RECLAMATION

Managing Water in the West

Environmental Assessment 18-31-MP

Refuge Water Acquisition Agreement with The Nature Conservancy and Semitropic Water Storage District

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

September 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.

Chapter 1 Introduction

The Bureau of Reclamation (Reclamation) proposes to enter into an agreement with The Nature Conservancy (TNC) and Semitropic Water Storage District (Semitropic) for the purchase of water for the Refuge Water Supply Program (RWSP), specifically Kern National Wildlife Refuge complex (Refuge) (Proposed Action). The Agreement will be effective from September 2018 through February 28, 2019. The Proposed Action, located in Kern County, California (Figure 1), would allow for the purchase of up to 1,000 acre-feet (AF) of Semitropic's acquired State Water Contractor's Dry Year Transfer Program (DYTP) water to be delivered as Incremental Level 4 (IL4) water for the Refuge. The Acquired Water would leave Semitropic's diversion #3 off the California Aqueduct and be routed to the Refuge via Gooselake Canal (Figure 2).

This Environmental Assessment (EA) satisfies the requirements of the National Environmental Policy Act (NEPA) (42 United States Code [USC] §4231 et seq.), the Council of Environmental Quality implementing regulations (40 Code of Federal Regulations [CFR] §1500-1508), and the Department of the Interior's NEPA regulations (43 CFR Part 46). Reclamation is the federal lead agency responsible for NEPA review of the proposed water acquisition. Environmental documentation has already been prepared that addresses the overall impacts of acquiring water supplies, the conveyance of water to the refuges, and use of water on the refuges. The overall impacts of implementing the CVPIA, including providing water supplies to the refuges, is addressed in a Final Programmatic Environmental Impact Statement (PEIS) (Interior 1999). Also, an Environmental Assessment/Initial Study (EA/IS) was prepared that addresses the conveyance of water to the KNWR (Conveyance of Refuge Water Supply EA/IS, October 2003), and an EA/IS was prepared that addresses the use of water on the Refuge (Refuge Water Supply, Long-Term Water Supply Agreements, January 2002).

This EA describes the potential effects of Reclamation purchasing water from Semitropic for the Refuge. Semitropic has offered its portion of the State Water Contractor's (SWC) DYTP water to all parcels within its service area, which includes the Refuge. Semitropic purchased the DYTP water as a member unit of the Kern County Water Agency (KCWA). KCWA, along with Dudley Ridge Water District (DRWD), have purchased water to be delivered during the fall/winter of 2018 from willing sellers north of the Delta as part of a series of temporary water transfers coordinated by the SWC DYTP. As a member of KCWA, Semitropic has already paid for the delivery of DYTP to its service area and water has already started being delivered and will be entirely delivered to Semitropic by the end of September 2018. The various sources of water being transferred as part of the DYTP have been approved through a variety of State Water Resource Control Board (SWRCB) temporary transfer orders, CEQA documents, and California Department of Water Resources (DWR) conveyance agreements. Transfer water is being made available through crop idling, groundwater substitution, and reservoir re-operations. This EA also identifies measures that have been incorporated to minimize or avoid project-related impacts. The purchase of water by Reclamation for the Refuge included in this EA only involves the purchase of DYTP, which would already be delivered to KCWA by DWR. This purchase would involve use of discretionary funds managed by the RWSP to purchase the water, where such discretionary use requires approval from Reclamation, thereby necessitating compliance with NEPA.

The DYTP is a term used by the SWC to coordinate through the SWC's group to pursue the acquisition of water from sellers in Northern California during years when State Water Project (SWP) allocations are extremely low, as was the case this year. Separate agreements are negotiated with each seller, and each seller is responsible for gaining approval for transferring their water. All transferred water being delivered to Semitropic through the DYTP has been fully vetted and approved by multiple regulatory entities as part of existing transfer review and approval protocols, including review by Reclamation, the SWRCB and DWR.

