RECLAMATION
Managing Water in the West

Draft Finding of No Significant Impact

Arvin-Edison Water Storage District and Metropolitan Water District 10-year Water Transfer/Exchange Program

FONSI-13-026

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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 Arvin-Edison Water Storage District and Metropolitan Water District 10-year Water Transfer/Exchange Program. This Finding of No Significant Impact (FONSI) is supported by Reclamation's Environmental Assessment (EA) 13-026, and is hereby incorporated by reference.

Reclamation intends to provide the public with an opportunity to comment on the Draft FONSI and Draft EA between November 21, 2013 and December 21, 2013 followed by completion and posting of the final EA and final FONSI on Reclamation's environmental document website. This timeframe supersedes the 15-day period originally posted due to concerns expressed by some Federal contractors within the Friant Division.

Background

In December 1997, AEWSD entered into a long-term Water Management Program (Program) with MWD. Under the Program, a portion of MWD's State Water Project (SWP) supply (up to 388,889 acre-feet [AF] which equates to approximately 350,000 AF after a 10 percent loss factor is applied) could be banked within AEWSD's groundwater bank at any one time. Upon request, AEWSD would return MWD's banked SWP water. These same actions have been employed past water years whereby AEWSD substituted and exchanged AEWSD's Central Valley Project (CVP) surface water for MWD SWP water (including previously banked water). This has resulted in an effective and efficient water management program.

Proposed Action

There are three components to the Proposed Action.

Groundwater Banking
MWD stores a portion of its SWP supply in CVP contractor AEWSD's groundwater banking facilities depending on annual allocations. If requested, AEWSD is obligated to return previously banked SWP water to MWD. In the absence of this proposed exchange, previously banked SWP water can only be recovered from the AEWSD banking facilities through groundwater extraction. The expansion of the CVP place of use (separate action) and the approval of the Proposed Action will allow AEWSD the option and flexibility to return MWD's banked water through an exchange of its available CVP Delta/San Luis Reservoir, or Friant surface supplies (CVP water). The exchange will allow AEWSD greater flexibility in the scheduling and use of its CVP supplies as well as a reduction in energy and costs associated with groundwater extraction. CVP water supplied to MWD by AEWSD in lieu of extraction to recover previously stored SWP water will result in a balanced exchange or one-for-one reduction of MWD's groundwater banking account with AEWSD. The exchange will occur only to the extent MWD has a positive bank account. Upon return of water to MWD, MWD's previously banked SWP water would transfer to AEWSD.

Regulation Program
Additionally, the approval of the Proposed Action and the change in place of use would allow AEWSD to deliver CVP water supplies to MWD first, and receive back SWP water supplies in exchange at a later time. This program better facilitates the use of AEWSD CVP water supplies that have a limited opportunity for use under current CVP operations. The ability to regulate water in this manner reduces the need to directly recharge and subsequently extract water on a one-for-one basis.

Fall/Winter Supplies Exchange
In the event that hydrologic conditions permit, and AEWSD believes that there may be limited ability to carry over CVP supplies in CVP reservoirs, AEWSD CVP water supplies would be delivered to MWD to reduce risk of spill and subsequent potential forfeiture of CVP water supplies. The CVP water will be delivered to MWD by exchange in San Luis Reservoir or directly into the California Aqueduct via the Friant Kern Canal and AEWSD facilities (including the Cross Valley Canal). MWD would later return a lesser amount (return 2 acre-feet for every 3 acre-feet regulated) to AEWSD. The unbalanced nature of the exchange reflects the compensation to MWD for its water management services, which would protect a portion of the water from spilling and loss. In the absence of the exchange with MWD, AEWSD would attempt to avoid spilling the water by delivering the available CVP contract supplies to groundwater banking programs within the AEWSD service area or other areas that are within the CVP place of use.

One of the benefits of the above exchanges is reduction of the impacts to AEWSD of the San Joaquin River Restoration Program (SJRRP). The exchanges increase AEWSD's ability to efficiently use water supplies and increase the opportunities to reduce impacts of SJRRP releases to AEWSD via recapture, regulation and return.

The proposed exchanges total up to 100,000 acre-feet (AF) per year of CVP water supplies for all three program components described above. CVP Delta supplies will be provided as stated above. Friant Division CVP water will be provided directly via delivery from the Friant-Kern Canal and AEWSD's distribution system, including its connections to the California Aqueduct at Milepost 227 (Reach 14C) or via its capacity in the Cross Valley Canal to the California Aqueduct at Tupman/Milepost 238 (Reach 12E).

