

RECLAMATION

Managing Water in the West

FINDING OF NO SIGNIFICANT IMPACT

**5-Year Refuge Level 2 Exchange Agreement with San Luis
Water District Project**

FONSI Number 16-22-MP

Recommended by:



Date:

10/20/2016

Bradley C. Hubbard
Natural Resource Specialist
Mid-Pacific Regional Office

Approved by:



Date:

10/21/2016

Richard J. Woodley
Resources Management Division Chief
Mid-Pacific Regional Office



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

Introduction

The Bureau of Reclamation (Reclamation) proposes to enter into a 5-year agreement with the San Luis Water District (District) for the exchange of Refuge Level 2 (L2) water from the Central Valley Project (CVP) for groundwater pumped from water supplies with the Modesto Properties (Proposed Action). The exchange would occur over the next five years and would involve up to 6,000 acre-feet per year (AFY) of groundwater developed by the District (in cooperation with Modesto Properties) and delivered to the East Bear Creek Unit of the San Luis National Wildlife Refuge (EBCU) for up to 3,000 AFY of L2 water made available to the District and up to 3,000 AFY delivered to South of Delta (SOD) Refuges.

Alternatives Including the Proposed Action

No Action:

The No Action Alternative would consist of Reclamation not approving the exchange of L2 water supplies with the District during the period ending February 28, 2021. The proposed up to 6,000 AFY of groundwater to be pumped as part of the Proposed Action would not be delivered to the EBCU. This could leave the refuge completely dry unless alternative sources of water can be acquired and conveyed to EBCU. The District would not receive L2 water supplies (equivalent to 50% of the up to 6,000 AFY delivered to the EBCU) delivered by Reclamation to help meet the District's water needs and other SOD refuges would not receive up to 3,000 AFY of Refuge Incremental Level 4 (IL4) water. The No Action alternative would reduce the overall refuge supplies (L2 and IL4) by up to 9,000 AFY.

Proposed Action:

Following the pilot project implemented from November 2015 - May 2016, the District proposes to continue funding over a 5-year period the costs associated with pumping groundwater supplies from existing private wells located within the Modesto Properties (up to 6,000 AFY) in exchange for L2 water supply (up to 3,000 AFY). The pumped groundwater would be discharged directly into Bear Creek and delivered to the EBCU to meet a component of its L2 water demand. The District in cooperation with Modesto Properties will oversee and coordinate the delivery of groundwater supplies to the EBCU. Operationally, once the Modesto Properties wetlands are at capacity, the groundwater wells would continue delivering water into Bear Creek via two existing structures. The water would then travel down Bear Creek less than one mile to the EBCU's pump station, prior to the confluence of the San Joaquin River where it would be lifted onto the EBCU. The rate of discharge to Bear Creek would be controlled at the two existing discharge structures that have historically been used to draw down the Modesto Properties wetlands and to allow flood waters to pass through the property.

Once the EBCU schedules delivery of its L2 water supply each fall, it is proposed that the District fund the cost to develop and deliver up to 6,000 AFY of groundwater in exchange for up to 3,000 AFY of L2 water. For every 2 AF of groundwater made available to the EBCU, the District will receive 1 AF of L2 water. The L2 exchange water will be made available to the District each month following the delivery of groundwater to the EBCU. This 2:1 exchange will provide water for EBCU and result in a refuge water supply benefit of up to 9,000 AFY, or up to

a total of 45,000 acre feet (AF) during the term of the agreement, of L2/IL4 water at no cost to Reclamation and up to 3,000 AFY, or up to 15,000 AF total during the term of the agreement, of new water supply for the District. The EBCU will pump 5% less water than provided by the District to account for conveyance losses.

The District will enter into an agreement with Reclamation for the exchange of water. The District, in cooperation with Modesto Properties, will be responsible for all water quality monitoring associated with the development of these groundwater supplies and insure that all water quality monitoring criteria and standards identified in the Monitoring and Mitigation Plan (**See Appendix 2 of the Environmental Assessment (EA) attached**) are met. The EBCU will provide the District and Reclamation monthly volumetric totals of the water pumped at the EBCU pump station.

