

RECLAMATION

Managing Water in the West

DRAFT FINDING OF NO SIGNIFICANT IMPACT

Madera Irrigation District Long-Term Banking and Return Project with North Kern Water Storage District and/or Semitropic Water Storage District

FONSI 11-102

Recommended by:

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Introduction

In accordance with section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as amended, the South-Central California Area Office of the Bureau of Reclamation (Reclamation), has determined that an environmental impact statement is not required for the Madera Irrigation District (MID) Long-Term Banking and Return Project with North Kern Water Storage District (NKWSD) and/or Semitropic Water Storage District (Semitropic). This Finding of No Significant Impact is supported by Reclamation's Environmental Assessment (EA) Number 11-102, Madera Irrigation District Long-Term Banking and Return Project with North Kern Water Storage District and/or Semitropic Water Storage District, and is hereby incorporated by reference.

Background

Central Valley Project (CVP) water service contractors strive to prepare for varying water supply conditions so that agricultural and/or urban water supply needs can be met regardless of the water availability conditions. The ability to bank water supplies that exceed the current demand is one strategy that can be useful. The flexibility in the timing of delivery afforded by water banking would be advantageous to water agencies during the summer when water demand is at its peak and during years when supplies have been reduced.

There is a need for MID to maximize the beneficial use of its varied water resources. The propose of the proposed action is to preserve MID's water supplies that exceed current demand by banking excess water at NKWSD and Semitropic for later use as demand warrants.

Proposed Action

Under the Proposed Action, Reclamation would approve MID's delivery of its CVP Water for banking outside of their service area boundary to NKWSD and/or Semitropic for banking, contingent on the availability of wheeling capacity in the Friant-Kern Canal (FKC), or San Luis Canal (SLC).

At any time MID would be allowed to store a maximum of 100,000 acre feet of CVP water at NKWSD and/or Semitropic. Upon request, NKWSD and/or Semitropic could return up to a total of 20,000 acre feet per year to MID, Exchange Districts or Transfer Districts described in Environmental Assessment 11-102.

Findings

Reclamation's finding that implementation of the Proposed Action will result in no significant impact to the quality of the human environment is supported by the following findings:

Water Resources

Exchange District Water Supplies: All potential exchanges would require the consent of the potential Exchange Districts. The Exchange Districts that would directly or indirectly exchange water being delivered to NKWSD or Semitropic for banking, being returned to MID and/or being transferred to Transfer Districts merely represent avenues through which the Proposed Action would be implemented. The Exchange Districts would not experience any loss or gain in

water supply that would impact their respective water resources. The Proposed Action would not interfere with the normal operations of any Exchange District, nor would it impede any State Water Project (SWP) or CVP obligations to deliver water to other contractors or to local fish and wildlife habitat. In the case of Arvin Edison, exchanges entailing conveyance of Delta Export Water through the CVC and into the FKC have the potential to impact the quality of water entering that district. Therefore, potential exchanges involving this operation would require the consent of Arvin Edison as per Article 9 of the “Contract Among Kern County Water Agency and Various Parties for the Operation of the Cross Valley Canal, Extension and Intertie” (November 15, 2006).

Transfer District Water Supplies: The Proposed Action would not increase or decrease the amount of CVP water each Transfer District is entitled to under their contract with Reclamation. Neither a Transfer District nor any CVP or SWP water user would be changing historic land and water management practices as a result of the Proposed Action. CVP operations and facilities would not vary considerably under either alternative. There would be no adverse impacts to participating districts and their respective CVP water supplies.

Under the Proposed Action, Transfer Districts that wish to recover MID water banked at NKWSD or Semitropic would provide Reclamation with advance notice of any proposed transfer so that Reclamation could determine if the action is consistent with the Proposed Action description and to coordinate with the Friant Water Authority (FWA), the Kern County Water Agency (KCWA) and/or the Department of Water Resources (DWR) to make sure that excess capacity exists within the facilities that would be used to convey the recovered water. In addition, coordination would ensure that Reclamation’s obligations to deliver water to other CVP contractors, wildlife refuges, and other requirements would not be adversely impacted by the Proposed Action. There would be no adverse impacts to CVP facilities.