Reclamation proposes to approve AEWSD's request to exchange/transfer a portion of its CVP water supply for MWD's SWP supply (including previously banked supplies). The delivery of up to 100,000 AF per year from AEWSD to MWD could include the following CVP water types:

- Class 1;
- Class 2;
- SJRRP Recovered Water Account Article 16(b);
- Recaptured SJRRP Interim Flows (including those supplies made available through transfers/exchanges as analyzed in the 2010, 2011 and 2012 EA for recirculation of recaptured interim flows as well as subsequent/future SJRRP environmental documentation);
- Section 215 water supplies, to the extent Section 215 water is declared by Reclamation and is available to AEWSD.

The Proposed Action is contingent upon approval by the State Water Resources Control Board SWRCB to consolidate the Change of Place of Use (CPOU), and would only occur during the timeframe for which the CPOU is in effect. It shall be noted that the SWRCB has already approved a CPOU from July 1, 2013 through June 30, 2014 for this Proposed Action as well as other programs (reference SWRCB Order dated July 1, 2013).

AEWSD is located on the southern end of the San Joaquin Valley in Kern County and MWD is located in Southern California. The timeframe for this environmental analysis would be for 10 years from the approval of the Final EA/FONSI. The timeframe for the contracts over this 10-year period would be from the approval date of the EA/FONSI through the remainder of the 10-year period as long as a CPOU is in place.

Environmental Commitments

AEWSD and MWD will implement the following environmental protection measures to reduce environmental consequences associated with the Proposed Action (Table 1). Environmental consequences for resource areas assume the measures specified would be fully implemented.

Table 2.1 Environmental Commitments

Resource	Environmental Commitment
Biological Resources	The Proposed Action may not involve the conversion of any land fallowed and untilled for three or more years. The Proposed Action may not change the land use patterns of cultivated or fallowed fields that potentially have some value to listed species or birds protected by the Migratory Bird Treaty Act.
Biological Resources	Exchange involving CVP and SWP water cannot alter the flow regime of natural water bodies such as rivers, streams, creeks, ponds, pools, wetlands, etc., so as to not have a detrimental effect on fish or wildlife, or their habitats.
Water Resources	In continuance of commitments from the Program, existing Aqueduct Pump-in Facilitation Group guidelines would be followed by both AEWSD and Kern County Water Agency (KCWA) when introducing water into the Aqueduct to insure that water quality would not be adversely impacted.
General	• No new construction or modification of existing facilities would be required; • Exchange involving CVP and SWP facilities, and the CVC would be required to obtain the applicable approval/permission so as not to hinder the respective normal operations and maintenance of the facilities; Exchange involving CVP and SWP facilities, and the CVC would be required to schedule accordingly with Reclamation, DWR and the Kern County Water Agency (KCWA), respectively, so as not to hinder their respective obligations to deliver water to contractors, participants, wildlife refuges, and to meet regulatory requirements.
General	Comply with all environmental commitments imposed by existing environmental documents, including the CVPIA Biological Opinion.

Reclamation's South-Central California Area Office has initiated an Environmental Commitment Program in order to implement, track and evaluate the environmental commitments developed for the Proposed Action.

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

The Proposed Action would allow AEWSD to deliver their CVP supplies to MWD in exchange for MWD's SWP water (including previously banked SWP). Nothing in the Proposed Action would hinder the Program's ability to continue operating as has historically occurred.

Allowing AEWSD to temporarily send CVP water to MWD for return within a SWRCB issued CPOU period would allow AEWSD to better manage supply that is already available to AEWSD but for which there isn't any instantaneous grower demands and/or available recharge capacity within the District. AEWSD would have the ability to better utilize this supply as a result of this temporary exchange. This may allow AEWSD to better regulate the supply to reduce or eliminate groundwater extractions to meet deficient supply later in the year and/or direct groundwater recharge in their recharge basins later in the year (regulate supply).

AEWSD would still have sufficient water resources to provide to their landowners for agricultural purposes and MWD would use this water to supplement their reduced SWP supplies in order to meet its customers' demand for municipal and industrial use. The Proposed Action could improve the timing in delivery, increase return volumes (return rates could be greater than instantaneous well extraction rates and/or potential capacity limitations), and improve water quality for MWD.

Under this condition, AEWSD would have water available that is temporarily surplus to their current operational needs, is at risk of spill, and would benefit by sending this water to MWD, and returned for AEWSD's in-district use in the following contract year. MWD would have storage capacity available, and it would benefit by being able to move and store additional water.

Although MWD would receive a net increase of up to one-third of the total amount of AEWSD CVP water delivered to them under this component of the Proposed Action, this would only occur because this water is surplus to AEWSD's current operational needs and are at risk of spill due to insufficient CVP reservoir storage.