The U. S. Fish and Wildlife Service (USFWS) plans to start taking delivery of L2 water at the EBCU in the fall of 2016 and plans to receive scheduled water deliveries through the fall of 2021. When the exchange agreement with Reclamation is executed and deliveries of groundwater to the EBCU begins, the exchange can be initiated. It is anticipated the wells will be operated for exchange purposes through the fall of 2021.

The District would be responsible for well operations and maintenance and for coordinating the delivery of groundwater into Bear Creek at times when the EBCU requests such water. Reclamation and USFWS staff would have access to the wells in order to independently test water quality and monitor flow. If water quality monitoring results do not meet the criteria set forth in the Monitoring and Mitigation Plan, the District would notify Reclamation and the exchange would cease until water quality criteria can be met.

Public Comment

The EA was published on September 30, 2016 for a 14-day public review period. No public comments were received.

Findings

Based on the attached EA, Reclamation finds that the Proposed Action is not a major Federal action that will significantly affect the quality of the human environment. The EA describes the existing environmental resources in the area of the Proposed Action, and evaluates the effects of the No Action and Proposed Action alternatives on specific resources. This EA was prepared in accordance with NEPA, CEQ regulations (40 CFR 1500-1508), and Department of the Interior regulations (43 CFR Part 46). Effects on several environmental resources were examined and found to be absent or minor. That analysis is provided in the attached EA, and the analysis in the EA is hereby incorporated by reference.

Following are the reasons why the Proposed Action's impacts are not significant:

1. The Proposed Action will not significantly affect public health or safety (40 CFR 1508.27(b)(3)).

2. The Proposed Action will not significantly impact natural resources and unique geographical characteristics such as historic or cultural resources; parks, recreation, and refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order (EO) 11990); flood plains (EO 11988); national monuments; migratory birds; and other ecologically significant or critical areas (40 CFR 1508.27(b)(3) and 43 CFR 46.215(b)).
3. The Proposed Action will not have possible effects on the human environment that are highly uncertain or involve unique or unknown risks (40 CFR 1508.27(b)(5)).
4. The Proposed Action will neither establish a precedent for future actions with significant effects nor represent a decision in principle about a future consideration (40 CFR 1508.27(b)(6)).
5. There is no potential for the effects to be considered highly controversial (40 CFR 1508.27(b)(4)).
6. The Proposed Action will not have significant cumulative impacts (40 CFR 1508.27(b)(7)).
7. The Proposed Action has no potential to affect historic properties (40 CFR 1508.27(b)(8)).
8. The Proposed Action will not result in adverse impacts to water resources or land resources. The Proposed Action would result in no substantial change or impact to CVP operations, or to Delta pumping by the CVP. The acquired water would be delivered to the EBCU via Bear Creek. Implementation of the Monitoring and Mitigation Plan would ensure that conveyance of water under this Proposed Action would not adversely impact existing water supplies or water quality. The Proposed Action would not adversely impact water conveyance facilities or activities within the EBCU. Instead, the additional deliveries through the Proposed Action would have the beneficial effect of helping meet L2 refuge needs during a period when there are physical constraints on providing the L2 supplies, as well as providing a supplemental water supply for agricultural use in the District.

Groundwater would be produced from 5 existing electrically powered wells and 2 existing wells powered by diesel generators. Groundwater would be pumped in an amount up to 6,000 AFY beginning in fall 2016 through the Fall of 2021. When compared to Modesto Properties' 2014 (the year prior to the pilot project) groundwater pumping, and taking into consideration the approximately 632 AF of water conserved from proposed wetland idling, Modesto Properties would pump an additional amount of up to 3,000 AFY. The actual amount of groundwater pumped would be dependent on the productivity of the wells and other factors, such as water quality and groundwater drawdown. All groundwater produced by the production wells would be discharged into Bear Creek and mixed with other waters in the creek (when present). All groundwater produced for this project would be used for refuge management purposes within the EBCU. Pumping would only occur if monitoring data indicates that water quality is suitable for refuge use and water quality standards provided in the Monitoring and Mitigation Plan are being met.