Conveyances: No new facilities would be needed as a result of the Proposed Action. The 1994 Semitropic Groundwater Banking Project Environmental Impact Report (EIR) evaluated potential impacts of the Banking Program operations on the timing of diversions from the Delta. Those studies determined that the timing of these diversions are regulated through operational restrictions under a number of agreements and biological opinions designed to protect sensitive fish species and on this basis, Semitropic operations would not considerably impact the timing of diversions from the Delta (Semitropic 1994). The Proposed Action would be regulated by the same operational restrictions. The Proposed Action would not alter the quantity or timing of diversions from the Delta.

Reclamation, the FWA, the KCWA, the DWR and the Kern River Watermaster manage the FKC, the CVC, the California Aqueduct/San Luis Canal and the Kern River respectively. Delivery of water for recharge and conveyance of recovered banked water involved with the Proposed Action would occur during times when these agencies determine that there is excess capacity. Taken together, the Proposed Action would not have adverse impacts on conveyance facilities or surface water resources.

Groundwater Levels: The Proposed Action would result in a small net increase in groundwater levels since more surface water would be delivered to the groundwater sub-basin underlying

NKWSD and Semitropic than would have occurred absent the project because ten percent of all recharged MID water would be contributed to the basin. The Proposed Action would not deplete groundwater supplies or interfere with groundwater recharge (that would otherwise occur). Taken together, the Proposed Action could result in a net rise in groundwater levels within the San Joaquin River and Tulare Lake Hydrologic Regions.

Water Quality: Application of MID's CVP water from the FKC for recharge in NKWSD and Semitropic could result in a beneficial impact to groundwater quality since the quality of FKC water is better than that of the underlying aquifer. Therefore, the Proposed Action could have beneficial impacts on groundwater resources.

As per existing operations and previously approved actions, during pump-in of banked water from NKWSD and Semitropic, the districts would be required to comply with Reclamation (FKC), KCWA (CVC) and/or the DWR (California Aqueduct) then-current monitoring requirements and criteria for introduction of water into the relevant conveyance(s). If monitoring indicates that the melded quality of water fails to meet criteria for pump-in to one of these conveyances, then program pump-in operations would be constrained, altered or halted until testing, operational adjustments and/or treatment have demonstrated to the applicable agencies that the water quality is sufficiently acceptable so as not to impact other stakeholders receiving water from the conveyance(s).

Certain transfer and exchange operations would entail conveyance of Delta export water through the CVC and into the FKC. The KCWA regulates the quality of water conveyed through the CVC. However, because the intake to the Arvin Edison Canal is less than 100 feet from the FKC-CVC intertie, these operations have the potential to impact the quality of water entering Arvin Edison. Reclamation recognized the potential for this impact in Delano-Earlimart Irrigation District and Rosedale-Rio Bravo Water Storage District Banking Program: 2010-2026, EA-FONSI-09-92 (January 2010) and required a supplemental monitoring program near the Arvin Edison Canal intake. In recognition of this issue, under this proposed program, potential operations that would entail conveyance of Delta Export water through the CVC and into the FKC would require:

- Consent of the KCWA and compliance with KCWA monitoring and water quality requirements for wheeling through the CVC;
- Consent of Reclamation and compliance with the then-current Reclamation monitoring and water quality requirements for discharge to the FKC;
- Consent of Arvin Edison and compliance with any supplemental monitoring requirements that Arvin Edison may have as per Article 9 of the "Contract Among Kern County Water Agency and Various Parties for the Operation of the Cross Valley Canal, Extension and Intertie" (November 15, 2006).

Taken together, there would be no adverse impacts to water resources as a result of the Proposed Action.

Land Use

The Proposed Action would not require the modification or construction of new conveyance facilities nor would it induce the construction of any new homes or businesses, or road extensions or other new infrastructure. The Proposed Action would not increase or decrease the amount of CVP water MID, the Transfer Districts or the Exchange Districts are entitled to under their contracts with Reclamation. Therefore, the Proposed Action would not result in increased or decreased water that would induce growth or land use changes.

