RECLAMATION
Managing Water in the West

FINDING OF NO SIGNIFICANT IMPACT

Volta Wells – 5-Year Incremental Level 4 Groundwater Pumping and Level 2 Diversification Project

FONSI Number 16-7-MP

Recommended by: _____ Date: 5/24/16

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Introduction

In accordance with Section 102(2)(c) of the National Environmental Policy Act of 1969 (NEPA), as amended, the Bureau of Reclamation (Reclamation) prepared an Environmental Assessment (EA) to evaluate and disclose any potential environmental impacts associated with its development of groundwater and entering into an agreement with the Del Puerto Water District (DPWD) and the San Luis Water District (SLWD) for the Volta Wasteway (VW) Wells (aka "Volta Wells") 5-Year Incremental Level 4 (IL4) Groundwater Pumping and Level 2 (L2) Diversification Project (Proposed Action).

This EA focuses on the potential impacts of pumping of up to 6,600 acre feet (af) of groundwater per year. Such groundwater would be a) delivered to certain South-of-Delta (SOD) Central Valley Project Improvement Act (CVPIA) designated federal wildlife refuges, state wildlife areas, and private wetlands (collectively referred to as "Refuges"), and b) exchanged for SOD Refuge Level 2 (L2) surface refuge water supplies with the DPWD and the SLWD. The Volta Wells are also located in the Volta Wildlife Area (VWA).

This Finding of No Significant Impact is supported by Reclamation's EA Number 16-7-MP, which is hereby attached and incorporated by reference.

Alternatives Including the Proposed Action

No Action: The No Action Alternative would consist of Reclamation not entering into an agreement with the DPWD and the SLWD to fund the pumping of groundwater supplies and/or exchange of Refuge L2 water for groundwater supplies to help meet SOD Refuges' demand for IL4 water, as well as exchange of Refuge L2 water for agricultural irrigation purposes. The pumping of the wells for purposes defined in this EA would not occur. Groundwater would not be developed and delivered to SOD Refuges to help meet IL4 refuge water needs. The volume of groundwater pumped would likely decrease. The DPWD and SLWD would not be able to utilize Refuge L2 water.

Proposed Action:
Reclamation proposes to diversify SOD Refuge L2 and supplement SOD Refuge IL4 water supplies by pumping groundwater from two groundwater wells located at the VW. Reclamation proposes to enter into an agreement with the DPWD and the SLWD to fund groundwater pumping in exchange for Refuge L2 Water (Proposed Action). The groundwater pumping is proposed as a 5-year action (June 2016 through February 2021). The Proposed Action will include monitoring well production, water quality, groundwater levels, and land subsidence. Monitoring would occur at each well location to confirm that groundwater quality is suitable for refuge use. Based on the data acquired, a determination could be made to modify or curtail the groundwater pumping operations at any time during the 5-year period to mitigate potential impacts.

The Volta Wells would collectively produce up to 6,600 AF of groundwater of acceptable quality annually, which can be conveyed to SOD Refuges. Monitoring data would be used to ensure that the Proposed Action would not result in significant impacts to any resources identified in this EA, including water quality within the delivery canals and groundwater levels

in the area of the Proposed Action. The Proposed Action would utilize existing facilities and would not involve any ground disturbance or construction. The groundwater would be conveyed down the VW to Pond 10 where the Grassland Water District (GWD) would divert the water into their internal conveyance system for distribution to various Refuges within the Grassland Resource Conservation District (GRCD). The Volta Wells could pump groundwater up to 24 hours a day all year long as long as the water is of acceptable quality that can be conveyed and used within SOD Refuges.

The groundwater pumping may be directly funded by Reclamation, or funded by DPWD and SLWD, in exchange for a smaller volume of Refuge L2 water supplies. The exchanged Refuge L2 water would be used for agricultural purposes within DPWD and SLWD.

The groundwater would be substituted in lieu of SOD Refuges receiving a portion their Refuge L2 surface water supply. In order for the exchange to be effective, the GRCD must be taking delivery of Refuge L2 surface water supplies during the groundwater pumping. The timing of the GRCD scheduled Refuge L2 water supply deliveries determines the availability of L2 diversified water.

The use of groundwater is expected to free up to 3,300 acre-feet of Refuge L2 water supply annually. The Refuge L2 water freed up by groundwater substitution would be delivered to the DPWD and the SLWD. The DWPD and the SLWD would utilize the Refuge L2 water supply within their service areas for reasonable and beneficial use. The Proposed Action would diversify Refuge water supply, improve water supply reliability, and minimize adverse impacts to CVP agricultural contractors.

Public Comment

Reclamation provided agencies and the public an opportunity to comment from April 29, 2016 through May 13, 2016. No public comments were received on the EA.

