

RECLAMATION

Managing Water in the West

Final Environmental Assessment

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

EA 13-026



**U.S. Department of the Interior
Bureau of Reclamation
Mid Pacific Region
South-Central California Area Office
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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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Section 1 Introduction

The Bureau of Reclamation (Reclamation) provided the public with an opportunity to comment on the Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) between November 21, 2013 and December 21, 2013. Comments received and responses are included in Appendix C. Changes from the Draft EA that are not minor editorial changes are indicated by vertical lines in the left margin of this document.

1.1 Background

In December 1997, Arvin Edison Water Storage District (AEWSD) entered into a long-term Water Management Program (Program) with Metropolitan Water District of Southern California (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. This has resulted in an effective and efficient water management program benefiting both districts.

1.2 Purpose of the Proposed Action

California continues to experience water management challenges resulting from several years of below-normal precipitation. There is a need to manage available water supplies in the most efficient way possible. The purpose of the Proposed Action is to provide for the expeditious and timely delivery of AEWSD's available surface water supplies to MWD in lieu of groundwater that otherwise would have been pumped and delivered to MWD in order to fulfill return water obligations under the Program. In addition, the Program would allow AEWSD to temporarily store water with MWD for return later at a time that is more useful to AEWSD's customers, thereby making more efficient use of its contract water supplies.

1.3 Related Environmental Documents

In June 2009 and July 2010, Reclamation prepared EA 09-97 and EA 10-38 respectively to approve the delivery of up to 40,000 AF per year of AEWSD's 2009, 2010 and 2011 Central Valley Project (CVP) supplies to MWD in-lieu of pumping, and returning a like-amount of MWD's previously banked SWP supplies within AEWSD's groundwater bank under the Program. A FONSI was signed in July 2009, December 2009 (augmenting July 2009), and September 2010, respectively, to approve the exchange. Both EAs and FONSIs are hereby incorporated by reference (Reclamation 2009, Reclamation 2010).

Additionally, in February 2012 (EA-11-085), Reclamation prepared an EA to approve the delivery of up to 100,000 AF of AEWSD's 2012 and 2013 CVP supplies to MWD from April 2012 to April 2013 in-lieu of pumping and returning a like amount of MWD's previously banked SWP supplies within AEWSD's groundwater bank under the Program, and allowing AEWSD to temporarily store water with MWD within a 12-month period for return later. A FONSI was

signed in April 2012 to approve the exchange. The 2012 EA and FONSI are also hereby incorporated by reference (Reclamation 2012b).

The Proposed Action is similar to the exchanges approved in 2009, 2010 and 2012, which were made possible due to the temporary consolidation of the CVP and SWP places-of-use and points-of-diversion from June 2009 to October 2011, and a CVP change in place-of-use from April 2012 to April 2013.

As part of the San Joaquin River Restoration Program (SJRRP), Reclamation, lead agency under the National Environmental Policy Act, and the California Department of Water Resources (DWR), lead agency under the California Environmental Quality Act, prepared an EA/Initial Study to evaluate activities necessary to convey the flows in the San Joaquin River from Friant Dam to the Sacramento-San Joaquin Delta (Delta), and to conduct data collection and monitoring activities during Interim Flow releases during Water Year (WY) 2010. Reclamation approved the FONSI and DWR adopted the Mitigated Negative Declaration on September 25, 2009. A Draft Supplemental EA for WY 2011 Interim Flows was prepared and the Final Supplemental EA for WY 2011 Interim Flows and FONSI were issued on September 21, 2010. A Draft Supplemental EA for WY 2012 Interim Flows was prepared and the Final Supplemental EA for WY 2012 Interim Flows and signed FONSI were issued on September 30, 2011.

In order to return the 2010 recaptured interim flows stored in the San Luis Reservoir (SLR) back to the Friant Division CVP contractors, Reclamation prepared an EA to analyze potential transfer and exchange scenarios to make up to 60,000 AF available from Millerton Lake as CVP water supplies. A Final EA was completed and a FONSI was signed on February 4, 2011. Both are hereby incorporated by reference (Reclamation 2011a).

In order to return the 2011 recaptured interim flows stored in SLR back to the Friant Division CVP contractors, Reclamation prepared an EA to analyze potential transfer and exchange scenarios to make up to 260,000 AF available from Millerton Lake as Class 1 or Class 2 CVP water supplies. A Final EA was completed and a FONSI was signed on May 24, 2011, and both are hereby incorporated by reference (Reclamation 2011b).

In order to return the 2012 recaptured interim flows stored in SLR back to the Friant Division CVP contractors, Reclamation prepared an EA to analyze potential transfer and exchange scenarios to make up to 260,000 AF available from Millerton Lake as Class 1 or Class 2 CVP water supplies. A Final EA was completed and a FONSI was signed on April 3, 2012, and both are hereby incorporated by reference (Reclamation 2012a).

In order to return the recaptured interim flows stored in SLR back to the Friant Division CVP contractors in Water Years 2013 through 2017, Reclamation has prepared a draft EA and FONSI to analyze potential transfer and exchange scenarios to make up to 260,000 AF available from Millerton Lake as Class 1 or Class 2 CVP water supplies. A Final EA was completed and a FONSI was signed on April 1, 2013, and both are hereby incorporated by reference (Reclamation 2013).

The California State Water Resources Control Board (SWRCB), Division of Water Rights, also issued corrected Water Rights Order (Order) WR 2010-0029-DWR. The order specifies necessary terms and conditions to be carried out through WY 2013 while Interim Flows are in place. Condition #2 of the Order states:

“Any San Joaquin River water temporarily stored or routed through San Luis Reservoir shall not be delivered to south-of-Delta contractors other than Friant Division Contractors. The water need not be directly delivered, but can be made available through transfers and exchanges. Reclamation shall document that it has taken all practicable measures to provide contract water to the Friant Division Contractors, while complying with all other conditions of this Order.”

Therefore, this Order allows for transfers and exchanges of Friant water that need not be directly delivered to the Friant contractors provided this water is put to beneficial use in other districts. The Proposed Action would comply with this approval from the SWRCB.

1.4 Scope

AEWSD is located at the southern end of the San Joaquin Valley in Kern County, and MWD is located in Southern California (Figure 1-1). The timeframe for this environmental analysis would be for 10 years.

1.5 Resources of Potential Concern

This EA will analyze the affected environment of the Proposed Action and No Action Alternative in order to determine the potential direct and indirect impacts and cumulative effects to the following resources:

- Water Resources
- Land Use
- Biological Resources



Figure 1-1 District Map

Section 2 Alternatives Including the Proposed Action

This EA considers two possible actions: the No Action Alternative and the Proposed Action. The No Action Alternative reflects future conditions without the Proposed Action and serves as a basis of comparison for determining potential effects to the human environment.

2.1 No Action Alternative

Under the No Action Alternative, Reclamation would not approve the exchange of AEWS's CVP water for MWD's SWP water. AEWS would still be able to pump MWD's previously stored SWP water from AEWS's groundwater bank and deliver it to MWD via the California Aqueduct. MWD would not receive CVP water available to AEWS.

2.2 Proposed Action

There are three components to the Proposed Action. All exchange components are dependent upon SWRCB issuance of an appropriate CPOU. The descriptions below have been adapted from the CPOU petition.

Groundwater Banking

MWD stores a portion of its SWP supply in CVP contractor AEWS's groundwater banking facilities, depending on annual allocations. AEWS is then obligated to return the banked SWP water to MWD on request on a one-for-one basis. Under the Proposed Action, AEWS would be allowed the option and flexibility to return water to MWD through an exchange of its available CVP Delta/San Luis Reservoir or Friant surface supplies (CVP water). CVP water supplied to MWD by AEWS in lieu of extraction to recover previously stored SWP water would result in a balanced exchange or one-for-one reduction of MWD's groundwater banking account with AEWS.

Regulation Program

Additionally, the approval of the Proposed Action and the CPOU would allow AEWS to deliver CVP water supplies to MWD when they are available, and then receive back SWP water supplies in exchange, at a later time. This program better facilitates the use of AEWS 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 store the water by way of direct recharge and subsequent extraction. This portion of the Proposed Action would be on a one-for-one basis.

Fall/Winter Supplies Exchange

In the event that hydrologic conditions permit, and AEWS believes that there may be limited ability to carry over CVP supplies in CVP reservoirs, AEWS CVP water supplies would be delivered to MWD to reduce risk of spill and subsequent potential forfeiture of CVP water supplies. The CVP water would be delivered to MWD by exchange in San Luis Reservoir or directly into the California Aqueduct via the Friant Kern Canal and AEWS facilities, including the Cross Valley Canal. MWD would later return a lesser amount (returning 2 acre-feet for every 3 acre-feet) to AEWS. The unbalanced nature of the exchange reflects the compensation to MWD for its water management services.

The proposed exchanges under all three components would total up to 100,000 acre-feet (AF) per year of CVP water supplies. CVP Delta supplies would be provided as described above. Friant Division CVP water would be provided directly via delivery from the Friant-Kern Canal and AEWS'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 AEWS's request to exchange/transfer a portion of its CVP water supply for MWD's SWP supply (including previously banked supplies). This could include the following CVP water types:

- Class 1 ("firm supply");
- Class 2 ("supplemental supply, nondependable");
- 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 declared by Reclamation is available to AEWS.

The Proposed Action is contingent upon approval of the CPOU by the SWRCB, and would only be permitted during the timeframe for which the CPOU is in effect. As described in Section 1.3, the SWRCB has already approved a CPOU from July 1, 2013 through June 30, 2014 for this Proposed Action as well as other programs.

In addition, the Proposed Action would include the following commitments:

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	These transfers/exchanges involving CVP 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 AEWS and Kern County Water Agency (KCWA) when introducing water into the Aqueduct to insure that water quality would not be adversely impacted.
Land Use/ Biological Resources	No new construction or modification of existing facilities would be allowed under this action.
Water Resources	Exchanges involving CVP and SWP facilities, and the Cross Valley Canal (CVC) would be required to schedule accordingly with Reclamation, DWR and the 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 applicable Biological Opinions.

Section 3 Affected Environment and Environmental Consequences

This section of the EA includes the analysis portion of the potentially affected environment and the environmental consequences involved with the Proposed Action and the No Action Alternative.