Biological Resources

Biological Resources: Section 7 of the Endangered Species Act requires Federal agencies, in consultation with the Secretary of the Interior and/or Commerce, to ensure that their actions do not jeopardize the continued existence of endangered or threatened species, or result in the destruction or adverse modification of the critical habitat of these species.

Reclamation's Biology Branch issued a determination on February 1, 2012 that there would be no effect on Federally listed or proposed species or critical habitat, so no consultation with either the U.S. Fish and Wildlife Service or the National Marine Fisheries Service is required. Reclamation will notify the U.S. Fish and Wildlife Service of the availability of the draft Environmental Assessment and Finding of no Significant Impact.

Cultural Resources

Cultural Resources: Cultural Resources is a broad term that includes prehistoric, historic, architectural, and traditional cultural properties. The National Historic Preservation Act (NHPA) of 1966 is the primary Federal legislation that outlines the Federal Government's responsibility to cultural resources. Section 106 of the NHPA requires the Federal Government to take into consideration the effects of an undertaking on cultural resources listed on or eligible for inclusion in the National Register of Historic Places (National Register). Those resources that are on or eligible for inclusion in the National Register are referred to as historic properties.

Reclamation's Cultural Resources Branch issued a determination on January 4, 2012 that the Proposed Action has no potential to cause effects to historic properties pursuant to 36 CFR Part 800.3(a)(1).

Indian Sacred Sites

Indian Sacred Sites: Reclamation is required by EO 13007, to the extent practicable permitted by law, and not clearly inconsistent with essential agency functions, to: (1) accommodate access to, and ceremonial use of, Indian sacred sites by Indian religious practitioners; and (2) avoid adversely affecting the physical integrity of such sacred sites. When appropriate, Reclamation shall, to the greatest extent possible, maintain the confidentiality of sacred sites.

The Proposed Action would not inhibit access to or ceremonial use of an Indian Sacred Site, nor would the Proposed Action adversely affect the physical integrity of such sacred sites.

Indian Trust Assets

Indian Trusts Assets: Indian trust assets (ITA) are legal interests in assets that are held in trust by the United States Government for federally recognized Indian tribes or individuals.

Reclamation's ITA Branch issued a determination on January 4, 2012 that there are no ITA within the Proposed Action area and therefore the proposed action does not have a potential to affect ITA.

Environmental Justice

Environmental Justice: The February 11, 1994, Executive Order 12898 requiring Federal agencies to ensure that their actions do not disproportionately impact minority and disadvantaged populations went into effect. The Proposed Action does not propose any features that would result in adverse human health or environmental effects, have any physical effects on minority or low-income populations, and/or alter socioeconomic conditions of populations that reside or work in the vicinity of the Proposed Action.

Socioeconomic Resources

The Proposed Action would provide water supply reliability to MID and Transfer Districts that would help to sustain existing croplands. Businesses and farm workers rely on these crops to maintain jobs. Conditions would remain the same as existing conditions and there would be no adverse impacts to socioeconomic resources. The Proposed Action would continue to support the economic vitality in the region; therefore, there would be no adverse impacts to socioeconomic resources.

Air Quality

Air Quality: Section 176 (C) of the Clean Air Act [CAA] (42 U.S.C. 7506 (C)) requires any entity of the federal government that engages in, supports, or in any way provides financial support for, licenses or permits, or approves any activity to demonstrate that the action conforms to the applicable State Implementation Plan (SIP) required under Section 110 (a) of the Federal CAA (42 U.S.C. 7401 [a]) before the action is otherwise approved.

Under the Proposed Action, MID water would be conveyed into storage generally through gravity flow. Banked water would be recovered using NKWSD and Semitropic wells that are equipped with electric motors and therefore have no direct emissions. The air quality emissions from electrical power have been considered in environmental documentation for the generating power plants that supply the system. There are no direct emissions from electrical motors and therefore a conformity analysis is not required under the CAA and there would be no impact on air quality. The Proposed Action would not involve any construction or land disturbing activities that could lead to fugitive dust emissions and/or exhaust emissions associated with the operations of heavy machinery.

