

## **SUPPLEMENT TO 2017 PETITION FOR TEMPORARY CHANGE TO MODIFY THE SWP AND CVP AUTHORIZED PLACES OF USE**

### **California Department of Water Resources**

Application Number 14443, Permit 16479

### **U.S. Bureau of Reclamation Permits for the Central Valley Project**

Application Numbers: 23, 234, 1465, 5626, 5628, 5638, 9363, 9364, 9368, 13370, 13371, 15374, 15375, 15764, 16767, 17374, 17376

License Number 1986 and Permit Numbers: 11885, 11886, 12721, 11967, 11887, 12722, 12723, 11315, 11316, 11968, 11969, 12727, 12860, 11971, 11973, 12364

### **Requested Change**

The California Department of Water Resources (DWR) and the United States Bureau of Reclamation (Reclamation) request the State Water Resources Control Board (SWRCB) modify the permits listed above to temporarily change the authorized place of use of (1) the above Reclamation permits to include the State Water Project (SWP) authorized place of use downstream of Harvey O. Banks Pumping Plant (Banks) as shown on the maps on file with the SWRCB, and (2) the above DWR permit to include the Central Valley Project (CVP) authorized place of use downstream of Jones Pumping Plant (Jones) as shown on the maps on file with the SWRCB and as shown on the attached maps. The authorized SWP and CVP places of use are located within Fresno, Kern, Kings, Los Angeles, Merced, Orange, Riverside, San Benito, San Bernardino, San Diego, San Joaquin, Santa Clara, Stanislaus, Tulare, and Ventura counties. DWR and Reclamation request that the above changes become effective on May 1, 2017 and remain in effect for one year from the date of any order approving this Petition. These changes will allow DWR and Reclamation to more effectively and efficiently utilize the potential operational flexibility of the combined SWP and CVP facilities and water supply south of Banks and Jones. The requested changes will facilitate the delivery of available Project supplies south of the Delta and maximize the beneficial use of available supplies. Approval of this Petition will not increase the quantity or alter the timing of diversions from the Delta or the San Joaquin River.

## **Reason for the Requested Changes**

California is experiencing wet conditions following five consecutive years of drought. Although hydrologic conditions in 2017 improved over the previous dry years, part of California was still experiencing severe drought conditions, especially south of the Delta. The U.S. Drought Monitor updated on April 11, 2017 continues to classify approximately 24 percent of the state in Abnormally Dry or Severe Drought conditions, mainly in Southern California. The current allocation to SWP contractors is 85 percent of their requested Table A amounts. On April 11, Reclamation announced full allocations for agricultural contractors and municipal and industrial contractors south of Jones, with conditions on San Luis Reservoir operations. It is therefore still critical for DWR and Reclamation to maximize the efficiencies of SWP and CVP deliveries to assist in drought recovery.

The proposed changes in place of use will not result in diversion of additional water from the Delta, a change in the timing of SWP or CVP diversions, or the delivery of more Project water than has been delivered historically. Instead, the requested change will provide the operational flexibility the Projects need to get available supplies where they are needed most and to make the most efficient use of the available water supplies, as well as to aid in the continued recovery from the extended drought.

## **Proposed Projects Requiring a Change in Authorized Place of Use**

All exchanges covered by this Petition will occur south of the Delta and total amount of water transferred will not exceed **360,232 acre-feet**. The following exchanges are proposed by SWP and CVP contractors south of the Delta to maximize efficient use of available water supplies.

### **1. Santa Clara Valley Water District**

Santa Clara Valley Water District (SCVWD) contracts for water supplies from both DWR and Reclamation. The SWP water is delivered through the South Bay Aqueduct (SBA) and the CVP water is delivered from San Luis Reservoir through the CVP San Felipe Division. In 2017 and 2018, several operational and maintenance issues may require the delivery of the SCVWD's CVP, SWP, and/or transfer water supplies through an exchange. Also in 2017 and 2018, SCVWD may need to recover previously stored CVP water from the Semitropic Water Storage District (Semitropic) groundwater bank by exchange. **Up to 100,000 acre-feet** of SCVWD's

CVP, SWP, and/or previously stored CVP supplies may be subject to these alternative conveyance approaches. The need for this flexibility is described in more detail below:

Based on historic operating conditions, total storage in San Luis Reservoir may drop to levels that result in operational and/or water quality problems. When this occurs, SCVWD's pumping capacity through the CVP San Felipe Division can be limited, potentially impacting the ability to meet SCVWD demands. In addition, low water levels can result in reduced water quality causing water treatment problems that could result in severe reductions in the quantity of CVP water conveyed through the CVP San Felipe Division, as well as increased water treatment costs. Another issue is the aging infrastructure of the CVP San Felipe Division, which could result in both planned and unplanned facility shutdowns for maintenance and repair. In addition to San Luis Reservoir water level issues and potential infrastructure repairs, the following activities may limit SCVWD's ability to receive water through the CVP San Felipe Division and therefore, may require delivery of SCVWD's CVP water through an exchange with SWP water: 1) work at Pacheco Pumping Plant; 2) work on SCVWD-maintained facilities, including shutdown of the Santa Clara Tunnel and Pacheco Conduit, which are the major raw water pipelines, scheduled from November 2017 to February 2018; 3) work on the Almaden Valley Pipeline from January 2018 to April 2018. SCVWD may also need to move its CVP water through the SBA by exchange in order to balance its operations if there is insufficient SWP water moving through the SBA. Thus, Reclamation and DWR are requesting approval to exchange CVP and SWP water to allow SCVWD's CVP water to be pumped at Jones and delivered to DWR at O'Neill Forebay for use within the SWP service area south of O'Neill, and in exchange, an equal amount of SWP water would be pumped at Banks and delivered through SBA. The proposed exchange would not increase the total amount of CVP or SWP water allocated to SCVWD by DWR or Reclamation.

Possible shutdowns on the SBA, as well as within SCVWD's service area, may prevent deliveries of SWP water through the SBA. The SBA is planned to have limited operations through June 2017. Work at SCVWD's Penitencia Water Treatment Plant, currently scheduled for January to June 2017, will also limit SCVWD's ability to utilize SWP supplies from the SBA. In addition, aging infrastructure may require unplanned shutdowns that could further limit SCVWD's ability to receive SWP water through the SBA. SCVWD may also need to move its SWP water through the CVP San Felipe Division by exchange in order to balance its operations if there is insufficient CVP water through the CVP San Felipe Division. Reclamation and DWR are requesting an exchange of CVP and SWP water to allow the delivery of SCVWD's SWP

water through an exchange with CVP water. SWP water would be pumped at Banks and delivered to Reclamation at O'Neill Forebay for use within the CVP service area south of O'Neill Forebay. In exchange, an equal amount of CVP water would be pumped at Jones and delivered to SCVWD through the CVP San Felipe Division. The proposed exchange would not increase the total amount of CVP or SWP water allocated to SCVWD by DWR or Reclamation.

SCVWD has previously banked CVP water in the Semitropic groundwater bank. Recovery of the stored CVP water must be accomplished by exchange. In order to return the previously stored CVP water to SCVWD, Semitropic will either pump the stored water into the California Aqueduct and deliver that water to DWR for use within the SWP service area south of Semitropic's turn-in facilities, or use SCVWD's previously stored water within its own service area. In exchange, an equal amount of SWP water would be delivered to SCVWD through either the SBA and/or the CVP San Felipe Division. The proposed exchange would not increase the total amount of CVP or SWP water allocated to SCVWD by DWR or Reclamation.

The added flexibility provided by the proposed exchanges will allow SCVWD to manage operational and maintenance uncertainties on both the CVP San Felipe Division and the SBA, and allow SCVWD to recover previously stored CVP water from the Semitropic groundwater bank by exchange, and will minimize negative impacts to the economy of the SCVWD service area, water levels within the region's groundwater basin, and local environmental resources.

## **2. Oak Flat Water District / Del Puerto Water District**

Oak Flat Water District (OFWD), a SWP contractor, and Del Puerto Water District (DPWD), a CVP contractor, are adjacent districts located north of San Luis Reservoir in San Joaquin, Stanislaus and Merced counties. These two districts share common landowners. Landowners with water supplies from both projects have requested the ability to optimize the application of available supplies on their combined properties.