The District, in cooperation with Modesto Properties, will monitor groundwater depths at the wells. They will measure groundwater depths 24 hours prior to pumping, and then measure again at approximately the midpoint of the pumping period and prior to shutting down the wells at the end of the pumping period. They will then take another measure of groundwater depth approximately 24 hours after the pumping period ends to evaluate the recovery of groundwater levels.

The District and Modesto Properties will closely monitor water quality at the wells during the Proposed Action. The three major water quality constituents of concern are salinity (measured in TDS), boron, and selenium. These parameters were monitored during the 2015-2016 pilot project and no significant changes in water quality were detected. If any of the future water quality data collected over the next 5 years indicates that the use of a well(s) may adversely impact water quality, the mitigation measures, incorporated into the Proposed Action, as well as the Monitoring and Mitigation Plan, will be implemented. If groundwater is found to contain constituent concentrations above the Central Valley Regional Water Quality Control Board's (CVRWQCB) surface water thresholds, the well(s) production rate will be reduced or curtailed for purposes of the Proposed Action until flow conditions improve and water quality objectives can be achieved. The mitigation measures included in the Monitoring and Mitigation Plan will ensure that the groundwater supply developed during this Proposed Action will not significantly adversely impact surface water quality. If the monitoring indicates that threshold values are exceeded, mitigation measures will be implemented within 24 hours of identifying an exceedance.

Two of the seven wells pump from the aquifer above and below the Corcoran Clay (Wells 5 and 21), however, these two wells will be used mainly as secondary supply to maintain 10 cfs during flood up of the Modesto Properties wetlands and to get water to the EBCU's pumping plant for purposes of the Proposed Action. If the other primary wells (Wells 18, 20 and 24) are able to achieve 10 cfs, then Wells 5 and 21 would not be utilized. Pumping groundwater from below the Corcoran Clay will only be temporary and may not occur at all.

Due to the limited amount of proposed groundwater pumping, the Proposed Action is not expected to have adverse impacts to groundwater resources or subsidence trends.

9. The Proposed Action will not affect listed or proposed threatened or endangered species (40 CFR 1508.27(b)(9)).

10. The Proposed Action will not violate federal, state, tribal or local law or requirements imposed for the protection of the environment (40 CFR 1508.27(b)(10)).

11. The Proposed Action will not affect any Indian Trust Assets (512 DM 2, Policy Memorandum dated December 15, 1993).

12. Implementing the Proposed Action will not disproportionately affect minorities or low-income populations and communities (EO 12898).

13. The Proposed Action will not limit access to, and ceremonial use of, Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (EO 13007 and 512 DM 3).

14. The Proposed Action will not have significant air quality impacts. There would not be construction or ground disturbance. The Proposed Action involves operating two existing diesel generators (80 horsepower & 139 horsepower) to pump groundwater intermittently when the other 5 electricity-powered well pumps are not able to maintain a 10 to 15 cfs flow rate into Bear Creek. These diesel engine-powered well pumps would only be used as necessary and shut off when the electric well pumps can maintain the flows required to meet USFWS demands at the EBCU pump station. As backup wells, they would be operated for up to three months a year, between October and January, emitting up to: 0.01792 tpy of ROG, 1.5354 tpy of NO_x, 0.0852 tpy of PM₁₀, 0.0852 tpy of PM_{2.5}, and 203.5559 metric tpy of CO₂ equivalents. Emissions from operating the generators for up to three months a year for five years would be far below the federal conformity and local thresholds. Therefore, the Proposed Action is exempt from the General Conformity Regulations, and a Federal general conformity analysis report is not required. The Proposed Action would not conflict or obstruct with the California State Implementation Plan.