

# 2021 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, 12727, 11315, 11316, 11968, 11969, 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 (State Water Board) 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 the Harvey O. Banks Pumping Plant (Banks) as shown on **Map 1**, and (2) the above DWR permit to include the Central Valley Project (CVP) authorized place of use downstream of the Jones Pumping Plant (Jones) as shown on **Map 2**. 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. This document collectively refers to the SWP and CVP as the Projects.

DWR and Reclamation request that the above changes become effective on July 16, 2021 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 Sacramento-San Joaquin Delta (Delta) and maximize the beneficial use of available Project supplies. Approval of this Petition 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 water from the Projects than has been delivered historically.

## **Reason for the Requested Changes**

The requested changes are made to address physical and timing limitations, to reduce energy and conveyance costs, and/or to implement certain parts of the San Joaquin River Restoration Program. The requested changes also cover half of two water years – this year is extremely dry and next year is unknown, so a portion of these requested changes cover the maximum action that could occur given higher allocations next year. All requested changes will occur within the actual allocations of the Projects, which are based on, not limited to, considerations of available storage throughout the Projects, as well as hydrology and regulations.

The requested changes fall into the following categories:

Physical limitations occur due to reduced capacity in aging infrastructure, scheduled maintenance of infrastructure, unplanned outages of maintenance, or facilities that were contemplated but not constructed due to the lower cost of implementing exchanges as an alternative. In some cases, lands in multiple Project contract service area are held in ownership by one entity, without connecting infrastructure.

Timing limitations occur specifically to Reclamation's Cross Valley Canal (CVC) contractors, who are dependent on capacity in the California Aqueduct, which is not generally available when demand is highest, so exchanges in time allow Project contractors to deliver water to CVC contractors to meet their demand, and receive water back when capacity is available later in the year.

Under the San Joaquin River Restoration Program (SJRRP), in accordance with federal law and separate approvals from the State Water Resources Control Board, Reclamation recaptures environmental releases from Millerton at approved points of rediversion and this water can be rediverted to storage in San Luis Reservoir (SJRRP Recaptured water). This water offsets the impacts of the SJRRP on CVP Friant Division contractors. However, since the water cannot be directly conveyed to these contractors, the law authorizes the sale of this water to other contractors. In this petition, contractors instead will exchange these supplies to Project contractors in return for water they can physically receive – such an exchange may require more than one exchange partner. This water can also be transferred under the SJRRP and federal authorization.

Recovery of previously banked Project and other surface supplies without physical extraction reduces energy consumption and greenhouse gas emissions, as well as conveyance costs. In some cases, parties that use groundwater banks are not able to physically recover their banked water directly from the bank, and therefore require an exchange to effect recovery, typically involving State Water Project supply. Five groundwater banks are proposing exchanges for more efficient return of currently banked water: Semitropic Water Storage District (Semitropic, Semitropic Bank, a member of Kern County Water Agency), Kern Water Bank, West Kern Water District (West Kern Bank), Rosedale – Rio Bravo Water Storage District (Rosedale Bank), Arvin-Edison Water Storage District (Arvin-Edison Bank).

As stated previously, all exchanges occur only within allocated Project supplies. As of May 1, 2021, Project allocations are:

SWP south-of-Delta contractors: 5%

CVP south-of-Delta irrigation contractors: 5%<sup>1</sup>

CVP south-of-Delta municipal and industrial contractors: 55% of their historic use or public health and safety needs, whichever is greater

CVP Friant contractors: 20%

For the San Joaquin River Restoration Program, Reclamation is currently forecasting a “Dry” water year type, providing for 170,732 acre-feet to be used for Restoration Program purposes.

No contractor has been given a 100% allocation for 2021, which is not expected to change, and therefore, for 2021 all Project contractors demands will exceed their Project supplies/allocations.

CVP contractors, in general, have demands that exceed their CVP supplies only. In general, Reclamation maximizes pumping at Jones Pumping Plant throughout the year and is dependent on the supplemental water stored in San Luis Reservoir to deliver CVP contract supplies, after Settlement contracts and Level 2 refuge demands are met. For these reasons, none of the actions described in this petition would affect CVP pumping from the Delta.