Global Climate

Global Climate Change: The EPA has issued regulatory actions under the CAA as well as other statutory authorities to address climate change issues (EPA 2011c). In 2009, the EPA issued a rule (40 CFR Part 98) for mandatory reporting of Greenhouse Gases (GHG) by large source emitters and suppliers that emit 25,000 metric tons or more of GHG [as CO₂ equivalents (CO_{2e}) per year] (EPA 2009). The rule is intended to collect accurate and timely emissions data to guide future policy decisions on climate change and has undergone and is still undergoing revisions (EPA 2011c). In 2006, the State of California issued the California Global Warming Solutions

Act of 2006, widely known as Assembly Bill 32, which requires California Air Resources Board (CARB) to develop and enforce regulations for the reporting and verification of statewide GHG emissions. CARB is further directed to set a GHG emission limit, based on 1990 levels, to be achieved by 2020.

As there are no direct emissions from gravity flow or electric pumps, the Proposed Action would not increase GHG emissions.

Cumulative Impacts

Council on Environmental Quality regulations implementing NEPA define cumulative impacts 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 actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Existing or foreseeable projects that could affect or could be affected by the Proposed Action include:

MID Water Supply Enhancement Project: Reclamation approved an Environmental Impact Statement and Record of Decision for a project to recharge and recover up to 55,000 AF per year of Friant, Hidden Unit and Pre-1914 water in a 250,000 AF water bank that will be owned and operated by MID. This project is at least several years away from full-build out and therefore, in the interim, MID is pursuing the Proposed Action. To the degree that the Water Supply Enhancement Project comes online during the period of this Proposed Action, MID intends to reduce reliance on the Proposed Action and correspondingly ramp up banking at MID's facility.

FONSI/EA-10-052 Accelerated Water Transfer Program (AWTP) for Friant Division and Cross Valley Central Valley Project Contractors, 2011-2015: Reclamation approved continuation of a five-year AWTP, that provides a streamlined process for annual transfers and/or exchanges of Friant Division CVP water between eligible Friant Division and CVC Contractors within the same geographical area who can receive CVP service from Friant Division facilities and who possess CVP interim or long-term water service contracts, or repayment contracts.

FONSI/EA-09-92 Delano-Earlimart Irrigation District (DEID) and Rosedale-Rio Bravo Water Storage District (RRBWSD) Banking Program 2010-2026: Reclamation approved DEID's delivery of its CVP and 215 Water (when available) supplies for banking outside of their service area boundary in RRBWSD. DEID will deliver up to 80,000 AF per year to RRBWSD for banking from March 2010 through February 2026. DEID will be allowed to store up to 100,000 AF maximum at any one time, and RRBWSD will return up to 10,000 AF per year to DEID upon request.

SEA-09-74 Amendment to the Storage and Exchange of Central Valley Project Water Delano-Earlimart Irrigation District to North Kern Water Storage District: The extension of water banking through 2026 and the addition of uncontrolled spill from Millerton Reservoir (Section 215 water) to the Class 1 and Class 2 CVP water to be banked.

SEA-09-62 Meyers Farm Water Banking Project Addition of Banta Carbona Irrigation District Supplies: The annual banking, extraction, and exchange of up to 5,000 AF of Banta Carbon

Irrigation District's pre-1914 San Joaquin River water rights water in Meyers Farm Water Bank over a 22 year period.

EA-09-157 Storage and return of Westlands Water District's Central Valley Project Water in Semitropic Water Storage District: The banking of 50,000 AF of Westlands Water District's 2009-2010 CVP allocation in Semitropic by March 1, 2010 and the annual recovery of up to 20,000 AF as needed within 10 years of the initial banking deposit.

FONSI-09-164 City of Tracy Long-term Central Valley Project Water Groundwater Banking with Semitropic Water Storage District: The long-term groundwater banking program will include the banking of up to 10,500 AF per year of Tracy's available CVP surface water supplies within Semitropic.