3.1 Water Resources

3.1.1 Affected Environment

AEWSD/MWD Water Management Program

Under the AEWSD/MWD Water Management Program, AEWSD agreed that MWD would be able to deliver a minimum of 277,778 AF (which equates to approximately 250,000 AF after a 10 percent loss factor is applied) to AEWSD. It was also anticipated that MWD would cycle water through the Program, and at AEWSD's discretion, MWD would be able to store up to 388,889 AF (which equates to approximately 350,000 AF after a 10 percent loss factor is applied) at any one time in AEWSD's groundwater bank. In order to facilitate the Program, AEWSD constructed facilities including 500 acres of new spreading works, 15 new groundwater wells, and a 4.5-mile bi-directional pipeline connecting the terminus of AEWSD's South Canal with the Aqueduct. It also recently expanded its South Canal capacity, as well as making improvements in the last 9 miles of canal for the ability to "reverse flow" the canal and assist in operational flexibility. These new facilities are used in conjunction with AEWSD's existing facilities and distribution system to manage the Program.

The Program has operated successfully for nearly 15 years, resulting in benefits for both AEWSD and MWD. For AEWSD, the Program has generated revenue for new infrastructure to manage its water supplies, stabilize water rates, increased groundwater levels, and increased drought year supplies. In addition, improved conjunctive use operations and in-lieu banking have also allowed AEWSD's farmers to utilize surface supplies instead of groundwater supplies at times when MWD banks water. AEWSD has benefitted from enhanced recharge capabilities resulting from the facilities that were constructed as part of the Program, as well as from higher groundwater levels resulting in lesser overall groundwater pumping energy use and costs. For MWD, the Program has provided an opportunity to convert its surplus wet year SWP supplies into a firm dry year supply and to improve water quality in the Aqueduct when AEWSD returns groundwater and/or Friant Division CVP water to MWD.

San Joaquin River Restoration Program

The SJRRP is a comprehensive, long-term effort to restore flows to the San Joaquin River from Friant Dam to the confluence of Merced River in order to restore a self-sustaining Chinook salmon fishery in the river, while reducing/avoiding adverse water supply impacts to Friant Division CVP contractors. The SJRRP is the program that implements both the San Joaquin River Restoration Settlement (a settlement that resulted from legal action) and the San Joaquin River Restoration Settlement Act (the law that directs Federal entity and Federal funding actions

relative to the settlement). Reclamation initiated the SJRRP in October 2009 with the first interim flows project. Interim flows have been provided since in accordance with the SJRRP. To reduce/avoid water supply impacts to Friant Division CVP contractors, the interim flows have/would be recaptured and stored in SLR for return to the Friant Division CVP contractors.

Arvin-Edison Water Storage District

AEWSD was formed in 1942 to provide a reliable water supply for its landowners for agricultural purposes. In order to regulate a highly variable water supply, AEWSD developed and continues to develop water management programs based on the concept of delivering imported water in years of above average water supplies to 1) spreading ponds for groundwater recharge and/or 2) transfers/exchanges with other agencies and entities (such as MWD) that can in turn provide return water at times later in the same year (or in subsequent years) or during drought or low allocation years or periods. During below average or dry years or periods, AEWSD extracts (via wells) previously stored groundwater and/or accepts return of water from water transfers and exchanges to meet its agricultural demands when surface supplies are deficient.

AEWSD is a long term CVP-Contractor; its current facilities were primarily constructed in the 1960s and are based on the conjunctive use of surface water imported from the CVP, SWP, Kern River, including other supplies (i.e. flood flows) and groundwater resources that underlie AEWSD. AEWSD owns and operates spreading/percolation/recharge basins and groundwater extraction wells, which are used to supply previously banked groundwater to its landowners within its service area when surface water supplies are deficient. AEWSD facilities (recharge and extraction) are also made available to other water agencies for their utilization through water management programs/agreements on a second priority basis.

AEWSD has an annual contract entitlement with Reclamation for 40,000 AF of Class 1 and 311,675 AF of Class 2 Friant Division CVP supplies. The Class 2 supply comprises the vast majority of its total contract allocation; however, this supply is highly variable depending on availability and hydrology. AEWSD manages this supply by using an underlying groundwater reservoir to regulate water availability and to stabilize water reliability by percolating water through spreading basins in addition to water management programs (i.e. transfers/exchanges) with other water agencies outside its service area. AEWSD takes Friant CVP water from its Intake Canal located at the terminus of the Friant-Kern Canal (FKC) and serves landowners within its district through 45 miles of lined canals and 170 miles of pipeline.

AEWSD has historically made available a portion of its Friant Division CVP water supply to other CVP contractors located on the eastside of the San Joaquin Valley in exchange for alternate CVP supplies originating from the Sacramento-San Joaquin River Delta, diverted and wheeled through the Aqueduct for ultimate delivery to AEWSD. Due to a decrease in supply reliability, cost increases, and water quality concerns, several of these exchanges are no longer feasible to the extent they once were. As a result, it has been necessary for AEWSD to identify and implement additional programs to manage its highly variable CVP water supplies.

AEWSD could also have recirculation water made available to it for delivery from SLR as a result of releases made into the San Joaquin River from Millerton Lake, captured at Mendota Pool or other locations, and subsequently stored through exchange/transfer agreements that were

analyzed under a separate EA for recirculation of recaptured interim flows. In addition, AEWS D assists in recirculation of other District's SJRRP allocations so that recirculated interim flows can be greatly increased.

Metropolitan Water District

MWD was created in 1928 under an enabling act of the California State Legislature to provide supplemental water to cities and counties in the Southern California coastal plain. This supplemental water is delivered to MWD's twenty six member agencies through a regional network of canals, pipelines, reservoirs, treatment plants and related facilities. In the late 1990s, MWD developed an Integrated Resources Plan which predicted significant water supply deficits for its service area and also outlined the efforts needed on several fronts to avoid significant water shortages, especially in dry years. This plan called for a mix of water resources derived from conservation, reclamation, groundwater conjunctive use and water transfers to ensure adequate system flexibility to protect public safety, particularly during droughts. The plan specifically cites a need for diversification of MWD's source of supply including accessing transfers, exchanges and groundwater banking programs involving Central Valley water districts.

Groundwater Resources

Tulare Lake Hydrologic Region The Tulare Lake Hydrologic Region covers approximately 10.9 million acres (17,000 square miles), and includes all of Kings and Tulare Counties and most of Fresno and Kern Counties. The extensive use of groundwater has historically caused subsidence of the land surface, primarily along the west side and south end of the San Joaquin Valley.

AEWS D is located within the Kern County Sub-basin of the Tulare Lake Hydrologic Region. In addition to adopting a groundwater management plan, AEWS D has successfully operated a conjunctive use program in order to balance and provide sufficient water supplies to their customers. AEWS D operates approximately 1,500 acres of spreading ponds including the North Canal, Sycamore, and Tejon Spreading Works. Water constituents within the subbasin are primarily calcium bicarbonate waters in the shallow zones, increasing in sodium with depth. While the local groundwater in AEWS D is of good quality, it is generally higher in total dissolved solids, nitrates, boron, and other constituents than that from the FKC (Program 1996).

South Coast Hydrologic Region The South Coast Hydrologic Region covers approximately 6.78 million acres (10,600 square miles) of the southern California watershed that drains to the Pacific Ocean. The region underlies all of Orange County, most of San Diego and Los Angeles Counties, parts of Riverside, San Bernardino, Ventura, Kern and Santa Barbara Counties. The majority of MWD is located within the South Coast Hydrologic Region. Groundwater provides about 23 percent of water demand in normal years and about 29 percent in drought years. Conjunctive use of surface water and groundwater is a long-standing practice in the region. Groundwater quality varies with local impairments from excess nitrate, sulfate, and volatile organic compounds (DWR 2003).

Conveyance Facilities

California Aqueduct/San Luis Canal The California Aqueduct (SWP) and San Luis Canal (CVP) is a joint-use facility. The San Luis Canal is the Federally-built and operated section and extends 102.5 miles from O'Neill Forebay in a southeasterly direction to a point west of

Kettleman City. At this point, the facility becomes the State's California Aqueduct; however, the Aqueduct actually begins at the Banks Pumping Plant where the canal conveys water pumped from the Sacramento-San Joaquin River Delta directly into O'Neill Forebay.

Cross Valley Canal The CVC is a locally-financed facility completed in 1975. The canal extends from the California Aqueduct near Tupman to Bakersfield. It consists of 6 pumping lifts, with a capacity of 1,400 cubic-feet per second (cfs) from the Aqueduct to AEWS's Intake Canal (also near the FKC terminus and Kern River). The CVC "extension", an unlined canal, continues past the AEWS Intake Canal, which is rated 342 cfs and has an additional 2 pumping lifts. The CVC is a joint-use facility owned by various participants, including AEWS. The CVC, which is operated by the KCWA, can convey water from the Aqueduct to the Kern Water Bank, the City of Bakersfield groundwater recharge facility, the Berrenda Mesa Property, the Pioneer Banking Project, the Kern River channel, to AEWS's Intake Canal, or to various member units of KCWA and other districts who have access to the CVC. The CVC is also capable of conveying 500 cfs, in reverse flow-gravity mode, to the Aqueduct. In 2008, as part of the CVC expansion project, an additional 500 cfs turnout was constructed from the FKC that can deliver water by gravity into either the AEWS Intake Canal or the CVC.

Friant-Kern Canal The FKC carries water over 151.8 miles in a southerly direction from Friant Dam to its terminus at the Kern River, four miles west of Bakersfield. The FKC has an initial capacity of 5,000 cfs that gradually decreases to 2,000 cfs at its terminus in the Kern River (Reclamation 2010). The water conveyed in the FKC is from the San Joaquin River and is considered to be of pristine quality because it originates from snow melt from the Sierra Nevada. The water is used for municipal and industrial, and agricultural purposes in Fresno, Tulare, and Kern Counties. The FKC is a part of the CVP, which annually delivers about seven million AF of water for agricultural, urban, and wildlife use.

