RECLAMATION

Managing Water in the West

Environmental Assessment

Acquisition of up to 40,000 Acre-Feet of Level 4 Refuge Water Supply from Westlands Water District (2017)

EA-17-20-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
CFR	Code of Federal Regulations
CVPIA	Central Valley Project Improvement Act
IL4	Incremental Level 4
ITA	Indian Trust Assets
L2	Level 2
L4	Level 4
MAF	Million acre-feet
Reclamation	Bureau of Reclamation
Refuges	South of Delta Refuges
RWSP	Department of the Interior Refuge Water Supply Program
Westlands	Westlands Water District

Section 1.0 Introduction

1.1 Background

This Environmental Assessment examines the environmental effects of the Department of the Interior Refuge Water Supply Program's (RWSP) acquisition of up to 40,000 acre-feet (AF) of water from Westlands Water District (Westlands) for Incremental Level 4 (IL4) water supplies for south of the Delta refuges (Refuges). 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.

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 "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).

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*)*. The purchase of up to 40,000 AF of water from Westlands would help Reclamation meet L4 water needs.

Section 2.0 Alternatives

2.1 No Action Alternative

Under the No Action Alternative, Reclamation would not purchase water from Westlands for delivery to the Refuges and requirements under CVPIA would not be met. Absent this water purchase, water available for acquisition from Westlands in 2017 would be held in storage in San Luis Reservoir. There would be no effects to storage in San Luis Reservoir or otherwise as a result of not purchasing incremental Level 4 water supply for the refuge, and the Fish and Wildlife Service, the Grassland Resources Conservation District, and the California Department of Fish and Wildlife would not be able to enhance management of the Refuges.

2.2 Proposed Action Alternative

The Proposed Action is for Reclamation to enter into an agreement with Westlands for a temporary water acquisition of up to 40,000 AF of water currently stored in San Luis Reservoir to help meet water supply needs for the Refuges through March 31, 2018.

The acquired water would be released from San Luis Reservoir and delivered to the Refuges via the Delta Mendota Canal, the California Aqueduct and other conveyance facilities to the Refuges' existing diversion points. The exact amount of water to be acquired each month will vary based upon the actual water needs of the Refuges as determined by the Refuge Representatives and the actual amount of water made available to Reclamation by Westlands, 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 up to 40,000 af of stored water from Westlands, there would be no change in management, and Refuge managers would continue to manage the refuges 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. Effects of the proposed action are compared to this condition.

3.1 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.

3.2 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.

3.3 Indian Trust Assets

The Proposed Action does not have a potential to affect Indian Trust Assets (ITA). 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.

3.4 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.

3.5 Water Resources

3.5.1 Affected Environment

Westlands Water District is located in the south western portion of the San Joaquin Valley, south of the San Luis Reservoir. Westlands receives its water from various sources, including a water service contract for approximately 1,150,000 acre-feet of water with Reclamation for Central Valley Project (CVP) water. The CVP consists of 20 dams and reservoirs, 11 power plants, and about 500 miles of major canals. Reclamation delivers about 7 million acre-feet of water for agricultural, urban, and wildlife use annually (Reclamation, 2017). Water is delivered to Westlands through the CVP by pumping water from the Sacramento-San Joaquin Delta and delivered 70 miles through the Delta-Mendota Canal to San Luis Reservoir. During the spring and summer, the water is released from San Luis Reservoir and delivered to Westlands through the San Luis Canal and the Coalinga Canal. Once it leaves the federal project canals, water is delivered to farms through 1,034 miles of underground pipe and more than 3,300 water meters (Westlands, 2017).

As of July 31, 2017, the 2017 water year saw precipitation at 165 percent of average, the snowmelt runoff was 220 percent of average, and reservoir storage was at 120 percent of average for this date. The unimpaired runoff for the Sacramento River Region was about 37.0 million acre-feet (MAF), which is about 217 percent of average; the San Joaquin River Region unimpaired runoff was about 17.5 MAF, which is about 258 percent of average; and, the Tulare Lake Region unimpaired runoff was about 7.0 MAF, which is about 241 percent of average. The 2017 water year was one of the wettest on record, and all CVP contractors were scheduled to receive 100% of their contractual supplies. Due to the extremely wet hydrology, many water districts are unable to take and use all of their contracted supply (Reclamation, 2017).
On July 5, 2017, San Luis Reservoir storage was about 2,012,100 AF, nearly 100 percent of the reservoir capacity (2,041,000 AF). On August 22, 2017, the reservoir was storing about 1,859,208 AF, 91 percent of capacity and nearly twice the average storage for this time of the year (DWR, 2017). Many of the CVP contractors storing water in San Luis Reservoir will be unable to utilize their contract amounts currently stored in the reservoir, including Westlands. In addition, Reclamation has capped the amount of carryover that will be approved for the 2018 water year to encourage use of the available supply to avoid constraining operations in 2018. Given the current storage amounts, and the cap on allowable carryover, water left in storage at San Luis Reservoir is likely to be lost as spill if Reclamation must curtail pumping in water year 2018 due to a shortage of space to store water being pumped from the Delta.

3.5.2 Environmental Consequences

The maximum of 40,000 AF of water to be purchased from Westlands this year represents about 3.5 percent of the water available through its contract for CVP water with Reclamation this year, and just under two percent of water in storage at San Luis Reservoir on July 5, 2017. Because of the extremely wet hydrology in water year 2017, San Luis Reservoir is well above average and CVP contractors are being asked to use as much of their contract supplies as possible. Use of

currently stored water in San Luis Reservoir will help Reclamation and DWR manage the reservoir in the coming water year by reducing the amount of water that may need to be carried over to water year 2018.

Because the water being purchased from Westlands is currently stored in San Luis Reservoir, and this water would not be used to meet contractual supplies in 2017, there would be no unmet demands within Westlands service area this year leading to a need for additional supplies. As with any water use, there is always the potential that water year 2018 could be exceptionally dry, leading to a decrease in available supply for water districts south of the Delta. However, given San Luis Reservoir is over 200 percent of storage for this time of year, it is highly unlikely 40,000 AF would impact next year's supply.

3.6 Biological Resources

3.6.1 Affected Environment

The habitats present at the refuges south of the Delta are natural valley grasslands and developed marsh. The refuges are managed primarily for migratory waterfowl, shorebirds, marsh and water birds, and their associated habitat types. Refuges south of the Delta provide wetland habitat as a major wintering ground and migratory stopover point for large concentrations of waterfowl, shorebirds and other waterbirds (USFWS 2012). 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. In compliance with CVPIA, Reclamation is required to provide specific amounts of water to wildlife areas and refuges south of the Delta. L2 is the average annual water supply provided to these areas, and L4 is the supply needed for optimum habitat management. 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 IL4 water. The RWSP acquires IL4 water supplies from willing sellers. The overall general impacts of implementing the CVPIA, including providing L4 water supplies to the refuges and the associated effects and benefits to various migratory waterfowl and listed species is addressed in the Central Valley Project Improvement Act Final Programmatic Environmental Impact Statement (Interior, 1999). The determination provided in this document is that there would be beneficial effects to species at the refuge by providing L4 water; this analysis is incorporated by reference.

3.6.2 Environmental Consequences

The acquisition of up to 40,000 AF of water from Westlands would constitute about thirty percent of the IL4 water needed each year. The additional water supplies would be delivered according to the needs of the refuges between execution of the contract to about March 31, 2018. 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 the National Environmental Policy Act, 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.

- Westlands Water District

Section 5.0 References

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