1.1 Background

KCWA and DRWD have purchased over 150,000 AF of water to be temporarily transferred from sellers north of the Delta as part of a multi-faceted DYTP coordinated by the SWC. KCWA has entered into purchase agreements with the various sellers and conveyance agreements to allow DWR to deliver the water via the California Aqueduct to the KCWA service areas, including Semitropic. As a member unit of KCWA, Semitropic is located in Kern County, mostly east of Interstate 5, west of U.S. Highway 43, west of the City of Wasco, east of the City of Lost Hills, and northwest of the City of Bakersfield.

In the 1960s, Semitropic's landowners approved implementation of a project, which included construction of main conveyance and distribution facilities extending easterly from the California Aqueduct of the SWP to farm delivery locations (Figure 2). The Aqueduct extends northwest-southeast to the west of Semitropic and along Interstate 5. Semitropic's Project was predicated on the conjunctive use of imported SWP water with the underlying groundwater resource.

In June 2018, the Semitropic Board of Director's authorized Semitropic to offer up to 14,000 AF of remaining DYTP water supply as an additional response to local water needs. The Refuge Water Supply Program on behalf of the Refuge is seeking up to 1,000 AF of this supply to help meet its water needs.

The Refuge was established in 1960 and consists of 11,249-acres of natural desert uplands, a relict riparian corridor, and developed marsh. Of the 11,249 acres that comprise the refuge, approximately 5,000 to 6,500 acres consists of seasonal wetlands, irrigated moist soil units, and riparian habitat. In addition, uplands total about 3,600 acres and are made up of grassland, alkali playa, and valley sink scrub habitats. Situated on the southern margin of what was once the largest freshwater wetland complex in the western United States, the Refuge provides optimum wintering habitat for migratory birds with an emphasis on waterfowl and water birds. Through restoration and maintenance of native habitat diversity, the Refuge also provides suitable habitat for several endangered species as well as preserving a remnant example of the historic valley uplands in the San Joaquin Desert. Approximately 8,200 visitors annually participate in refuge programs ranging from wildlife viewing to waterfowl hunting. (https://www.fws.gov/refuge/Kern/about.html)