The Proposed Action would not increase groundwater pumping from what has historically occurred within the Kern County Subbasin by AEWSD, rather the Proposed Action has the potential to reduce groundwater pumping. In addition to adopting a groundwater management plan, AEWSD has successfully operated a conjunctive use program by which to balance its surface and groundwater supplies. Surface water imported into the district is used to recharge the groundwater through AEWSD's many spreading works after first satisfying agricultural irrigation purposes. The Proposed Action would allow AEWSD to exchange its CVP water supplies for MWD's SWP supplies (including previously banked water supplies). AEWSD could benefit in the form of reducing the risk of forfeiting their CVP water supplies using MWD's demands and storage system of otherwise uncontrollable flows. MWD could also obtain additional water supplies by virtue of the imbalanced exchange component (3 for 2) of the Program. The supplemental water would be used to satisfy current customers' needs and could alleviate the region's reliance on groundwater pumping; however, groundwater pumping as part of the region's conjunctive use practice would continue as has historically occurred and would occur with or without the Proposed Action.

The CVC, CVP and SWP facilities would not be impacted as the Proposed Action must be scheduled and approved by Kern County Water Agency (KCWA), Reclamation and State Department of Water Resources (DWR), respectively. If a canal capacity prorate is required during the period this water is moving through the FKC, the prorate priority shall be pursuant to the tiers defined in Section VII of the Operational Guidelines for Water Service, Friant Division CVP, dated March 18, 2005. Additionally, the exchange must be conducted in a manner that would not harm other CVP contractors or other CVP contractual or environmental obligations, or SWP contractors. Therefore, normal obligations by the overseeing agencies to deliver water to their contractors and other obligations would not be impacted. In continuance of commitments from the Program, existing Aqueduct Pump-in Facilitation Group guidelines would followed by both AEWSD and KCWA when introducing water into the Aqueduct to insure that water quality would not be adversely impacted.

Cumulative Impacts

No adverse cumulative impacts to water resources is expected as the Proposed Action would likely have similar results as the No Action Alternative as surface water would be delivered to the same general area for irrigation and recharge. The water transferred to MWD would likely be replaced as AEWSD would be able to reduce risk of spill of CVP water supplies as part of the Fall/Winter Supplies Exchange component of the Proposed Action.

Land Use

As to facilitating the return of previously banked water under the Program, the Proposed Action would utilize existing facilities to convey waters involved and would not require the need to construct new facilities or modifications to existing facilities that would result in ground disturbance. The exchange would be “bucket for bucket”; except in wet years when water was likely to spill or be lost to storage within CVP reservoirs in which case MWD’s system would be utilized to reduce losses and increase conserved water for both parties. AEWSD would benefit by reducing the risk of forfeiting their CVP water supplies by using MWD’s ability to store and regulate otherwise unstorable flows, receiving surface water back from MWD at times when it can be used by AEWSD (for growers demands and/or recharge) and MWD would benefit by receiving a portion of the flows so reregulated as a result of the unbalanced exchange. When CVP water is provided by AEWSD in lieu of pumped groundwater, MWD would exchange an equivalent amount of banked SWP water under the Program for AEWSD’s CVP supplies and the SWP water exchanged would change in ownership over to AEWSD and remain in AEWSD’s groundwater bank. At a time of its choosing, AEWSD would pump the banked water and deliver it to their landowners for existing agricultural purposes.

Allowing AEWSD to temporarily send CVP water to MWD for return in the same year would allow AEWSD to better manage supply that is already available to AEWSD but for which there isn’t any instantaneous grower demands and/or available recharge capacity within the District. AEWSD would have the ability to better utilize this supply as a result of this temporary exchange which may allow AEWSD to reduce or eliminate groundwater extractions to meet deficient supply later in the year and/or groundwater recharge in their recharge basins later in the year (regulate supply).

AEWSD would not experience a decrease in water supply that would impact existing irrigated farmlands within its service area, nor would the banked or return water be used to cultivate

native or fallowed land that has been in those conditions for three or more consecutive years. MWD intends to use the exchanged CVP water to supplement its water supplies for existing municipal and industrial purposes within its service area, replenish reserves, and would not contribute to any potential expansion within the area. Therefore, the Proposed Action would not have any impacts on existing land use.

Biological Resources

The effects of the Proposed Action are similar to the No Action alternative. A large portion of the Action Area in AEWSD consists of active farmland that no longer provides suitable habitat for federally protected species. Approximately 10% of MWD is urbanized, and the remainder of the district consists of undeveloped desert and mountain areas that are rich in natural resources. Fallowed lands that have been untilled for three or more consecutive years would not be converted as a result of the Proposed Action. The land use patterns of cultivated and fallowed fields that might provide suitable habitat for listed species or birds protected under the Migratory Bird Treaty Act would not be changed as a result of the Proposed Action. No natural stream courses would be altered and no additional pumping would be conducted to carry out the Proposed Action, so there would be no effects to federally protected fish species. No critical habitat occurs within the AEWSD, so none would be affected by the proposed action. Although designated critical habitat for multiple federally listed species occurs within MWD, there would be no change in land use patterns, no alteration of natural stream courses, and no construction included in the proposed action, so no critical habitat would be affected. With the implementation of the provided avoidance measures, Reclamation has determined that there would be *No Effect* to listed species or designated critical habitat under the ESA (16 U.S.C. §1531 et. seq.) resulting from the approval of the Proposed Action.