3.1.2 Environmental Consequences

No Action

Under the No Action Alternative, Reclamation would not approve the proposed exchange of AEWS's CVP water for MWD's SWP water. AEWS would retain their Friant Division CVP supplies and recaptured interim flows stored in SLR, and use them as allowed under their contract to meet in-district irrigation demands or apply the water to spreading works for groundwater recharge, if available capacities exist. AEWS would fulfill its obligation to return water under the Program by extracting/pumping previously banked SWP supplies for delivery to MWD. MWD would then use this water to satisfy their customers' needs. AEWS would not have the ability to reduce the risk of forfeiting its CVP water supplies that would help offset groundwater extraction and/or have supplies for recharge later in the year. MWD would not receive CVP water available to AEWS and associated water quality benefits.

There would be no additional impacts to any of the conveyance facilities and water resources listed in the affected environment from what was already analyzed under the Program. There would be no impacts to the SJRRP, its projects, and objectives.

Proposed Action

The banking exchange and water regulation portions of the Proposed Action would allow AEWS to deliver their CVP supplies to MWD in exchange for MWD's SWP water (including previously banked SWP). Allowing AEWS to temporarily send CVP water to MWD for later return would allow AEWS to better manage supply that is already available to AEWS but for which there isn't any instantaneous grower demands and/or available recharge/storage capacity within the District. This allows AEWS to better regulate the supply to reduce or eliminate groundwater extractions to meet intermittent deficiencies in supply.

Under the third portion of the Proposed Action, AEWS would make available water to MWD that is temporarily surplus to AEWS's current operational needs and is at risk of spill. AEWS would benefit by sending this water to MWD which would be returned for AEWS's in-district use in the same or a following contract year. Although MWD would receive a net increase on the total amount of AEWS CVP water delivered to them under this component of the Proposed Action, this would only occur because this water is surplus to AEWS's current operational needs and is at risk of spill due to insufficient CVP storage.

The Proposed Action would not increase groundwater pumping from what has historically occurred within the Kern County Sub-basin by AEWS. Rather the Proposed Action has the potential to reduce groundwater pumping by providing additional options for balancing surface supplies with needs.

AEWS's benefit would be a reduced risk of forfeiting their CVP water supplies by making use of MWD's demands and storage system for otherwise uncontrollable flows. MWD would benefit by receiving higher-quality CVP water, and 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.

Everyday operations of the CVC, CVP and SWP facilities would not be impacted, as water movement considered under the Proposed Action must be scheduled and approved by KCWA, Reclamation and DWR, respectively. In continuance of commitments from the Program, existing Aqueduct Pump-in Facilitation Group guidelines would be followed by both AEWS and KCWA when introducing water into the Aqueduct to insure that water quality would not be adversely impacted.

The Proposed Action would, among other things, serve to offset the impacts to AEWS of the San Joaquin River Restoration Program, by increasing AEWS's ability to more effectively regulate its remaining water supplies.

Cumulative Impacts

No adverse cumulative impacts to water resources are expected, as the water to be exchanged to MWD would only be water which AEWS is unable to otherwise use or store. The water exchanged to MWD would likely be returned to AEWS as part of the Fall/Winter Supplies Exchange component of the Proposed Action. Water exchanges would be scheduled to ensure that there are no capacity conflicts in the affected conveyance facilities.

3.2 Land Use

3.2.1 Affected Environment

Arvin-Edison Water Storage District

AEWSD includes the City of Arvin and is located in the proximity of the unincorporated communities of Edison, Lamont, Mettler, and DiGiorgio. Agriculture in the form of row crops, orchards and vineyards, is the primary land use in the region. The Kern County General Plan designates most areas within the AEWSD service area as “intensive agriculture”. Supplemental irrigation is required for these activities as the area receives an average of only 8.5 inches of rainfall per year. Other agricultural uses, while not directly dependent on irrigation for production, are also consistent with the intensive agriculture designation. The Kern County General Plan defines intensive agriculture with a minimum parcel size of 20 acres, and permitted uses include, but are not limited to, irrigated cropland, orchards, vineyards, horse ranches, beekeeping, ranch and farm facilities, and related uses. One single-family dwelling unit is permitted per 20-acre parcel (KCPD 2007).

Metropolitan Water District

The Southern California Association of Governments area comprises the bulk of MWD’s service area both in terms of area and water usage. Only 10 percent of the region is urbanized. The remainder is largely uninhabited mountain and desert area, rich in natural resources.

Principal land use trends include densification of existing residential and commercial areas, urban fill on scattered pockets of vacant land, extension of urban development into hillside and mountainous terrain, and suburban expansion on the perimeter of the urbanized regions with new planned developments. Such trends are operating differently in various sub-regions, depending upon their respective histories, locations and socio-economic influences. City and county regional plans reflect mainly incremental changes to existing land use in coastal areas, while major expansions of the new urban development are shown for undeveloped land in outlying valleys and desert areas.

3.2.2 Environmental Consequences

No Action

Under the No Action Alternative, AEWSD would deliver banked SWP supplies in the form of pumped groundwater back to MWD as originally arranged and analyzed under the Program. This would continue current land use patterns.

Proposed Action

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 proposed water exchanges would not be used to support changes in land use, either by encouraging new development or allowing cultivation of native or fallowed land (left untilled/fallowed for three or more 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.

Cumulative Impacts

In recent years, land use changes within the San Joaquin Valley have involved the urbanization of agricultural lands. These types of changes are typically driven by economic pressures and are as likely to occur with or without the Proposed Action; therefore, no cumulative effects to land use are expected as a result of the Proposed Action.

3.3 Biological Resources

3.3.1 Affected Environment

On May 16, 2013 Reclamation requested an official species list from the US Fish and Wildlife Service (USFWS) via the Sacramento Field Office's website, http://www.fws.gov/sacramento/es/spp_list.htm (document number: 130516030630). The list is for the eleven U.S. Geological Survey (USGS) 7½-minute quadrangles (Quads) that make up the AEWSD service area. On May 20, 2013 Reclamation requested an official species list from the USFWS, for portions of the Action Area under the jurisdiction of the Carlsbad and Ventura Field Offices, via the Ventura Office's website, <http://ecos.fws.gov/ipac/wizard/trustResourceList!prepare.action>. The list is for the 123 USGS 7½-minute Quads that make up the MWD service area. The CDFG California Natural Diversity Database was also queried for records of protected species within 10 miles of the Proposed Action Area. The information collected above, in addition to information within Reclamation's files, was combined to create Tables 3-1 and 3-2 for AEWSD and MWD respectively.

Table 3-1 Federally Protected Species with the Potential to Occur within AEWSD

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u> ^Δ	<u>Effects</u> [#]
Invertebrates			
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	T	NE
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	T	NE
Fish			
Delta smelt	<i>Hypomesus transpacificus</i>	T	NE
Amphibians			
California red-legged frog	<i>Rana draytonii</i>	T	NE
Reptiles			
Blunt-nosed leopard lizard	<i>Gambelia (Crotaphytus) sila</i>	E	NE
Giant garter snake	<i>Thamnophis gigas</i>	T	NE
Birds			

Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	E	NE
California condor	<i>Gymnogyps californianus</i>	E	NE
Mammals			
Giant kangaroo rat	<i>Dipodomys ingens</i>	E	NE
Tipton kangaroo rat	<i>Dipodomys nitratoide nitratoide</i>	E	NE
Buena Vista Lake shrew	<i>Sorex ornatus relictus</i>	E	NE
San Joaquin kit fox	<i>Vulpes macrotis mutica</i>	E	NE
Plants			
California jewelflower	<i>Caulanthus californicus</i>	E	NE
San Joaquin woolly-threads	<i>Monolopia congdonii (lembertia congdonii)</i>	E	NE
Bakersfield cactus	<i>Opuntia treleasei</i>	E	NE
San Joaquin adobe sunburst	<i>Pseudobahia peirsonii</i>	T	NE
<p>Δ Status= Status of federally protected species protected under federal Endangered Species Act E: Listed as Endangered under the federal Endangered Species Act T: Listed as Threatened under the federal Endangered Species Act NMFS: Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. X: Critical habitat designated under the federal Endangered Species Act C: Candidate proposed for listing # Effects = Effect determination NE: No Effect to federally listed species anticipated as a result of the Proposed Action</p>			

Table 3-2: Federally Protected Species with the Potential to Occur within MWD

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u> ^Δ	<u>Effects</u> [#]
Invertebrates			
Riverside fairy shrimp	<i>Streptocephalus woottoni</i>	E, X	NE
San Diego fairy shrimp	<i>Branchinecta sandiegonensis</i>	E, X	NE
Vernal Pool fairy shrimp	<i>Branchinecta lynchi</i>	T	NE
Delhi Sands Flower-Loving fly	<i>Rhaphiomidas terminatus abdominalis</i>	E	NE
El Segundo Blue butterfly	<i>Euphilotes battoides allyni</i>	E	NE
Laguna Mountains skipper	<i>Pyrgus ruralis lagunae</i>	E, X	NE

Palos Verdes blue butterfly	<i>Glaucopsyche lygdamus palosverdesensis</i>	E, X	NE
Quino Checkerspot butterfly	<i>Euphydryas editha quino</i>	E, X	NE
Fish			
Santa Ana sucker	<i>Catostomus santaanae</i>	T, X	NE
Southern California Coast Steelhead	<i>Oncorhynchus mykiss</i>	E, X	NE
Tidewater goby	<i>Eucyclogobius newberryi</i>	E, X	NE
Unarmored Threespine stickleback	<i>Gasterosteus aculeatus williamsoni</i>	E	NE
Amphibians			
Arroyo toad	<i>Anaxyrus californicus</i>	E, X	NE
California red-legged frog	<i>Rana draytonii</i>	T, X	NE
Mountain Yellow-Legged frog	<i>Rana mucosa</i>	E	NE
Reptiles			
Blunt-nosed leopard lizard	<i>Gambelia (Crotaphytus) sila</i>	E	NE
Birds			
California Least tern	<i>Sterna antillarum browni</i>	E	NE
California condor	<i>Gymnogyps californianus</i>	E	NE
Coastal California gnatcatcher	<i>Polioptila californica californica</i>	T, X	NE
Least Bell's vireo	<i>Vireo bellii pusillus</i>	E,X	NE
Light-footed clapper rail	<i>Rallus longirostris levipes</i>	E	NE
Marbled murrelet	<i>Brachyramphus marmoratus</i>	T	NE
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	E, X	NE
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	T,X	NE
Mammals			
Pacific pocket mouse	<i>Perognathus longimembris pacificus</i>	E	NE
Peninsular bighorn sheep	<i>Ovis Canadensis spp. nelsoni</i>	E	NE
San Bernardino Merriam's kangaroo rat	<i>Dipodomys merriami parvus</i>	E, X	NE