Figure 1 – Location of DYTP source water, Semitropic, and KNWR

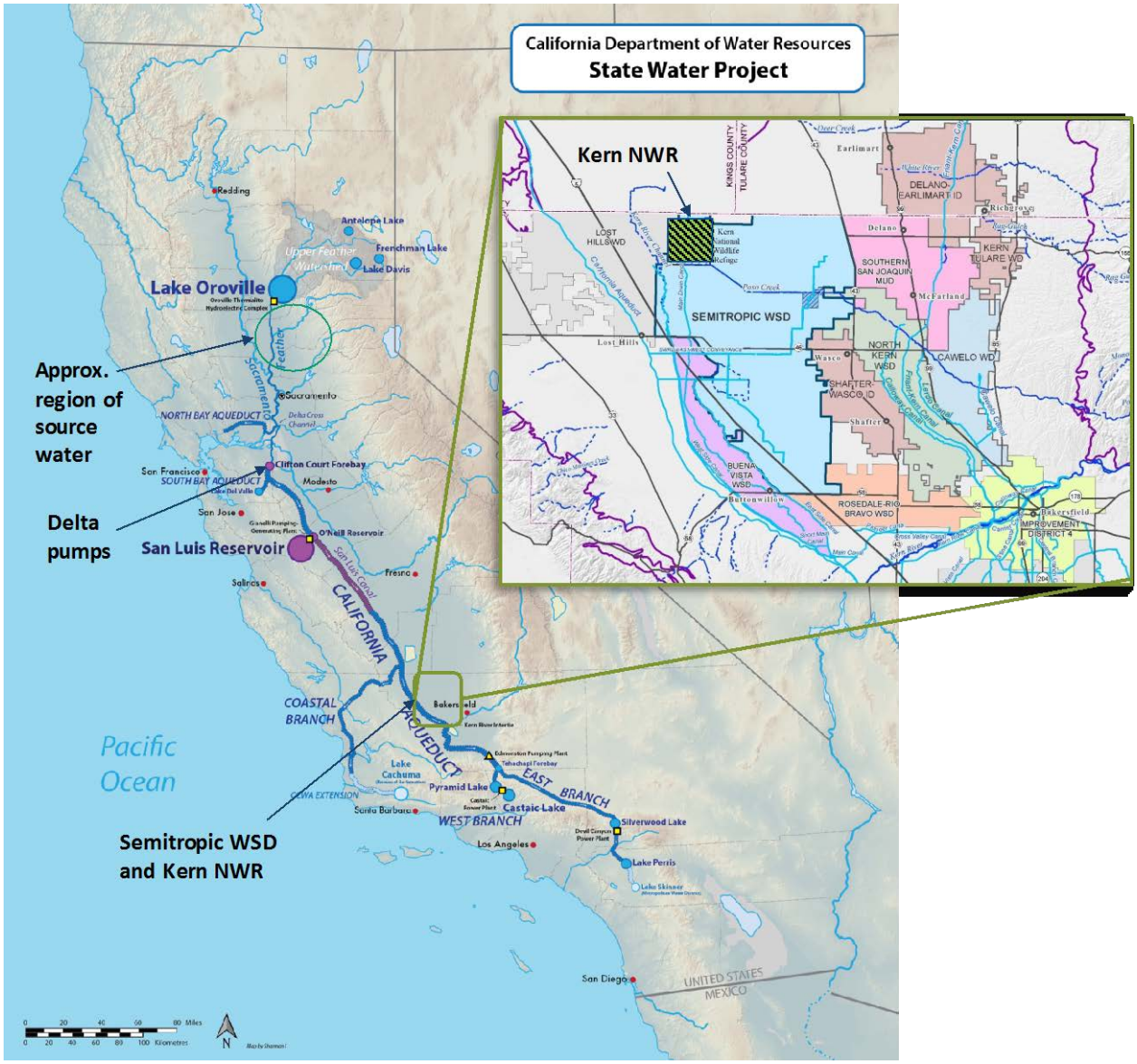
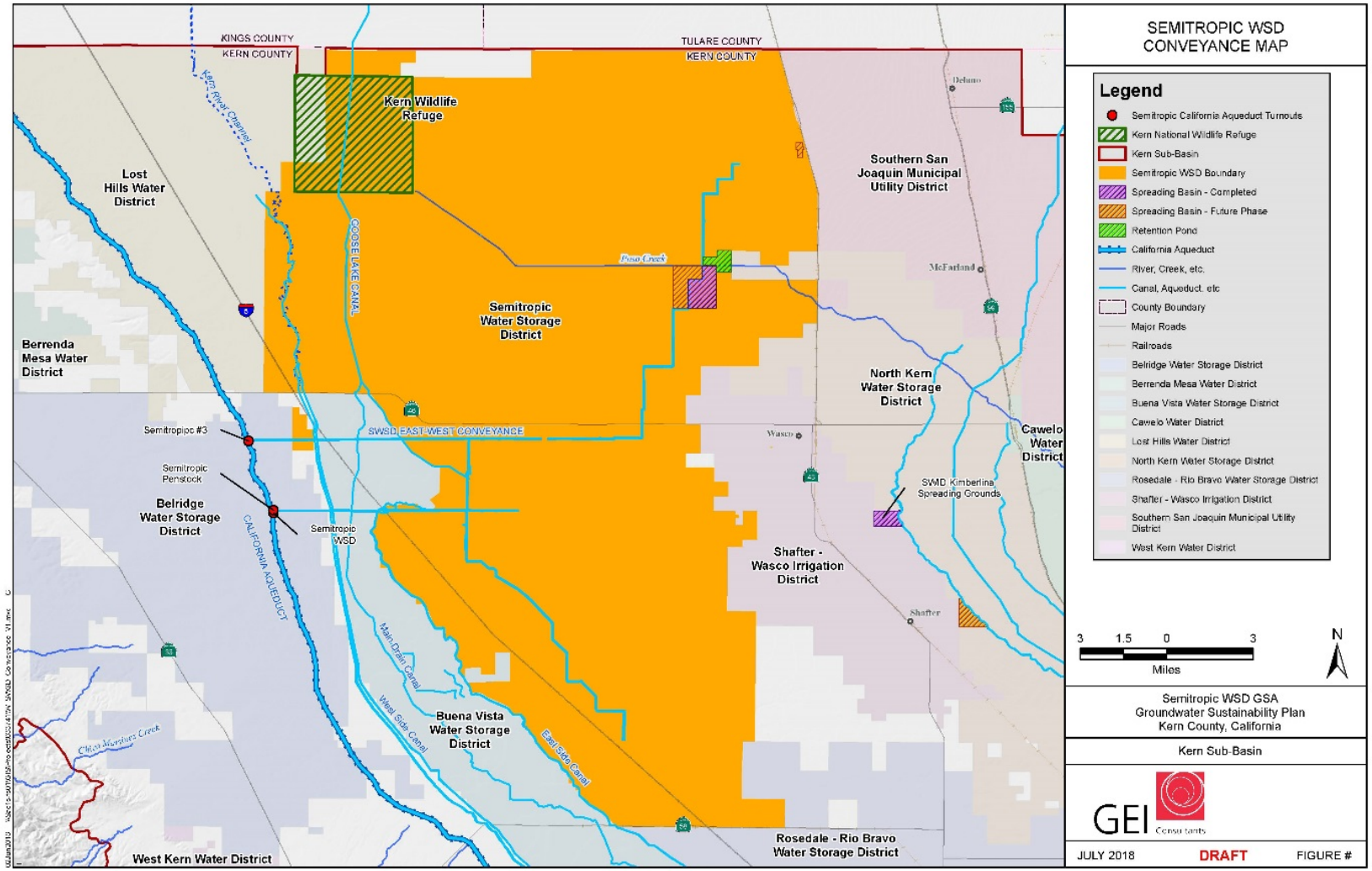