San Joaquin River Restoration Settlement: As part of the San Joaquin River Restoration Settlement (Settlement), the Water Management Goal aimed to reduce or avoid adverse water supply impacts to all of the Friant Division long-term contractors that may result from the Interim and Restoration Flows provided for in the Settlement. As a result, Reclamation is currently developing plans for Recaptured, recapture, reuse, and exchange or transfer of Interim and Restoration Flows. Specifics for these plans are currently unknown; however, one proposal involves recapturing the flows from the Delta and Recaptured through the California Aqueduct. The flows would then be introduced into the FKC via the CVC for ultimate delivery to Friant Division CVP contractors. Installation of permanent pump-back facilities at key check structures would allow reverse-flow in the FKC for direct delivery to the contractors upstream of the CVC introductory point.

EA-09-157 Storage and return of Westlands Water District's Central Valley Project Water in Semitropic Water Storage District: The banking of 50,000 AF of Westlands Water District's 2009-2010 CVP allocation in Semitropic by March 1, 2010 and the annual recovery of up to 20,000 AF as needed within 10 years of the initial banking deposit.

The Proposed Action and other similar projects would not interfere with the projects listed above, nor would it hinder the normal operations of the CVP and Reclamation's obligation to deliver water to its contractors or to local fish and wildlife habitat. The FWA manages the FKC, on Reclamation's behalf, such that capacity must exist before any movement of water is scheduled under the Proposed Action. Similarly, the KCWA must determine that there is excess capacity before water involved with the Proposed Action is allowed to enter the CVC so as not to impact any stakeholders that normally receive their water supply from the CVC. Likewise, the DWR and Reclamation would make determinations that there is excess capacity before water involved with the Proposed Action is allowed to enter the California Aqueduct/San Luis Canal so as not to impact any stakeholders that normally receive their water supply from SWP and CVP Delta Exports. The Kern River Watermaster would also have to determine that the Kern River is able to accommodate certain operations under the Proposed Action. Therefore, when taking into consideration other similar existing and/or future actions, the implementation of the Proposed Action would not have adverse cumulative impacts on the normal operations of the conveyance facilities involved.

The banked water recovery wells involved with this project are located within NKWSD's and Semitropic's existing banking facilities and through implementation of Monitoring Committee

requirements, would not interfere with any private wells. Groundwater levels in the area would also rise slightly since 10 percent of recharged water will be left behind. In addition, the groundwater level underlying MID and the Transfer Districts could experience beneficial cumulative impacts over the course of this project because landowners in these districts would need to rely less on groundwater pumping during years with surface water shortages.

Application of better quality CVP water from the FKC over the course of the project (including other similar existing and/or foreseeable projects) for recharge would result in a beneficial cumulative impact to groundwater quality in the Kern County Groundwater Sub-basin. The Proposed Action, when added to other similar existing and proposed actions, may result in beneficial cumulative impacts to overall groundwater resources in the project area on a small scale.

The use of this water upon return to MID or Transfer Districts would be to maintain current land uses that are predominantly the growing of crops on existing agricultural lands. Since there would be no cumulative adverse impacts to water quality, it is then anticipated that lands receiving this water would not be adversely impacted. No native or previously untilled lands would be put into production. The Proposed Action would maintain existing land uses and would not contribute to cumulative changes or impacts to land uses or planning. Therefore, there would be no cumulative effects to land use as a result of the Proposed Action.

Under the Proposed Action, the ability to manage varied water resources could help maintain agricultural production and local employment in MID and the Transfer Districts. Since there is no construction or other impacts that could disproportionately affect minority or disadvantaged populations, there are no cumulative adverse impacts involving socioeconomic or environmental justice interests. Since there is no construction or other ground disturbing actions there are no cumulative adverse impacts involving ITAs or Indian sacred sites.

The Proposed Action itself has no adverse impacts on air quality because well pumps are operated using electric motors and the amount of well pumpage would be approximately equal to that under the No Action Alternative (although at different times and places in the same air basin. Therefore, cumulative impact emissions from the power plants serving electricity to the pumps for the Proposed Action would still be below the de minimis thresholds.

CVP water allocations are made dependent on hydrologic conditions and environmental requirements. Since Reclamation operations and allocations are flexible, any changes in hydrologic conditions due to global climate change would be addressed within Reclamation's operation flexibility and therefore water resource changes due to climate change would be the same with or without the Proposed Action.