Stephen's kangaroo rat	<i>Dipodomys stephensi</i>	E	NE
Plants			
Big-leaved crownbeard	<i>Verbesina dissita</i>	T	NE
Brand's phacelia	<i>Phacelia stellaris</i>	C	NE
Braunton's milk-vetch	<i>Astragalus brauntonii</i>	E, X	NE
California orcutt grass	<i>Orcuttia californica</i>	E	NE
Coastal dunes milk-vetch	<i>Astragalus tener</i> var. <i>titi</i>	E	NE
Conejo dudleya	<i>Dudleya abramsii</i> ssp. <i>parva</i>	T	NE
Del mar manzanita	<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i>	E	NE
Encinitas baccharis	<i>Baccharis vanessae</i>	T	NE
Gambel's watercress	<i>Rorippa gambellii</i>	E	NE
Laguna beach liveforever	<i>Dudleya stolonifera</i>	T	NE
Lyon's pentachaeta	<i>Pentachaeta lyonii</i>	E, X	NE
Marcescent dudleya	<i>Dudleya cymosa</i> ssp. <i>marcescens</i>	T	NE
Marsh sandwort	<i>Arenaria paludicola</i>	E	NE
Mexican flannelbush	<i>Fremontodendron mexicanum</i>	E, X	NE
Munz's onion	<i>Allium munzii</i>	E,X	NE
Nevin's barberry	<i>Berberis nevinii</i>	E, X	NE
Orcutt's hazardia	<i>Hazardia orcuttii</i>	C	NE
Orcutt's spineflower	<i>Chorizanthe orcuttiana</i>	E	NE
Otay mesa-mint	<i>Pogogyne nudiuscula</i>	E	NE

Otay tarplant	<i>Deinandra conjugens</i>	T, X	NE
Salt Marsh bird's beak	<i>Cordylanthus maritimus ssp. maritimus</i>	E	NE
San Bernardino bluegrass	<i>Poa atropurpurea</i>	E	NE
San Diego ambrosia	<i>Ambrosia pumila</i>	E, X	NE
San Diego button-celery	<i>Eryngium aristulatum var. parishii</i>	E	NE
San Diego mesa-mint	<i>Pogogyne abramsii</i>	E	NE
San Diego thornmint	<i>Acanthomintha ilicifolia</i>	T, X	NE
San Fernando Valley spineflower	<i>Chorizanthe parryi var. fernandina</i>	C	NE
San jacinto Valley crownscale	<i>Atriplex coronata var. notatior</i>	E	NE
Santa Ana River woolly-star	<i>Eriastrum densifolium ssp. sanctorum</i>	E	NE
Santa Monica Mountains dudleya	<i>Dudleya cymosa ssp. ovatifolia</i>	T	NE
Slender-horned spineflower	<i>Dodecahema leptoceras</i>	E	NE
Spreading navarretia	<i>Navarretia fossalis</i>	T, X	NE
Thread-Leaved brodiaea	<i>Brodiaea filifolia</i>	T, X	NE
Triple-ribbed milk vetch	<i>Astragalus tricarinatus</i>	E	NE
Vail Lake ceanothus	<i>Ceanothus ophiocylus</i>	T, X	NE
Ventura Marsh milk-vetch	<i>Astragalus pycnostachyus var. lanosissimus</i>	E, X	NE
Verity's dudleya	<i>Dudleya verityi</i>	T	NE
Willowy monardella	<i>Monardella linoides ssp. viminea</i>	E, X	NE

Δ Status= Status of federally protected species protected under federal Endangered Species Act
 E: Listed as Endangered under the federal Endangered Species Act
 T: Listed as Threatened under the federal Endangered Species Act
 NMFS: Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service.
 X: Critical habitat designated under the federal Endangered Species Act
 C: Candidate proposed for listing
 # Effects = Effect determination
 NE: No Effect to federally listed species anticipated as a result of the Proposed Action

3.3.2 Environmental Consequences

No Action

Under the No Action Alternative, the baseline conditions of the Action Area would not change, so there would be no effects to biological resources.

Proposed Action

The effects of the Proposed Action are similar to the No Action alternative. A large portion of the Action Area in AEWS D 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. Fallow 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. These transfers/exchanges would only occur in wet years when there is already sufficient water in the San Joaquin River to meet existing commitments. These transfers/exchanges would neither increase nor decrease the amount of water flowing into the Kern River. No critical habitat occurs within the AEWS D, so none would be affected by the proposed action. Although designated critical habitat for multiple federally listed species occurs within MWD, the proposed action would not cause alteration of natural stream courses, or construction activities, therefore 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 AEWS D 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.

3.4 Resources Eliminated from Further Analysis

Potential impacts to the following resources were considered and found to be minor, and no additional analysis is necessary beyond what is provided below:

Cultural Resources

The Proposed Action to exchange water as described in the Section 2.2 of this EA constitutes an undertaking pursuant to Section 301(7) of the National Historic Preservation Act (NHPA), triggering Section 106 of the NHPA and its implementing regulations at 36 Code of Federal Regulations (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, 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 (Appendix A).

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 AEWS 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 (Appendix B).

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 AEWS and delivered to MWD in exchange for water supplies available to MWD (SWP or previously banked groundwater). Water so delivered would primarily serve to reduce energy use with attendant cost savings and would also allow AEWS to increase their groundwater banking account to meet current and future summertime peaking demands, which would support agricultural jobs in the region.

Socioeconomic Resources

Allowing AEWS and MWD to manage their water resources cooperatively allows them to match available supplies to needs on a timely basis. This helps reduce water supply disruptions, which is a socioeconomic benefit to their customers.

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 direct emissions. The air quality emissions from electrical power have been considered in environmental documentation for the generating power plant. 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.

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 direct 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.

Section 4 Consultation and Coordination

4.1 Public Review Period

Reclamation provided the public with an opportunity to comment on the Draft FONSI and Draft EA between November 21, 2013 and December 21, 2013. This timeframe superseded the original 15-day comment period due to concerns expressed by some Federal contractors within the Friant Division. Comments received and responses are included in Appendix C.

4.2 Fish and Wildlife Coordination Act (16 U.S.C. § 661 et seq.)

The Fish and Wildlife Coordination Act (FWCA) requires that Reclamation consult with fish and wildlife agencies (federal and state) on all water development projects that could affect biological resources. The amendments enacted in 1946 require consultation with the Service and State fish and wildlife agencies “whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the United States, or by any public or private agency under Federal permit or license”. Consultation is to be undertaken for the purpose of “preventing the loss of and damage to wildlife resources”.

The Proposed Action does not involve any new impoundment or diversion of waters, channel deepening, or other control or modification of a stream or body of water as described in the statute, but the exchange of pumped groundwater for CVP water. In addition, no construction or modification of water conveyance facilities are required for movement of this water. Consequently, Reclamation has determined that FWCA does not apply.

4.3 Endangered Species Act (16 U.S.C. § 1531 et seq.)

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 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.) for the proposed federal action.

4.4 Migratory Bird Treaty Act (16 U.S.C. § 703 et seq.)

The Migratory Bird Treaty Act implements various treaties and conventions between the United States and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. Unless permitted by regulations, the Act provides that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. Subject to limitations in the Act, the Secretary of the Interior may adopt regulations determining the extent to which, if at all, hunting, taking, capturing, killing, possessing, selling, purchasing, shipping, transporting or exporting of any migratory bird, part, nest or egg will be allowed, having regard for temperature zones, distribution, abundance, economic value, breeding habits and migratory flight patterns.

Reclamation has determined that there would be No Effect to migratory birds for the Proposed Action.

4.5 National Historic Preservation Act (16 U.S.C. § 470 et seq.)

The NHPA of 1966, as amended (16 U.S.C. 470 et seq.), requires that federal agencies give the Advisory Council on Historic Preservation an opportunity to comment on the effects of an undertaking on historic properties, properties that are eligible for inclusion in the National Register of Historic Places. The 36 CFR Part 800 regulations implement Section 106 of the NHPA.

Section 106 of the NHPA requires federal agencies to consider the effects of federal undertakings on historic properties. Compliance with Section 106 follows a series of steps that are designed to identify interested parties, determine the Area of Potential Effects (APE), conduct cultural resource inventories, determine if historic properties are present within the APE, and assess effects on any identified historic properties.

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.

Section 5 Preparers and Reviewers

Chuck Siek, Natural Resources Specialist, SCCAO
 Ben Lawrence, Acting Supervisory Natural Resources Specialist, SCCAO
 Michael Inthavong, Natural Resources Specialist MP
 Lisa Carlson, Wildlife Biologist Technician, SCCAO
 David Hyatt, Supervisory Wildlife Biologist, SCCAO
 Bill Soule, Archaeologist, MP-153
 Patricia Rivera, ITA, MP-400

Section 6 Acronyms and Abbreviations

AEWSD	Arvin-Edison Water Storage District
AF	acre-feet
APE	area of potential effects
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
cfs	cubic-feet per second
CPOU	Consolidated Place of Use
CVC	Cross Valley Canal
CVP	Central Valley Project
DWR	Department of Water Resources
EA	Environmental Assessment
FKC	Friant-Kern Canal
FONSI	Finding of No Significant Impact
FWCA	Fish and Wildlife Coordination Act
GHG	Green House Gases
ITA	Indian Trust Assets
KCWA	Kern County Water Agency
MWD	Metropolitan Water District of Southern California
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
Program	Water Management Program between AEWSD and MWD
Reclamation	Bureau of Reclamation
SJRRP	San Joaquin River Restoration Program
SLR	San Luis Reservoir
SWP	State Water Project
SWRCB	State Water Resources Control Board
USFWS	U.S. Fish and Wildlife Service

Section 7 References

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Appendix A

Cultural Resources Determination

November, 2013



IN REPLY
REFER TO:
MP-153
ENV-3.00

United States Department of the Interior

BUREAU OF RECLAMATION
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, California 95825-1898

VIA ELECTRONIC MAIL ONLY

February 21, 2014
MEMORANDUM (Revised)

To: Charles Siek
GS0401-Supervisory Natural Resources--South-Central California Area Office

From: William Soule
Archaeologist – Division of Environmental Affairs

Subject: 13-SCAO-165: Arvin-Edison Water Storage District (AEWSD) and Metropolitan Water District (MWD)
10-Year Water Transfer/Exchange Program

This proposed undertaking by Reclamation is for a 10-year program to exchange or transfer up to 100,000 acre-feet (AF) of water annually between the AEWSD and the MWD. This is the type of undertaking that does not have the potential to cause effects to historic properties, should such properties be present, pursuant to the National Historic Preservation Act Section 106 regulations codified at 36 CFR Part 800.3(a)(1). Reclamation has no further obligations under NHPA Section 106, pursuant to 36 CFR § 800.3(a)(1).