Figure 2 - Project Area Map: Delivery of Semitropic DYTP Water to KNWR from CA Aqueduct to SWRU East-West Conveyance, to Main Drain Canal to Refuge



1.1 Need for the Proposal

The need for the Proposed Action is to provide IL4 water supplies to the Refuge in accordance with requirements under Section 3406(d) of the Central Valley Improvement Act (CVPIA).

Chapter 2 Alternatives

2.1 No Action

Under the No Action Alternative, Reclamation would not purchase water from Semitropic for the Refuge. In the absence of the Reclamation purchase on its behalf, the Refuge may not have enough water to meet desired habitat objectives, which can adversely impact targeted wildlife that utilize the Refuge.

2.2 Proposed Action/Proposed Project

Reclamation's Proposed Action is to provide approval to the RWSP to purchase available DYTP water from Semitropic for delivery to the Refuge. Semitropic would deliver requested DYTP water to the Refuge using its existing northerly Aqueduct turnout (referred to as the SWRU East-West Conveyance), then routing water into the Gooselake Canal, which flows to the boundary of the Refuge (see Figure 2). The Refuge will request up to 1,000 AF of DYTP water be delivered to its boundary starting in the fall/winter of 2018 on a schedule mutually agreed upon by the Refuge and Semitropic.

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. Potential impacts to the following resources were considered and found to be minor so are not further discussed in this document. Brief explanations for the impacts are provided below:

- Indian Trust Assets (ITA): ITAs are legal interests in assets that are held in trust by the United States for federally recognized Indian tribes or individuals. The closest ITA to the Proposed Action activity is a Public Domain allotment about 45 miles to the northwest. Based on the nature of the planned work it does not appear to be in an area that will impact Indian hunting or fishing resources or water rights nor is the proposed activity on actual Indian lands. The Proposed Action does not have the potential to affect ITAs.

- 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: Executive Order 12898 requires each Federal agency to identify and address disproportionately high and adverse human health or environmental effects, including social and economic effects of its program, policies, and activities on minority populations and low-income populations. 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.

3.1 Water Resources

3.1.1 Affected Environment

Surface water in Semitropic consists of local surface water supplies and water provided under its contract with the KCWA through a SWP entitlement. The SWP water is pumped from the Delta and conveyed through the California Aqueduct. The SWP water can be stored in San Luis Reservoir for subsequent conveyance in the California Aqueduct to Semitropic.