### ***Transfer of Allocated SWP and CVP Supplies***

The proposed transfers will allow the delivery of **up to 1,000 acre-feet** of the landowners' CVP supplies through SWP turnouts on the California Aqueduct to lands within OFWD and/or delivery of the landowner's SWP supplies through CVP turnouts on the Delta-Mendota Canal to lands within DPWD. The proposed transfers will result in no increase in total SWP or CVP allocations to either district.

### ***Delivery of Allocated CVP Water Through SWP Turnouts***

In addition to the transfers above, OFWD and DPWD propose an even exchange with SWP and CVP water to allow the delivery of **up to 2,000 acre-feet** of DPWD's CVP water. A portion of the lands within DPWD adjacent to OFWD are more efficiently served from OFWD's turnouts on the California Aqueduct. DPWD proposes to deliver a portion of its CVP supply to the lands adjacent to OFWD through an even exchange with SWP water. Up to 2,000 acre-feet of SWP water will be delivered through the OFWD turnouts on the California Aqueduct. An equal amount of CVP water will be delivered to DWR at O'Neill Forebay. The exchange will not result in any increase in pumping from the Delta of either SWP or CVP water. There will be no increase in total deliveries to DPWD.

### **3. Kern County Water Agency / Central Valley Project**

The Kern County Water Agency (KCWA) proposes to deliver **up to 3,442 acre-feet** of CVP Cross Valley Canal (CVC) water to lands within KCWA but outside of the CVP place of use. Sun World International has agricultural operations within KCWA and acquired 3,442 acre-feet of CVP Friant Division (Friant) Class 1 water supplies from Porterville and Tulare Irrigation Districts. Sun World International has exchanged the Friant Class 1 water supplies with Pixley Irrigation District (Pixley) for a like amount of Pixley's CVC water in San Luis Reservoir. Pixley's CVC water will be delivered to Sun World International within KCWA but outside of the CVP place of use. This Petition will expand the CVP place of use to include the SWP place of use that covers Sun World International's service area.

KCWA proposes to deliver **up to 29,750 acre-feet** of its CVP Friant water to lands outside of the CVP place of use but inside the SWP place of use that covers service areas of Castaic Lake Water Agency (Castaic), Coachella Valley Water District (Coachella), and Metropolitan Water District of Southern California (MWDSC) on behalf of its member agency Irvine Ranch Water District (Irvine) to facilitate the delivery of previously stored SWP and Kern River water in Rosedale-Rio Bravo Water Storage District (Rosedale). Castaic has banked SWP and Kern River water supplies in Rosedale and plans to recover up to 8,250 acre-feet of their previously stored SWP and Kern River water. Coachella has banked Kern River water supplies in Rosedale and plans to recover up to 16,500 acre-feet of their previously stored Kern River water. Irvine has banked SWP and Kern River water supplies in Rosedale and plans to recover up to 5,000 acre-feet of their previously stored SWP and Kern River water. Delivery of the SWP and Kern River water currently stored in Rosedale will be accomplished through

exchange. KCWA will deliver up to 29,750 acre-feet of the CVP Friant water to Castaic, Coachella, and Irvine's California Aqueduct turnouts. An equivalent amount of Castaic, Coachella, and Irvine's water stored in Rosedale will be transferred to Rosedale.

#### **4. Arvin-Edison Water Storage District / Metropolitan Water District Program**

MWDSC proposes to exchange **up to a total of 150,000 acre-feet** of CVP water supplies under three programs described below.

##### ***Groundwater Banking***

MWDSC, depending on annual allocations, stores a portion of its SWP supply in the Arvin-Edison Water Storage District (AEWSD, a CVP contractor) groundwater banking facilities. When requested, AEWSD is obligated to return a portion of the previously banked SWP water to MWDSC. In the absence of this proposed exchange, previously banked SWP water can only be recovered from AEWSD banking facilities through groundwater extraction. The expansion of the CVP place of use will allow AEWSD the option and flexibility to return MWDSC's banked water through an exchange of AEWSD available surface water supplies, including CVP water supplies from the Delta, San Luis Reservoir, and Friant Unit. This exchange will allow AEWSD greater flexibility in the scheduling and use of its CVP supplies, as well as reduce the energy and costs of groundwater extraction. The ability for AEWSD to return surface water through exchange will enhance operational flexibility, water quality, and timing of water returned to MWDSC. AEWSD's CVP water supplied to MWDSC in lieu of groundwater extraction to recover previously stored SWP water will result in a balanced exchange and one-for-one reduction of MWDSC's groundwater banking account with AEWSD. This exchange will occur only to the extent MWDSC has a positive water bank balance. Upon return of water to MWDSC, an equivalent amount of MWDSC's previously banked SWP water residing in AEWSD's water banking facilities would transfer to AEWSD.