There is no ground disturbance or change in land use associated with this proposed action. The transfer or exchange would take place over a 10-year period from March 01, 2014 to February 29, 2024. A maximum of 100,000 AF could be delivered during each contract year. This action involves Central Valley Project water and requires approval of a temporary change to Reclamation's Consolidated Place of Use provisions or Friant Division Place of Use provisions through a petition to the State Water Resources Control Board.

After reviewing the materials provided for the Section 106 determination of effect for this undertaking, I concur with an assessment in the EA which states that this action has no potential to cause effect on historic properties, assuming that such properties were present, pursuant to 36 CFR § 800.3(a)(1). This memorandum is intended to convey the completion of the NHPA Section 106 process for this undertaking. Please retain a copy in the administrative record for this action. Should changes be made to this project, additional NHPA Section 106 review, possibly including consultation with the State Historic Preservation Officer, may be necessary. Thank you for providing the opportunity to comment.

CC: Cultural Resources Branch (MP-153), Anastasia Leigh – Regional Environmental Officer (MP-150)

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FINAL ENVIRONMENTAL ASSESSMENT (13-026)

Appendix B

Indian Trust Asset Determination

Fwd: EA-13-026, ITA Request Amendment

1 message

RIVERA, PATRICIA <privera@usbr.gov>
To: Michael Inthavong <minthavong@usbr.gov>

Thu, Feb 20, 2014 at 11:03 AM

Mike,

I reviewed the proposed action to transfer or exchange of water between Arvin-Edison Water Storage District (AEWSD) and Metropolitan Water District (MWD). There is no ground disturbance associated with the Proposed Action. The transfer or exchange program would take place over a 10-year period (March 1, 2014 - February 29, 2024). Up to 100,000 acre-feet of water could be delivered during each contract year. This action requires approval of a temporary change to the Reclamation's Consolidated Place of Use provisions or Friant Division Place of Use provisions through a petition to the State Water Resources Control Board. A Consolidated Place of Use petition is currently under review by the State Water Resources Control Board. Transfer/exchange specifics include:

1. Transfer AEWSD's Central Valley Project (CVP) water to MWD. A like amount of MWD State Water Project (SWP) water was banked previously at AEWSD under a separate action.
2. Deliver AEWSD's CVP water to MWD during times of abundant AEWSD supplies after which MWD would return a like amount (balanced exchange) of SWP water, metered at the California Aqueduct (Aqueduct), to AEWSD later within the 12-month period.
3. Deliver AEWSD's CVP water to MWD during times those supplies are at-risk of loss to AEWSD after which MWD would return a portion (unbalanced exchange) of the water so delivered as SWP water, metered at the California Aqueduct (Aqueduct) to AEWSD later within the 12-month period.

The Proposed Action would allow for better regulation of water supplies by creating the opportunity to store otherwise unstorable water for use during high demand periods. The Proposed Action would also reduce energy use and the costs associated with groundwater pumping while improving water quality.

The proposed action does not have a potential to impact Indian Trust Assets.

Patricia Rivera
Native American Affairs Program Manager
US Bureau of Reclamation
Mid-Pacific Region
2800 Sacramento, California 95825
(916) 978-5194

Kristi this is admin-please log in. thanks

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Appendix C Comments and Responses



December 18, 2013

Harvey A. Bailey
Chairman of the Board

Nick Canata
Vice Chairman

Tom Runyon
Secretary/Treasurer

Ronald D. Jacobsma
General Manager

Jennifer T. Buckman
General Counsel

Member Agencies
Arvin-Edison W.S.D.
Delano-Earlimart I.D.
Exeter I.D.
Fresno I.D.
Ivanhoe I.D.
Kaweah Delta W.C.D.
Kern-Tulare W.D.
Lindmore I.D.
Lindsay-Strathmore I.D.
Lower Tule River I.D.
Madera I.D.
Orange Cove I.D.
Pixley I.D.
Porterville I.D.
Saucelito I.D.
Shafter-Wasco I.D.
Stone Corral I.D.
Tea Pot Dome W.D.
Terra Bella I.D.
Tulare I.D.

Chuck Siek
Bureau of Reclamation
1243 N Street Fresno, CA 93721
Via email at csiek@usbr.gov.

Subject: Request for extension of time for public review of the Draft Environmental Documents on a Proposed Water Transfer Exchange Program between Arvin-Edison Water Storage District and the Metropolitan Water District of Southern California

Dear Mr. Siek,

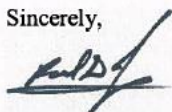
The Friant Water Authority requests a 45 day extension (from Saturday, December 21, 2013 to Tuesday, February 4, 2014) of the public review for the Draft Environmental Documents on a Proposed Water Transfer Exchange Program between Arvin-Edison Water Storage District and the Metropolitan Water District of Southern California (Program). The Authority appreciates Reclamation's extension of the public review through Saturday, December 21, 2013. However, due to the holiday season and the resulting adjustment to our meeting dates, the Authority has had limited opportunity to consider this matter.

The Authority and its member districts wish to seek clarification of certain aspects of the Program to better understand the potential water supply and other impacts to San Joaquin Valley that might result. The Authority supports extension of the existing exchange arrangement between Arvin-Edison and Metropolitan. However, the Program seems to expand the parameters of the existing arrangement in two ways: (1) by changing the timing of when the exchanges would take place and (2) by changing the ratio of water and expanding the types of water that can be exchanged. To allow our board sufficient time to obtain more information about how the Program would operate and what, if any, impacts might reasonably be expected, we respectfully request that the comment period be extended through February 4, 2014.

Comment 1.

Thank you in advance for consideration of this request.

Sincerely,



Ronald D. Jacobsma,
General Manager

cc: Member Districts
Jennifer Buckman, FWA General Counsel

From: Dale Brogan
Sent: Thursday, December 19, 2013 2:46 PM
To: 'MICHAEL JACKSON'
Cc: 'Ronald D. Jacobsma'; Buckman Jennifer (jbuckman@friantwater.org); jmeith@minasianlaw.com;
Pablo Arroyave (PArroyave@usbr.gov)
Subject: RE: Request for Extension on Proposed Program between AEWS and MWD

Michael-

I must lodge my complaint about the decision to not extend the comment period for AE-MWD exchange EA. This is a major program with potentially far-reaching impacts to every Friant district and others that use water in this valley. The ability to have adequate time to first understand the proposal so that specific comments and be prepared and offered is critical to preserving the integrity of the environmental review process. Launching the comment period on this project very close to the Thanksgiving holiday and then closing the comment period just short of the Christmas holiday puts a strain on an already busy part of the calendar. It is lost on me how allowing the comment period to be extended as requested by the Friant Water Authority puts anyone in a hardship position.

The Delano-Earlimart Irrigation District respectfully requests that you reconsider the request from FWA that an extension of time be granted for the comment period on this project. To do otherwise will result in a stifling of comments that otherwise could be offered with respect to the potential impacts of this project.

Comment 2.

Dale Brogan, General Manager
Delano-Earlimart Irrigation District
14181 Avenue 24
Delano, CA 93215
Office: 661-725-2526
Cell: 559-901-3113

From: Sean Geivet <sgeivet@ocsnet.net>
Subject: Re: Request for Extension on Proposed Program between AEWS and MWD
Date: December 19, 2013 at 3:58:14 PM PST
To: MICHAEL JACKSON <mjackson@usbr.gov>
Cc: "Jennifer T. Buckman" <jbuckman@friantwater.org>, Ronald Jacobsma <rjacobsma@friantwater.org>, PABLO ARROYAVE Arroyave <PARroyave@usbr.gov>, Jeffery Meith <jmeith@minasianlaw.com>, Alex Peltzer <apeltzer@prlawcorp.com>, "D. Zackary Smith" <Zsmith@visaliaalaw.com>

Michael,

On behalf of the Porterville, Saucelito, and Terra Bella Irrigation Districts I request you reconsider your decision to not extend the public review period for the proposed program between AEWS and MWD as originally requested by the Friant Water Authority (FWA).

After a cursory review of the environmental documents it appears that the proposal is a large expansion to the existing AEWS/MWD program. We are not able to evaluate the impacts of the proposed expansion to our Districts in the time allowed and we do not see the needed analysis in the documents provided. Therefore, we respectfully request that you grant the extension to the public review period for the proposed program between AEWS and MWD asked for in the letter from FWA. This will allow my Districts the necessary time to both fully understand the proposal and any potential impacts of the program.

Comment 3.

Thank you in advance for your attention to this important matter.

Sean Geivet
General Manager
PID, SID, & TBID

Response to Comments 1, 2 and 3

Reclamation originally posted the Arvin-Edison Water Storage District and Metropolitan Water District 10-year Water Transfer/Exchange Program Draft EA/FONSI for a 15-day circulation period in order to meet the proponents' requested schedule. Reclamation received several requests to extend the circulation period based on the fact that some water districts wishing to comment on the documents were experiencing reduced hours and short staffing due to the holiday season.

Reclamation granted that request by re-posting a revised press release listing the circulation period as between November 21, 2013 and December 21, 2013. Subsequently, several water districts requested a second extension of 45-days which would have resulted in a 75-day total circulation period for the Draft EA/FONSI. These requests were considered, however, Reclamation made the determination that the 30-day circulation period was sufficient for completing and submitting comments. See also Reclamation's letter to Friant Water Authority, included following.