Water is a critical component of wetland management, including not only quantity but also timing and availability. Early in the history of the Refuge, water was supplied by deep wells or purchased annually from local water districts, but eventually both became cost prohibitive. It wasn't until 1992, when Congress passed the CVPIA that the Refuge was provided with a reliable annual water supply. All wetlands are seasonal in nature. Fall flood-up begins in mid-August and reaches a peak of nearly 6,500 acres of flooded marsh habitat by January. Habitat is maintained through February after which a slow draining of the wetland begins. Selected units are irrigated during the late spring and early summer months to encourage plants to grow to provide food for wintering and migrating birds the following fall. (https://www.fws.gov/refuge/Kern/about.html)

3.1.2 Environmental Consequences

Semitropic has made water available to the Refuge in the past (1996/1997, 1997/1998, and 1999/2000) from their SWP entitlement. During past purchases, no changes in Delta operations occurred as compared to the No-Action Alternative. Likewise, no changes in the Delta operations would result from implementation of the Proposed Action. No reduction or change in CVP deliveries to agricultural, municipal, and industrial contractors would occur from implementation of the Proposed Action.

3.1.3 Cumulative Impacts

No adverse impacts to water resources would result from implementation of the Proposed Action, therefore, the Proposed Action would not contribute to cumulative impacts to surface water resources.

3.2 Biological Resources

3.2.1 Affected Environment

Semitropic lands are predominately agricultural, whereas, the Refuge is 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 is a favorite spot for thousands of birds that migrate through the Pacific Flyway. As spring arrives at the Refuge, the water levels begin to slowly be draw down as thousands of waterfowl begin their journey north. The exposed mudflats in late February and early March attract large numbers of shore birds to probe for food. White-faced Ibis, Black-necked Stilts, Greater Yellow Legs, Cattle, Snowy, and Great egrets all forage on the exposed invertebrates and amphibians. During the fall, migrating birds that use the Pacific Flyway begin to show up at the refuge. Thousands of waterfowl, mainly ducks, arrive at the Refuge and utilize the habitat. Northern Pintail, Green-winged Teal, Northern Shoveler, Gadwall, Greater White-fronted Geese, and White Geese are just some of the waterfowl species that arrive on the Refuge. As the fall season goes on the number of migrating birds on the Refuge fluctuates as some birds continue their migration south. During the winter, waterfowl numbers may peak to 80,000 in December and January. Large concentrations of waterfowl can be seen foraging in the moist soil and seasonal marsh areas. In late winter, waterfowl concentrate on storing energy for the spring migration back north. (https://www.fws.gov/refuge/Kern/about.html)

3.2.2 Environmental Consequences

Biological impacts and benefits associated with use of IL4 water on the Refuge have been previously addressed *(Refuge Water Supply Long-Term Water Supply Agreements, Reclamation, U.S. Fish and Wildlife Service, January 2001).* The Proposed Action does not change how water will be managed on the Refuge and no biological resources will be impacted as a result of the Proposed Action.

3.1.3 Cumulative Impacts

No adverse impacts to biological resources would result from implementation of the Proposed Action, therefore, the Proposed Action would not contribute to cumulative impacts to biological resources.

Section 4 Consultation and Coordination

This EA will be made available for public review and comment from September 10 through September 17, 2018.

Reclamation, U.S. Fish and Wildlife Service and The Nature Conservancy staff worked together on this Proposed Action, identifying the need for water delivery to the Refuge.

Section 5 References

Bureau of Reclamation. 1989. Report on Refuge Water Supply Investigations. March 1989.

_____. 2001. Refuge Water Supply Long-Term Water Supply Agreements. January 2001.

_____. 2002. Refuge Water Supply, Long-term Water Supply Agreements.

_____. 2003. Conveyance of Refuge Water Supply Environmental Assessment/Initial Study. October 2003.

Department of Interior. 1999. Final Programmatic Environmental Impact Statement for the Central Valley Project Improvement Act.

U.S. Fish and Wildlife Service. 2018. Kern National Wildlife Refuge website located at https://www.fws.gov/refuge/Kern/about.html