##### ***Regulation Program***

Additionally, this Petition will allow AEWSD to deliver its CVP water supplies to MWDSC first, and receive back MWDSC's SWP water supplies in exchange at a later time. This program allows more efficient use of AEWSD's CVP water supplies by utilizing MWDSC's greater operational flexibility to take delivery of and use or store AEWSD's CVP water when it is available and return MWDSC's SWP water supplies to AEWSD at a future time. This will allow AEWSD to more directly match available CVP and SWP surface water supplies to its grower

demands. This operational flexibility will reduce the need to directly recharge and subsequently extract supplemental groundwater. This exchange mechanism will also be on a balanced exchange on a one-for-one basis.

### ***Spill Prevention Program***

In the event that hydrologic conditions are such that AEWS D believes that there may be limited ability to carry over 2017 CVP water supplies in CVP reservoirs, this Petition will allow AEWS D to deliver its CVP water to MWDSC to reduce risk of spill and potential loss of water supplies. AEWS D's CVP water will be delivered to MWDSC by exchange in San Luis Reservoir or directly into the California Aqueduct via the Friant-Kern Canal and AEWS D or CVC facilities. MWDSC is willing to provide water management services to assist in regulating available AEWS D's CVP water.

MWDSC will receive AEWS D's CVP water prior to spill and, at a later time, return a lesser amount of surface water to AEWS D (for example, MWDSC could be required to return 2 acre-feet for every 3 acre-feet regulated.) The unbalanced nature of the exchange reflects the compensation to MWDSC for their water management services to AEWS D, which will protect water from spilling. In the absence of the exchange with MWDSC, AEWS D would attempt to avoid spilling by delivering the available CVP water to groundwater banking programs within the AEWS D service area or other areas that are within the CVP place of use.

The potential benefits of the above proposed exchanges include: (1) offset impacts to AEWS D from the San Joaquin River Restoration Program (SJRRP) by increasing AEWS D's ability to efficiently use available water supplies and by increasing the opportunities to complete the return of SJRRP releases to AEWS D; and (2) reduce energy and costs associated with groundwater recharge and extraction.

CVP Delta supplies will be pumped from the Delta export facilities on the same schedule and in the same quantities with or without the exchanges. Friant water will be provided directly via delivery from the Friant-Kern Canal and AEWS D's distribution system, including its connections to the California Aqueduct at Milepost 227 (Reach 14C) or via its capacity in the CVC to the California Aqueduct at Tupman/Milepost 238 (Reach 12E).

**5. Kern County Water Agency / Westlands Water District**

***Semitropic Water Storage District Recovery***

KCWA proposes to deliver **up to 6,800 acre-feet** of its SWP water to lands within the Westlands Water District (Westlands) to facilitate the delivery of previously stored CVP water in the Semitropic groundwater bank. Two landowners, Poso Creek LLC and Harris Farms Inc., have agricultural operations in both KCWA and Westlands and have both a SWP and CVP contract supply. The landowners have banked CVP water with Semitropic. The landowners plan to recover up to 6,800 acre-feet of their previously stored CVP water. Delivery of the CVP water currently stored in Semitropic will be accomplished through exchange: KCWA will deliver up to 6,800 acre-feet of SWP water to Westlands turnouts on the joint use facilities and an equivalent amount of the landowner's CVP water stored in Semitropic will be transferred to KCWA.

**6. Byron Bethany Irrigation District / Musco Olive Products Inc.**

Byron Bethany Irrigation District (BBID) contracts with Reclamation for CVP water. BBID provides **up to 450 acre-feet** per year of CVP water to Musco Olive Product Inc. (Musco). Musco is not connected to Reclamation's or BBID's distribution system. Neither BBID nor Reclamation can physically convey CVP water to Musco directly. Musco is located near SWP Reach 2A on the California Aqueduct (north of O'Neill Forebay). DWR will deliver up to 450 acre-feet of SWP water to Musco for BBID in exchange for an equivalent amount of CVP water delivered by Reclamation to DWR at O'Neill Forebay.