IN REPLY REFER TO:
SCC-411
ENV-6.00

United States Department of the Interior

BUREAU OF RECLAMATION
Mid-Pacific Region
South-Central California Area Office
1243 N Street
Fresno, CA 93721-1813

DEC 20 2013

VIA ELECTRONIC MAIL AND U.S. POSTAL SERVICE

Mr. Ronald D. Jacobsma
General Manager
Friant Water Authority
854 North Harvard Avenue
Lindsay, CA 93247

Subject: Request for extension of time for public review of the Draft Environmental Documents on a Proposed Water Transfer/Exchange Program between Arvin-Edison Water Storage District and the Metropolitan Water District of Southern California (Your Letter Dated December 18, 2013)

Dear Mr. Jacobsma:

The Bureau of Reclamation (Reclamation) is in receipt of your request for extension of the public review period for the draft environmental documents on a proposed water transfer/exchange between Arvin-Edison Water Storage District (Arvin-Edison) and the Metropolitan Water District (Metropolitan) of Southern California.

Having already granted an extension to fulfill a previous request by the Friant Water Authority (Authority) to extend the comment period, and after review of your latest request, Reclamation will not grant a further extension of the public review period for the following reasons:

- While National Environmental Policy Act public notification requirements do not mandate specific circulation periods for draft Environmental Assessments/Findings of No Significant Impacts, it is atypical to circulate these documents longer than 30-days.
- The Authority noted in the request to extend the comment period that two elements of the previous transfers between Arvin-Edison and Metropolitan have changed as follows: 1) The transfer period for the Proposed Action has been extended to 10-years; and, 2) the ratio of water has changed with Arvin-Edison leaving behind 1 acre-foot for every 3 acre-feet as compensation to Metropolitan for their management and storage costs. All comments related to these or other elements of the Proposed Action will be considered and responded to in the final environmental documents.

- As the Authority had the opportunity to comment on similar projects including the Consolidated Place of Use Petition which addressed the transfer/exchange described in this environmental document and the Recirculation of Recaptured Water Year 2013-2017 San Joaquin River Restoration Program flows which provided for unbalanced exchanges and transfers or exchanges with a number of non-federal contractors including Metropolitan but provided no such comments, it is not clear that extending the comment period for this project would result in substantive new information.
- Reclamation has received a request from the proponent that they are not supportive of extending the comment period.

Therefore, based on the above, Reclamation will not extend the public comment period past December 23, 2013. The Authority is encouraged to provide comments to Reclamation by December 23, 2013.

Sincerely,



Chuck Siek
Supervisory Natural Resources Specialist

cc: Ms. Toni Marie
Executive Secretary
Friant Water Authority
854 North Harvard Avenue
Lindsay, CA 93247



December 20, 2013

Harvey A. Bailey
Chairman of the Board

Nick Canata
Vice Chairman

Tom Runyon
Secretary/Treasurer

Ronald D. Jacobsma
General Manager

Jennifer T. Buckman
General Counsel

Member Agencies
Arvin-Edison W.S.D.
Delano-Earlimart I.D.
Exeter I.D.
Fresno I.D.
Ivanhoe I.D.
Kaweah Delta W.C.D.
Kern-Tulare W.D.
Lindmore I.D.
Lindsay-Strathmore I.D.
Lower Tule River I.D.
Madera I.D.
Orange Cove I.D.
Pixley I.D.
Porterville I.D.
Saucelito I.D.
Shafter-Wasco I.D.
Stone Corral I.D.
Tea Pot Dome W.D.
Terra Bella I.D.
Tulare I.D.

Chuck Siek
Bureau of Reclamation
1243 N Street Fresno, CA 93721
Via email at csiek@usbr.gov

Subject: Draft Environmental Documents on a Proposed Water Transfer Exchange Program between Arvin-Edison Water Storage District and the Metropolitan Water District of Southern California

Dear Mr. Siek,

Thank you for the opportunity to submit comments on the Draft Environmental Documents on a Proposed Water Transfer Exchange Program (Program) between Arvin-Edison Water Storage District (AEWSD) and the Metropolitan Water District of Southern California (Metropolitan). The Friant Water Authority (Authority) is generally supportive of its members' programs to augment their water supplies and increase water supply reliability. However, the Authority does have some concerns the environmental impacts of certain aspects of this Program have not been adequately evaluated.

The Program proposes to continue and expand an existing exchange arrangement between AEWSD and Metropolitan Water District. Broadly speaking, under the Program, Metropolitan will provide AEWSD with some of its Delta supplies in exchange for some of AEWSD's Friant supplies.

As you know, the Authority asked for an extension of the public review period to seek clarification of certain aspects of the Program so that the Authority and its member districts could better understand the potential water supply and other impacts to San Joaquin Valley that might result. Unfortunately, Reclamation chose not to grant that extension, which left the Authority with no choice but to submit these comments. While the Authority remains hopeful that any misunderstandings of the Program or its impacts can be cleared up through further discussions,

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854 N. Harvard Avenue
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Fax: 559-562-3496

Sacramento Office
1107 9th Street, Suite 640
Sacramento, CA 95814

Phone: 916-346-4165
Fax: 916-346-3429

Website: www.friantwater.org

Chuck Siek
December 20, 2013
Page 2

the Authority does not believe that the environmental documents establish that the Program will not have any significant environmental impacts. At a minimum, the documents must be revised to include additional required analysis and recirculated for another period of public review. In its letter to you dated December 18, 2013, AEWS D claims that the Authority does not need more time to evaluate the Program because AEWS D participated in a public SWRCB process last summer and, according to AEWS D, "the Program was described identically in the CPOU process as is provided in these environmental documents" (December 18, 2013 letter from S. Collup to C. Siek, p. 1.) However, on the next page, the AEWS D letter concedes that "the 2-for-3 component is new in AEWS D's latest petition." (*Id.* at p. 2.) Thus, the CEQA documents prepared for the SWRCB process admittedly did not evaluate the environmental impacts associated with the whole of the Program AEWS D now proposes. As such, they are probably defective under CEQA.

Comment 4

Furthermore, even if the Program had not been expanded to include the components that are now proposed, the lack of participation in prior SWRCB and CEQA processes is irrelevant to this NEPA process. The operative question at this time is whether these environmental documents are considered legally adequate to demonstrate, under NEPA, that the Program will not have any significant environmental impacts. Accordingly, none of the reasons stated in AEWS D's December 18 letter to you provide any legitimate reason not to grant an extension of time to allow the parties sufficient opportunity to evaluate the environmental impacts of this newly expanded Program.

AEWS D has previously taken the position that the introduction of Delta water into the Friant system could diminish water quality to the detriment of other users. For example, the comments AEWS D submitted on October 3, 2013 on the Cross Valley Contractors' Interim Contract Renewals (a copy of which is attached for your reference) raise this as a potential issue. Many, if not most, of the Authority's twenty member districts have taken the position that the introduction into Friant facilities of Delta water that meets applicable water quality standards and is suitable for the member districts' permitted uses does not result in any significant water quality impacts. It appears that this proposed Program is consistent with that perspective.

Comment 5

Unfortunately, though, the lack of significant water quality impacts does not mean that the Program will not have any significant environmental impacts. The Authority notes that the currently proposed Program includes two new aspects that were not components of the prior arrangement AEWS D had with Metropolitan: the Program (1) alters the timing of when the exchanges would take place, and (2) changes the ratio of water and expands the types of water that can be exchanged. As you know, the last twelve months have been the driest that the San Joaquin Valley has ever experienced. We are in the midst of a severe drought. Groundwater levels in the Valley have been dropping precipitously, and subsidence is occurring at an alarming rate in many areas. Yet this Program proposes an unbalanced exchange under which for every 3 acre-feet of water AEWS D provides to Metropolitan, AEWS D receives back 2 acre-feet. There

Comment 6

Chuck Siek
December 20, 2013
Page 3

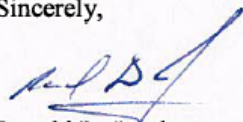
is no analysis regarding the extent to which water delivered to Metropolitan would have otherwise have been deliverable to AEWS or other Friant Division contractors. This means that the Program may result in a net loss of water supply to the San Joaquin Valley and could result in a reduction of Class 2, Section 215 or Recovered Water Account water supplies available to other Friant Contractors, most of which would benefit groundwater conditions. The EA's lack of analysis as to whether the potential loss of water supply further exacerbates a dire groundwater situation in the Friant Service area and the San Joaquin Valley, and results in significant direct, indirect, or cumulative impacts to groundwater overdraft in the Valley, is a significant deficiency. Neither the short nor the long-term environmental impacts of this aspect of the Program's unbalanced exchange have been adequately evaluated. This is a fatal flaw in the Draft EA.

Also, the Program's alteration of the timing of the exchanges and the types of water that can be exchanged may result in potential water supply impacts to other Friant contractors as compared to historical conditions. This aspect of the Program has not been adequately evaluated, and the Draft EA is not sufficient to support a conclusion that the Program will not have any direct, indirect, or cumulative impacts on water supplies to other Friant contractors.

At a minimum, the Draft EA must be revised to include analysis of these two crucial issues. Once the Draft EA is revised so that it discloses all of the relevant information regarding the Program's potentially significant environmental impacts, it must then be recirculated for another period of public review to allow interested parties the opportunity to evaluate the Program features and comment on them. As written, the Draft EA is simply incomplete and does not support a Finding of No Significant Impact.

Thank you for consideration of these comments.

Sincerely,



Ronald D. Jacobsma,
General Manager

cc: Member Districts
Jennifer Buckman, FWA General Counsel

Attachment

Response to Comment 4

Reclamation reviewed the CEQA Notice of Determination (State Clearinghouse number 2012021031) signed by AEWS D June 11, 2013. The following text is included in that document, under the subheading “Exchange of Fall/Winter Supplies”:

“MWD would receive AEWS D water prior to spill and at a later time, return a lesser amount (return 2 AF for every 3 AF regulated to AEWS D. The uneven nature of the exchange reflects the compensation to MWD for their water management services.”

Therefore it appears that AEWS D’s CEQA documents adequately describe the Proposed Action and are sufficient.