Cumulative Impacts

Existing loss of habitat from urbanization and the expansion of agricultural lands, that cumulatively impacts listed species and their habitats, is expected to occur regardless of whether or not the Proposed Action is implemented. The exchange, or transfer, of CVP and SWP water between MWD and AEWSD is not expected to contribute to cumulative habitat loss because the water would be used in a way that is consistent with current practices. There would be no adverse cumulative impacts to biological resources as a result of the Proposed Action.

Cultural Resources

The Proposed Action to exchange water as described in the Section 2.2 of this EA/IS constitutes an undertaking as pursuant to Section 301(7) of the NHPA, initiating Section 106 of the NHPA and its implementing regulations at 36 CFR Part 800. All exchanges would occur through existing facilities and water would be provided within existing service area boundaries to areas that currently use water. The Proposed Action would not result in modification of any existing facilities, construction of new facilities, change in land use, or growth. Because the Proposed Action would result in no physical alterations of existing facilities and no ground disturbance as stipulated in Section 2.2 of this EA, Reclamation concludes that the Proposed Action has no potential to cause effect to historic properties pursuant to the regulations at 36 CFR Part 800.3(a)(1), and would result in no impacts to cultural resources.

Indian Sacred Sites

Native American consultation activities consisted of a Sacred Lands File Search performed by the Native American Heritage Commission (NAHC); no resources were identified during this activity. Project notification letters and requests for consultation were sent to the designated Native American area contacts as identified by the NAHC. No responses were received from the Native American representatives regarding the Proposed Action. At this time, no Indian sacred sites have been identified. In addition, the Proposed Action would not impede access to or ceremonial use of Indian sacred sites. If sites are identified in the future, Reclamation would comply with Executive Order 13007.

Indian Trust Assets

Approval of the exchange between AEWSD and MWD would not involve any construction on lands or impact water, hunting, and fishing rights associated with Indian Trust Assets (ITA). Therefore, the Proposed Action does not have a potential to affect ITA.

Environmental Justice

Similar to the No Action Alternative, the Proposed Action would not cause dislocation, changes in employment, or increase flood, drought, or disease within the affected environment. The Proposed Action would not disproportionately impact economically disadvantaged or minority populations. The Proposed Action is intended to allow the expeditious delivery of surface water supplies available to AEWSD and delivered to MWD in exchange for water supplies available to MWD (SWP or previously banked groundwater) over a 12-month period. Water so delivered would primarily serve to reduce energy use with attendant cost savings and would also allow AEWSD to increase their groundwater banking account to meet current and future summertime peaking demands, which would support agricultural jobs in the region.

Socioeconomic Resources

The Proposed Action would result in less energy use with virtually no changes in flow path from what was analyzed under the Program. This would save AEWSD the energy and costs associated with otherwise pumping and returning groundwater. If AEWSD is also directly recharging water to their groundwater at this time on their own behalf, it would also save AEWSD the expenses associated with operating their recharge basins. Agricultural practices within AEWSD would be within historical conditions and would not be adversely impacted by the implementing the Proposed Action.

Air Quality

The delivery of water would require no modification of existing facilities or construction of new facilities. In addition, the movement of water would be done via gravity flow and/or pumped using electric motors which have no emissions. The air quality emissions from electrical power have been considered in environmental documentation for the generating power plant. There are no emissions from electrical motors and therefore a conformity analysis is not required under the Clean Air Act and there would be no impact on air quality. The Proposed Action could result in a small net beneficial effect in air quality since groundwater pumping involving diesel engines would be reduced.

Cumulative Impacts

The Proposed Action would utilize gravity and/or pumped using electric motors which have no emissions. Therefore, when taking into consideration other similar actions, no adverse cumulative impacts to air quality are expected.

Energy Use and Global Climate

There would be no Greenhouse Gas (GHG) emissions resulting from the Proposed Action due to construction activity. Additionally, there would be no GHG emissions from gas or diesel engines as the movement of water would be done via gravity flow and/or pumped using electric motors which have no emissions. The air quality emissions from electrical power have been considered in environmental documentation for the generating power plant. The Proposed Action could result in a small net decrease in GHG since groundwater pumping involving diesel engines would be reduced.