**7. Tulare Lake Basin Water Storage District / Westlands Water District/ San Luis Water District**

Due to uncertainties in hydrologic, regulatory, and operational conditions, Westlands and San Luis Water District (SLWD) could be subject to reduction. Growers within Westlands and SLWD will execute an agreement with J. G. Boswell Company (Boswell), a local landowner within Tulare Lake Basin Water Storage District (TLBWSD), for the purchase of **up to 60,000 acre-feet** of Boswell's pre-1914 Kings River water. This Petition will allow TLBWSD to deliver the water purchased from Boswell to Westlands and SLWD transferring up to 60,000 acre-feet of its SWP water to Westlands and SLWD in exchange for up to 60,000 acre-feet of Boswell's pre-1914 Kings River water. TLBWSD's SWP water in San Luis Reservoir will be conveyed through the California Aqueduct and delivered to the CVP growers within Westlands and SLWD.



## **8. Castaic Lake Water Agency/San Luis Water District**

Castaic Lake Water Agency (CLWA), a SWP contractor, has a long-term agreement with the Buena Vista Water Storage District (BWSD) and Rosedale for up to 11,000 acre-feet per year of Kern River water appropriated under BWSD's pre-1914 water rights to high flows on the Kern River. The Kern River water is diverted and placed in groundwater storage for later extraction. Kern River water purchased by CLWA prior to 2017 is stored in Kern County or exchanged for Rosedale's SWP supplies in San Luis Reservoir via an exchange agreement with Rosedale. CLWA is proposing to transfer **up to 5,940 acre-feet** of its purchased Kern River water to SLWD and to be delivered by SWP facilities to SLWD's turnouts on Reaches 3 and/or 4 of the California Aqueduct. This transfer could be accomplished by exchange whereby CLWA would provide up to 5,940 acre-feet of its 2017 SWP supply to SLWD and CLWA will retain up to 5,940 acre-feet of its Kern River water.

## **9. Department of Veteran Affairs – San Joaquin Valley National Cemetery**

The Department of Veteran Affairs – San Joaquin Valley National Veterans Cemetery (Cemetery) contracts with Reclamation for **up to 850 acre-feet** of CVP supply. The CVP water cannot physically be delivered directly to the Cemetery when the use of Joint Point of Operations (JPOD) authorized under Water Right Decision 1641 (D-1641) or the California Aqueduct-Delta Mendota Canal intertie (Intertie) is not available. The Cemetery is located near Reach 2B on the California Aqueduct (north of O'Neill Forebay). This Petition would allow DWR to deliver up to 850 acre-feet of SWP water to the Cemetery in exchange for an equivalent amount of CVP water delivered by Reclamation to DWR at O'Neill Forebay.

## **Potential of Additional Exchanges/Transfers**

The above exchanges/transfers include all the specific exchanges/transfers anticipated as of the date of this Petition. However, SWP and CVP contractors continue to explore other opportunities to retrieve previously stored Project supplies and optimize the delivery (quantity and timing) of their Project supplies from all available sources. DWR and Reclamation anticipate that throughout the coming year more needs and opportunities for exchanging SWP and CVP water may be developed. DWR and Reclamation request that any order approving this Petition to consolidate the SWP and CVP places of use south of the Delta to include the approval of potential future projects that meet certain specific criteria. In order to allow the

SWRCB to make the findings required by Water Code Section 1725, any project not specifically detailed above would be required to meet the following criteria:

1. The exchange or transfer would not result in any increase in the amount of water diverted from the Delta. The water to be exchanged would be part of any available Project allocations, water currently stored in San Luis Reservoir, or previously placed in groundwater storage south of the Delta.
2. The water to be exchanged or transferred would have been consumptively used or stored in the absence of the transfer.
3. The total quantity of water delivered to SWP or CVP contractors as a result of the change will not exceed historic deliveries.
4. The exchange or transfer will not result in the net loss of San Joaquin River or Sacramento River flow.
5. The exchange or transfer will not result in an increase in saline drainage to the San Joaquin River.
6. Prior to initiating any exchange or transfer not specifically listed above, DWR or Reclamation will provide SWRCB with a description of the proposed exchange or transfer for review and approval of a change in place of use.
7. DWR and Reclamation will develop, in coordination with SWRCB staff, a reporting plan that will account for all water exchanged or transferred under the provisions of any order approving the consolidated place of use. The reporting plan will include the parties to the exchange or transfer, how much water was to transferred, how the water was made available, and the facilities required to affect the transfer.