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 Proposed Action area, and evaluates the effects of the No Action and Proposed Action alternatives on specific resources. This EA was prepared in accordance with NEPA, Council on Environmental Quality 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 effects 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 not establish a precedent for future actions with significant effects; nor will it 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 cumulatively significant impacts (40 CFR 1508.27(b)(7)).

7. The Proposed Action will not 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.

Surface Water Impacts: The Proposed Action would not impact surface water supplies because a net increase or decrease in delivered SOD CVP surface water supplies would not occur. The total amount of CVP surface water delivered SOD would remain the same. Surface water and pumped groundwater would be comingled within the existing conveyance facilities to meet wildlife habitat needs. Westside agricultural water users would receive L2 refuge surface water supplies through exchange. Delivering Refuge L2 water to CVP agricultural contractors within the CVP Place of Use service area would not trigger new surface water resources' impacts or impacts of greater magnitude than those impacts already considered in the exchange parties' CVP contract.

Groundwater Impacts: Reclamation's June 1, 2010 Finding of No Significant Impact and Environmental Assessment analyzed the impacts of pumping the Volta Wells on local groundwater and geologic resources including the cumulative effects from associated with other local wells (Ingomar Packing Company and Morning Star Packing Company). This groundwater level and aquifer impact analysis included on pages 17-20 of Reclamation's existing NEPA Environmental Assessment for the *Volta Wildlife Area Level 2 Diversification/ Incremental Level 4 Development Pilot Project,* May 2010. This analysis on pages 17, 18, 19 and 20 of this 2010 EA is incorporated by reference. There are no new circumstances or changes in the action or its impacts that would result in significantly different environmental effects.

Subsidence Impacts: Although land subsidence has been measured within the Delta-Mendota Subbasin, most of it has occurred south and east of the GRCD and has been associated with pumping from the lower confined zone, beneath the Corcoran Clay. The area in the vicinity of the Proposed Action wells has not been identified as a critical land subsidence area. Subsidence is unlikely to occur as a result of the Proposed Action. Although pumping would occur from

beneath the Corcoran Clay, the total volume of groundwater produced is minimal when compared to regional groundwater pumping in the San Joaquin Valley. Most of the groundwater production in the San Joaquin Valley occurs above the Corcoran Clay. In addition, there would be sufficient recharge which would offset any decreases in pore pressure caused by the Proposed Action.

As part of the Groundwater Level and Subsidence Monitoring Plan included in the EA and as part of GWD's ongoing Groundwater Management Plan, GWD and other water districts included in the Proposed Action would collaborate with the San Luis & Delta-Mendota Water Authority and the Central California Irrigation District, which maintain local land subsidence monitoring programs. Reclamation will annually review the results of all of these monitoring programs and work with the monitoring agencies to the extent practical to address any regional problems associated with land subsidence.

Water Quality Impacts: Current groundwater monitoring plans require GWD to monitor for TDS, selenium, and boron in GWD's surface water channels. For selenium, the Regional Water Quality Control Board has established a maximum surface water concentration of 2 μg/L. There is no adopted surface water quality objective for boron within the GRCD, because boron is primarily an agricultural constituent of concern. If any water quality objectives are exceeded, Reclamation would modify groundwater pumping operations or curtail groundwater pumping until water quality objectives are again met.

Staff from the U.S. Fish and Wildlife and California Department of Fish and Wildlife reviewed and commented on the public draft Water Quality Monitoring Plan (WQMP). Minor clarification revisions were made to the WQMP to incorporate their recommendations for clarifying that electro-conductivity (EC) will be used as a surrogate for TDS and regular EC samples will be taken weekly to ensure that water quality objectives are not exceeded.

Under the Proposed Action, surface water quality sampling and analysis for selenium will be conducted upstream and downstream of well discharges to help ensure compliance with surface water quality objectives set by the RWQCB. If a surface water quality objective is exceeded groundwater pumping will be modified or curtailed or additional surface water will be routed into the receiving conveyance channel until surface water quality objectives are met. Weekly monitoring of the EC, pH and temperature upstream and downstream of each well discharge will continue. The water quality monitoring and reporting for the Proposed Action is described in the WQMP included in the EA.

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

Based on extensive biological monitoring occurring at this project site as part of the Volta Wells pilot project since 2011, direct and indirect impacts are not expected to occur from water quality affecting the prey base of the federally-listed as threatened giant garter snake (GGS). Groundwater from the two existing production wells would be pumped into the VW and then ultimately into the GWD conveyance system and delivered downstream throughout the GRCD, similar to all GWD refuge water supplies.

Extensive coordination with U.S. Fish and Wildlife Service (USFWS) staff has occurred with developing this 5-year project, particularly concerning biologic resources and water quality. In a memo dated February 19, 2016, Reclamation requested concurrence from the USFWS that the Proposed Action is not likely to adversely affect (NLAA) GGS. Reclamation completed informal Section 7 consultation with USFWS and received a NLAA concurrence Memorandum (dated May 23, 2016) from the USFWS prior to executing this FONSI.

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. 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).