the amount of water proposed for acquisition, little to no indirect or direct surface water or groundwater effects would occur. Additionally, water delivered to the Refuge wetland areas on a

schedule that meets Refuge water needs would allow the Service to enhance management of the Refuge, resulting in beneficial effect to wetland habitat areas.

Reclamation must provide sufficient fresh water to meet the SWRCB Vernalis flow and salinity objectives (SWRCB 2000). To avoid impacting Reclamation's Stanislaus River operations, releases from storage by MID would be required to be coordinated with Reclamation so that the replenishment of stored water in Lake McClure does not impact the releases of New Melones Reservoir or Reclamation's ability to meet these objectives. This requirement will be enforced through a refill agreement between Reclamation and MID.

## **3.2 Biological Resources**

### **3.2.1 Affected Environment**

The habitats present at the Refuge are natural valley grasslands and developed marsh. The Refuge is managed primarily for migratory waterfowl, shorebirds, marsh and water birds, and their associated habitat types as well as for listed species.

The Refuge, as part of the San Luis National Wildlife Refuge, provides wetland habitat as a major wintering ground and migratory stopover point for large concentrations of waterfowl, shorebirds and other waterbirds (USFWS 2012a). A rich botanical community of native bunchgrasses, native and exotic annual grasses, forbs, native shrubs, trees, and a variety of animal species are found within these areas.

### **3.2.2 Environmental Consequences**

The acquisition of water supplies under the Proposed Action would result in the Refuge temporarily receiving more water than the average amount of water utilized from intermittent Bear Creek flows under existing conditions. The additional water supplies would be delivered August through October, 2017, per the Agreement. The water would allow for improved management of the wetland habitat areas to benefit migratory and breeding waterfowl and other water birds within the Refuge per refuge management plans. There would be no change in facilities or operational conditions at the refuge, and no construction would be needed to facilitate use of this water.

The Proposed Action would result in short-term benefits to vegetation and wildlife resources at the Refuge, and there would be no effects to wildlife, including federally listed species.

## **3.3 Cumulative Impacts**

According to the Council on Environmental Quality regulations for implementing the procedural provisions of NEPA, a cumulative impact is defined as *the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions*. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time. Because there would be no

negative effects from implementing the proposed action, there would be no cumulative effects to consider.

## Section 4.0 Consultation

Agencies and persons consulted during preparation of this document.

- U.S. Fish and Wildlife Service
- Merced Irrigation District

## Section 5.0 References

California Environmental Protection Agency, State Water Resources Control Board. 2000. *Revised Water Right Decision 1641*.

City of Merced. 2001. *Merced Water Supply Plan Update, Final Status Report*. Prepared by CH2M Hill for City of Merced, Merced Irrigation District and UC California Merced.

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U.S. Fish and Wildlife Service. 2012a. San Luis National Wildlife Refuge. [http://www.fws.gov/sanluis/sanluis\\_info.htm](http://www.fws.gov/sanluis/sanluis_info.htm) Accessed: September 5, 2012.