The SWRCB petition (approved July 1, 2013) included the same language and description for each of the 3 Program components as were described in this EA/FONSI, and upon which the FWA did not offer comments. That approved petition is “AEWS D’s latest petition.” AEWS D was simply pointing out that the only new component to AEWS D’s program, which was described and approved in the SWRCB petition, was the 2 for 3 component, and FWA’s comment regarding “altering the timing of when exchanges take place” is not new and has been approved by the SWRCB and Reclamation in years past, approvals on which the FWA also did not comment.

The commenter’s disagreement with Reclamation’s decision not to extend the comment period for the Environmental Assessment is noted. Please see the above responses to Comments 1, 2 and 3.

Response to Comment 5

Reclamation is aware of AEWS D’s position regarding potential water quality issues in the Friant-Kern Canal (FKC) from introduction of other sources. Reclamation is also aware many of the FWA’s member districts’ position that introduction of Delta water into the FKC would not result in significant water quality impacts. The proposed Program does not include discharges of Delta water into the FKC.

Response to Comment 6

As considered under this EA, water to be transferred to MWD would only occur during periods of excess flow, during which AEWS D could not otherwise store the water or use it to meet in-district needs. Under such “wet” conditions, the water needs of other Friant Division contractors are expected to also be met, resulting in no shortage of water available for their needs or for groundwater recharge.

Timing as it relates to operations or meeting other obligations is addressed in Table 2-1 of the EA which states the following:

“Exchanges 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.”

Dec. 19, 2013 11:09AM Chowchilla Water District

No. 4313 P. 1

Chowchilla Water District

Post Office Box 905 ♦ 327 S. Chowchilla Blvd. ♦ Chowchilla, CA 93610
Phone (559) 665-3747 ♦ Fax (559) 665-3740 ♦ Email dwelch@cwddwater.com

Board of Directors

Dan Maddalena ♦ Michael Mandala ♦ Vince Taylor ♦ Kole M. Upton ♦ Mark Wolfshorndt

December 19, 2013

VIA FACSIMILE ONLY

559-487-5397

Mr. Chuck Siek
United States Bureau of Reclamation
1243 N Street
Fresno, CA 93721

Re: Comments on Draft Environmental Documents On Proposed Water
Transfer/Exchange Program for the Arvin-Edison Water Storage and
Metropolitan Water Districts

Dear Mr. Siek:

In response to the Bureau of Reclamation's press release dated November 21, 2013 on the above-referenced program, the Chowchilla Water District hereby provides the following comments. Please include this letter in the administrative record for the subject program and the related environmental documents.

As you are aware, the Chowchilla Water District is a Friant Division contractor. Our area, like the balance of the Friant Division, is water short. Accordingly, all water generated by the Friant Division that can be diverted into the District is of vital importance to our water users, to groundwater conditions in the District, and to the region. A loss of any Friant water is problematic and could have material adverse impacts, especially when considered cumulatively with the loss of water to our area occasioned by the San Joaquin River Restoration Program.

The "Operational Guidelines for Water Service Friant Division Central Valley Project" provide for the declaration of an "Uncontrolled Season" when the Contracting Officer determines there is a need to evacuate water from Millerton Lake in order to prevent or minimize a spill or meet flow control criteria. Many Friant Division contractors, including the Chowchilla Water District, utilize and rely on Uncontrolled Season water.

Comment 7

The Proposed Action would allow the Arvin-Edison Water Storage District to deliver water to the Metropolitan Water District during an Uncontrolled Season on a 3 for 2 imbalanced exchange basis. The effect of this imbalanced exchange could be to shorten the length of the Uncontrolled Season, thereby reducing the amount of water available to other Friant Division contractors during an Uncontrolled Season and redirecting it to MWD.

Dec. 19. 2013 11:09AM Chowchilla Water District

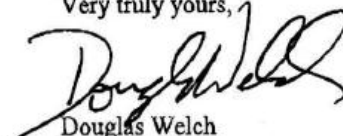
No. 4313 P. 2

Mr. Chuck Sick
December 19, 2013
Page 2

The draft Environmental Assessment wrongly assumes the Uncontrolled Season water to be delivered to MWD will be "at risk of spill" and fails to analyze the impacts of the program on the length of Uncontrolled Seasons. Nowhere in the subject program is there any assurance that other Friant Division contractors will be made whole or that the only water to be delivered to MWD as a part of the Fall/Winter imbalanced exchange will be water that could not otherwise be utilized by other Friant Division contractors, and nowhere in the draft documents submitted for review is there any analysis of the potentially substantial water supply, groundwater, economic and other impacts of that loss of water. Absent such assurances in an enforceable form, and absent an analysis of the subject impacts, the program, the draft Environmental Assessment and Finding of No Significant Impact are fatally flawed. The Chowchilla Water District urges Reclamation to withdraw both documents to address those flaws.

Please contact me if you have any questions.

Very truly yours,



Douglas Welch
General Manager

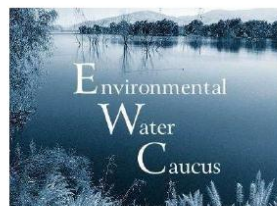
DW

cc: Arvin-Edison Water Storage District

Response to Comment 7

“Uncontrolled Season” shall mean any time during the Contract Year the Contracting Officer determines that a need exists to evacuate water from Millerton Lake in order to prevent or minimize spill or to meet flood control criteria, taking into consideration, among other things, anticipated upstream reservoir operations and the most probable forecast of snowmelt and runoff projections for the upper San Joaquin River watershed.

If and when an “Uncontrolled Season” is declared by Reclamation, AEWS D along with other eligible contractors, divert this water within the existing contractual and operational guidelines specific to their respective Class 2 contract supplies. AEWS D is not given an unfair advantage over other eligible contractors during a declared “Uncontrolled Season” as a result of this proposal or other programs. Many other programs similar to this have been approved for other Friant contractors. AEWS D’s 9d contract with Reclamation (#14-06-200-229AD) allows for Sales, Transfers and Exchanges of Water. The water proposed to be included in the Program is only water that is made available to AEWS D under its Contract.



NORTH

COAST

RIVERS

ALLIANCE



December 21, 2013

Chuck Siek
Bureau of Reclamation
1243 N Street
Fresno, CA 93721

Comments On the Draft Environmental Assessment (DEA 13-026) for the 10 year 100,000 Acre Feet of Proposed Water Transfer/Exchange Program from the Arvin-Edison Water Storage District (AEWSD) to Metropolitan Water District (MWD) & Draft Finding of No Significant Impact (FONSI 13-026)

Dear Mr. Siek:

Thank you for the opportunity to comment on the proposed transfer of up to 100,000 acre feet of Central Valley Project water to Metropolitan Water District, the largest urban wholesale water supplier in the State Water Project.¹ The draft EA is not adequate and does not contain sufficient information to fully assess environmental impacts that should be avoided in order to

¹ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=15863

fully protect the environment. Reasonable alternatives which could reduce the environmental impacts of the project have not been considered. The information, data, analyses, and cumulative impacts should be included and an EIS completed for recirculation before a finding of no significant impact can be made.

Comment 8.

Without analysis or data, the DEA determines there will be no impact to the environment, no effect to endangered species, and that there is full compliance with the Migratory Bird Treaty Act and the Fish and Wildlife Coordination Act. Relying on a 1998 – a fifteen 15 year old document--by the United States Fish and Wildlife Service² and the Bureau of Reclamation is the basis for the determination that there is no need for further consultation regarding critical habitat, impacts to threatened and endangered species, or a need to provide any data to support the conclusions in the document. Much has occurred since 1998 including new listings of endangered and threatened species and critical habitat affected by the proposed project. This new information, along with impacts from climate change, droughts, and increased exports of scarce water supplies has not been considered under the proposal to export water out of the basin. In addition, the required monitoring or information required under existing biological opinions in the water service areas impacted by the proposed decade long transfer is absent. USBR in the DEA also determines, without documentation, data or analysis, that there will be no impact to water quality or meeting the terms of D-1641.³

Comment 9.

Comment 10.

The DEA also relies upon a change of place of use [CPOU] issued for one year 2013⁴, to determine that ten more successive years of such a transfer will not have any cumulative impacts, any environmental impacts, nor will there be impact to any of the listed endangered species or the designated critical habitat or threatened species. Once again no data is provided. The documents rely upon the premise that ‘all the water to be exchanged is water that would have been consumptively used or stored in the absence of the exchanges.’ The project however, rests upon a fact that refutes this premise. Arvin Edison’s contracted intermittent water supply often cannot be stored and instead is released, thus benefiting fish and wildlife and natural stream flows. Under the proposed provisions of payment by MWD who would receive AEWS D water prior to spill and at a later time, return a lesser amount (return 2 acre-feet for every 3 acre-feet regulated) to AEWS D is further evidence that the water is in fact not consumptively used by AEWS D and thus, the entire premise of the agreement between MWD and AEWS D refutes the contention CVP water under contract with AEWS D is consumptively used and thus there is no impact from exporting it out of the basin. Further, the impacts and cumulative impacts of recent changes to expand the boundaries of the membership of AEWS D (July 2013), to include the Westside Mutual Water District member lands in Westlands Water District to the AEWS D

Comment 11.

² http://www.usbr.gov/mp/cvpia/3405a/docs/ltr_final_proposal_water_trans_04-16-98.pdf

³ D-1641 also states that Reclamation will provide compensation and habitat values that mitigate for those associated with the delivery of CVP water to lands previously outside the authorized place of use. Delivery of this CVP water will be to lands outside the authorized place of use. This mitigation requirement has yet to be met.

⁴ http://www.waterboards.ca.gov/waterrights/water_issues/programs/applications/transfers_tu_orders/docs/reclamati_on_order.pdf
http://www.waterboards.ca.gov/waterrights/water_issues/programs/applications/transfers_tu_orders/docs/arvin_edis_on_order_040312.pdf

service area and Westside Exchange Program are not disclosed nor analyzed.⁵ Further irrigating these toxic soils on the west side of the San Joaquin Valley is known to create life threatening impacts to migratory birds, wildlife and fish, magnifying up the food chain as these pollutants accumulate. The promise of “bucket for bucket” water transferred stretches credibility when no description of the bucket for bucket is provided, nor is there monitoring or reporting conditions provided so that third party or environmental impacts can be assessed.