## **General Information**

### ***The Amount of Water to be Transferred/Exchanged Would Have Been Consumptively Used or Stored in the Absence of the Transfer***

Current allocations to SWP contractors are 85 percent of contractor requests. There may be unmet demands throughout the irrigation season even with the improved water supply conditions in 2017. The projects proposed under this Petition, including any potential future projects meeting the criteria outlined above, involve water that is part of the SWP and/or CVP contractors 2017 allocated supplies diverted from the Delta consistent with all applicable regulatory requirements and exported from the basin in which it was developed, as well as local

supplies made available through exchange with CVP or SWP 2017 allocated supplies. Some of the proposed exchanges result in more efficient storage and recovery of water from existing conjunctive use programs. The proposed exchanges include only allocated SWP and CVP water supplies and will not result in an increase in the allocations to any SWP or CVP contractors. In the absence of the proposed exchanges, the available water supplies would be consumptively used or stored in existing SWP or CVP surface storage or local groundwater storage facilities. The exchanges or transfers will allow agencies to recover previously stored water, or optimize the beneficial use of their existing limited water supplies.

***Analysis of Potential Changes in Streamflow, Water Quality, Timing of Diversions or Use, Return Flows, or Effects on Legal Users***

The change in place of use requested by DWR and Reclamation will not result in any measurable changes to streamflow, water quality, timing of diversion or use, or return flows. There will be no impact to other legal users of water. The water to be transferred or exchanged is diverted out of the watershed from which it originates in conformance with the provisions of the respective DWR and Reclamation water rights permits and regulatory restrictions governing those diversions, including those contained in the Water Right Decision 1641 (D-1641) and the current Biological Opinions. There are no other legal users downstream of the points of diversion that would be affected by the exchanges.

The quantity and timing of diversions from the Delta will not change. The delivery rates from San Luis Reservoir may be slightly different. The scheduling of the deliveries will be coordinated between DWR and Reclamation so as not to adversely impact any SWP or CVP contractor deliveries. Adequate capacity in the California Aqueduct and in the Delta-Mendota Canal is available, and will not be adversely impacted as a result of the exchanges.

The exchanges will not result in a measurable change in quantity or quality of return flows. There will be no increase in either SWP or CVP allocations as a result of the proposed exchanges. There could be some shift in the timing of deliveries of SWP and CVP supplies south of the Delta, however this will not affect streamflow. All the water to be exchanged is water that would have been consumptively used or stored in the absence of the exchanges. Exchanges similar to those proposed above were conducted in several previous years consistent with the SWRCB orders approving DWR's and Reclamation's Petitions for Change to consolidate the SWP and CVP places of use. No measureable effects on other legal users of water, fish and wildlife or the environment were noted from those transfers.

***The Transfer Will Not Result in Unreasonable Impacts to Fish and Wildlife or the Environment***

The change requested by DWR and Reclamation will not result in unreasonable impacts to fish and wildlife or the environment. The water was previously diverted out of the watershed from which it originates in conformance with the provisions of the respective DWR and Reclamation water rights permits and regulatory restrictions governing those diversions including those contained in D-1641 and the current Biological Opinions. There will be no change in the pumping schedule or the amount of SWP or CVP water diverted at the Banks or Jones. Therefore, there will be no change in flow or water quality conditions in the Delta. The transfers and exchanges are conducted south of the Delta and will not affect pumping from the Delta. All the water to be exchanged is water that would have been consumptively used or stored in the absence of the exchanges.

The exchanges will not result in a measurable change in quantity or quality of return flows. There will be no increase in either SWP or CVP allocations as a result of the proposed exchanges. There could be some shift in the timing of deliveries of SWP and CVP supplies south of the Delta, however this will not affect streamflow.

Exchanges similar to those proposed above have been implemented in previous years by both DWR and Reclamation. No measureable effects on other legal users of water, fish and wildlife or the environment were noted from those transfers. For the above reasons, DWR and Reclamation believe the facts support a finding that approval of this Petition would not result in injury to other legal water users or unreasonable impacts to the environment.