The delivery of Central Valley Project water to one of the largest urban water users in California is premised on “efficiency.” Absent from this efficiency argument, however, are the required environmental data and analysis to document how this proposed project will not have third party impacts, will not impact fish and wildlife, and will protect endangered species and water quality. A full environmental impact is needed to ensure compliance with the National Environmental Policy Act and other federal laws. We submit by reference, comments provided Cross-Valley Contractors Interim Renewal Contracts EA-12-048 and Draft Finding of No Significant Impact Cross-Valley Contractors Interim Renewal Contracts FONSI-12-048.

Comment 12.

The Bureau claims that Congressional directives under the Reclamation Reform Act of 1982, including the acreage limitations and full-cost provisions, do not apply because AEWS has repaid its obligation to the American taxpayer for the Central Valley Project. Little documentation of this interpretation is provided. No mention is made of the required charges of \$25 an acre foot under the CVPIA transfer provisions⁶. Further no discussion of third party impacts is provided from such a transfer extended over a decade. It is understandable that MWD would desire the better water quality from the eastside of the Central Valley, or water from the Delta Estuary, rather than the polluted groundwater of the Kern Plateau that was part of their original 1997 and 2008 agreements. However, the impacts on the environment and surrounding communities of exporting these surface water supplies are not disclosed. Without evidence or data the Bureau proclaims there are no impacts from this sustained export of water out of the basin.

Comment 13.

Relying on a one year permit sanction to change the place of use, the Bureau claims that all the water to be exchanged is water that would have been consumptively used or stored in the absence of the exchanges. This stretches credibility given that the very premise of the exchange is AEWS's intermittent water contract, the timing of available supplies, and inability to take delivery of the contract water when it is available, thus necessitating the transfer to MWD. Further the claim is *‘There will be no change in the amount of SWP or CVP water diverted at the Banks or Jones Pumping Plants. Therefore, there will be no change in flow or water quality*

⁵ http://www.usbr.gov/nrp/nepa/documentShow.cfm?Doc_ID=14341. The existing Exchange Program involves delivery of Arvin's supplies to Westside member lands as exchange water, based on a 1 for 1 or “bucket for bucket” basis, up to 50,000 acre feet (af). Westside diverts and uses a portion of Arvin's CVP water through a combination of existing turnouts. In exchange for Arvin's supplies, Westside delivers up to 50,000 af on a variable, as needed and available basis a combination of Westside's: SWP water supply, CVP Section 215 water, Kern River water, and/or City of Bakersfield Surplus Kern River water. The Exchange Program began in 2011 and is in effect through February 29, 2016 or 50,000 af, whichever comes first.

⁶ Ibid. USFWS 1998 agreement @ pg 27

conditions in the Delta. This statement is inconsistent with the premise of the project, which is to recapture San Joaquin River Restoration flows for diversion and export from the San Francisco Bay Sacramento San Joaquin Delta Estuary. Further, it is well documented that approximately 50% of the flow into the estuary is exported out of the San Francisco Bay Sacramento San Joaquin Delta Estuary, causing significant impacts to fish, wildlife and water quality. There is no data to support the conclusion that exporting San Joaquin River Restoration flows will not have estuary flow or water quality impacts. It is precisely this shift in the timing, deliveries and amounts of water exported from the estuary that does impact fish, wildlife and water quality.

Comment 14.

The Draft EA at page 8 states, “*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;*
- *San Joaquin River Restoration Program (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.”*

Relying on three years of serial one year transfers and the associated environmental assessments is insufficient to fully determine the impacts from the proposed decade long annual transfer of up to 100,000 acre feet of federally subsidized water supplies from the federal Central Valley Project to the state water project contractor, Metropolitan Water District of Southern California. The impacts to the surrounding communities, the environment, source water supplies and Indian Water Rights have not been addressed or documented.

The failure to conduct an adequate NEPA review imposes high ecological risks on a water system in the middle of extreme drought and where community wells are being drained, rivers are dried up, and fish and wildlife stressed to extinction due to water diversions. Without greater transparency regarding these risks there is insufficient information to determine there will not be significant environmental impact.

The draft EIS does not adequately assess the potentially significant environmental impacts of the project. Given the project is suppose to account for water “bucket for bucket”, the failure of the document to include any history or data regarding the previous three years of “temporary” sales, exchanges or transfers leaves decision makers and the public in the dark. There are reasonably available alternatives that have not been considered and should be analyzed in order to reduce the potentially significant environmental impacts. Absent from the document is any

assessment of the cumulative impacts of the project including third party impacts and impacts to fish, wildlife and water quality. The document needs to be withdrawn. A full EIS is needed.

Thank you for the opportunity to comment. Please add our names to USBR's electronic notification lists for environmental documents regarding the Central Valley Project water supplies or contracts.



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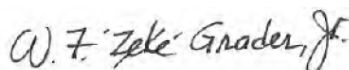
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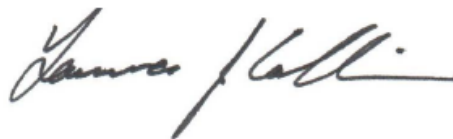
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Response to Comment 8

Alternatives involving shorter timeframes (2 and 5 years) were considered but eliminated prior to developing the full Proposed Action description. The environmental impacts were judged to be similar, and longer-term agreements provide greater certainty and efficiency for the affected districts. In the event that the affected environment or environmental consequences change during the 10-year timeframe, Reclamation would review the existing environmental documentation. Reclamation would then either supplement the existing environmental document, issue a new FONSI or elevate the document to an EIS.

The EA was developed consistent with National Environmental Policy Act (NEPA) regulations, guidance from the Council on Environmental Quality (CEQ), and the Department of the Interior's NEPA regulations. Reclamation has followed applicable procedures in the preparation of the EA, which includes the required components of an EA as described in the CEQ's NEPA regulations (40 CFR 1508.9). Considering direct, indirect, and cumulative impacts as a result of the Proposed Action, Reclamation determined that a Finding of No Significant Impact is appropriate and an Environmental Impact Statement is not necessary.

Response to Comment 9

The analysis of effects to species did not rely on the referenced 1998 document. A current list of species was developed and the project's effects to species were considered, as identified in Section 3.3. Reclamation requested an official species list from the Service that included 11 quadrangle maps that comprise AEWS's service area and a species list from the Service that included 123 quadrangle maps that comprise MWD's service area. In addition, Reclamation reviewed the California Natural Diversity Database for protected plant species within 10 miles of the Proposed Action Area.

The Proposed Action would not include land disturbance or change land use. These considerations coupled with the fact that similar actions in the past that did not result in adverse impacts to animal or plant species or critical habitat informed Reclamation's determination. Reclamation has fulfilled its responsibility under the respective statutes protecting biological resources as a result of this Proposed Action. Reclamation has and will continue to comply with existing, applicable Biological Opinions.

California's water supply issues are complicated and wide-ranging. A variety of state, federal and local agencies are involved in predicting future trends and identifying appropriate, balanced solutions to supply challenges. It is beyond the scope of this action to address the full range of water issues affecting the State.

Response to Comment 10

The imbalanced exchanges considered under the Proposed Action would only take place during conditions of excess flow, when the requirements of the San Joaquin River Restoration Program have been met, and flows are adequate to meet the water quality objectives identified by D-1641.

Response to Comment 11

The CPOU is an administrative action issued on an annual basis. The statement that Reclamation's determination of the action's impact is based on the 2013 CPOU or any

subsequent CPOU for the length of the Program is incorrect. Instead, Reclamation based its determination regarding the impacts of the CPOU on commitments that there would be no construction or change in land use for the length of the Program.

We could not identify the passage in the draft EA regarding consumptive use that the commenters have referenced. Therefore we are unable to respond on that point. In addition, the assertion that AEWSO often cannot use or store their contracted intermittent water supply is not correct. AEWSO has historically banked, exchanged, or made in-district use of all of the “Class 2” water supply made available to them.

Regarding the issue of imbalanced exchanges, the imbalanced exchanges considered under the Proposed Action would only take place during conditions of excess flow, when obligations to contractors and environmental/habitat purposes have been satisfied. Other competing water needs would not be impaired or unmet as a result of the imbalanced exchanges.

The impacts of expanding AEWSO’s service area were evaluated by Reclamation in a separate Environmental Assessment (EA 12-030). It is beyond the scope of this document to revisit that analysis.

Habitat loss, habitat fragmentation, and impacts to species are expected to occur regardless of whether or not the Proposed Action is implemented as most of the causes of these problems have no relation to this action.

Response to Comment 12

The exchanges considered under the Proposed Action would only take place during conditions of excess flow, when obligations to contractors and environmental/habitat purposes have been satisfied. None of the impacts identified in the Environmental Assessment rise to the level of significance which would trigger the need for an Environmental Impact Statement.

In reference to comments previously submitted regarding EA/FONSI-12-048, please refer to Reclamation’s response to those comments in EA/FONSI-12-048.

Response to Comment 13

Any per-acre-foot surcharges such as the commenter has described are contract details which do not bear on the environmental impacts of the action. Therefore they were not incorporated or analyzed herein.

The environmental impacts of large-scale Delta exports were analyzed in the environmental analyses for the CVPIA. The Proposed Action is of a type which was considered and evaluated as part of those analyses, and it is beyond the scope of this document to revisit decisions and determinations made through that process.

Response to Comment 14

Again, we could not identify the passage in the draft EA regarding consumptive use that the commenters have referenced. Similarly, the quoted text regarding Banks and Jones pumping plants could not be found in the draft EA. Therefore we are unable to respond on those points.

Also see the response to Comment 13 regarding operation of the CVPIA and large-scale Delta exports.

The assertion that Reclamation is proposing a transfer of 100,000 acre-feet of CVP water to MWD in a time of shortage is inaccurate. The groundwater banking and water flow regulation elements of the Proposed Action would be on an equal-volume basis. Since SWP and CVP water would be exchanged in matching amounts, there would be no net change to the water basin. The third element of the Proposed Action, exchange of uncontrolled flows, would take place on a 2-for-3 basis, but that component would only apply to excess flow which cannot otherwise be used or stored by AEWS. Under such conditions, obligations to contractors and environmental/habitat purposes would already have been satisfied. Other competing water needs would not be impaired or unmet as a result of the imbalanced exchanges.