Reclamation and DWR have evaluated the included proposals and have determined there is no operational constraint for the Projects to divert and use the exchange water within the existing place of use absent the approval.

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<sup>1</sup> On March 23, 2021, Reclamation notified irrigation contractors south-of-Delta that the allocation of 5% of their contract supply is not available for delivery until further notice.

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

All exchanges covered by this Petition will occur south of the Delta. The water to be exchanged involves south-of-the-Delta CVP and SWP water supplies that are already contracted or allocated to the exchange parties, currently stored in San Luis Reservoir, or previously stored in groundwater banking facilities. These Project supplies are diverted from the Delta under DWR's permit and Reclamation's license and permits in compliance with Water Right Decision 1641 (D-1641), the current Biological Opinions, and the Incidental Take Permit. The total amount of water to be exchanged will not exceed **431,780 acre-feet**. Details are as follows.

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

Santa Clara Valley Water District (Valley Water) contracts for water supplies from both the SWP and CVP. DWR delivers SWP water to Valley Water through the South Bay Aqueduct (SBA) and Reclamation delivers CVP water to Valley Water from the San Luis Reservoir through the San Felipe Division. The approval of this Petition will provide Valley Water with flexibility to manage its SWP and CVP water supplies through **up to 100,000 acre-feet** of exchanges: (1) exchange of up to 60,000 acre-feet of SWP and CVP water to address potential operational and maintenance issues in the San Felipe Division and (2) exchange of up to 40,000 acre-feet of banked CVP water with SWP water.

#### ***i. Reduced CVP Delivery from San Felipe Division***

Reclamation's latest projections for San Luis Reservoir storage levels this year indicate that a low point is likely to occur, which poses operational and/or water quality problems for Valley Water. During low point, Valley Water has limited pumping capacity through the CVP San Felipe Division and low water levels degrade water quality that can cause water treatment problems. This can reduce the amount of CVP water that Valley Water schedules through the CVP San Felipe Division and increase Valley Water's treatment costs. There is similar uncertainty for the Projects' water supply allocations and operations in 2022.

An additional constraint is that Valley Water was required by the Federal Energy Regulatory Commission (FERC) to drawdown its largest local reservoir, Anderson Reservoir, by October 2020. Since Valley Water would typically store CVP water in Anderson Reservoir via the San Felipe Division, additional flexibility for CVP deliveries to Valley Water is needed for the foreseeable future.

Additionally, there is aging infrastructure on the San Felipe Division. In 2021, Valley Water has identified the following planned activities that will limit its ability to receive water through the San Felipe Division: (1) scheduled outages, including a partial shutdown of the Pacheco Pumping Plant for almost a month in November 2021; (2) inspection and rehabilitation on the Pacheco and Santa Clara Tunnels from November 2021 through January 2022; and (3) scheduled outage for the CVP/Calero Pipeline and Coyote Creek tie-in. The reduction or cessation in Valley Water's CVP deliveries through the San Felipe Division will force Valley Water to rely on SWP water and other local water supplies to meet demands, which will restrain Valley Water's operational flexibility.

With the approval of this Petition, during reduction of CVP deliveries from the San Felipe Division, DWR will export and deliver SWP water equivalent to the reduced CVP amount through SBA to help Valley Water to maintain its operational flexibility. Reclamation will return an equal amount of CVP water at the O'Neill Forebay to DWR for use within the SWP service area south of the O'Neill Forebay.

The SWP water to be exchanged would be supplied to other SWP contractors within their existing allocations.

***ii. Recovery of Banked CVP Water in the Semitropic Bank***

Valley Water has previously banked CVP water in the Semitropic Bank, which is located downstream of Valley Water's service area, and therefore recovery of the Valley Water's stored CVP water in the Semitropic groundwater bank must be accomplished through an exchange.

With the approval of this Petition, Semitropic will extract up to 40,000 acre-feet of Valley Water's banked CVP water from the aquifer and either pump the stored water into the California Aqueduct through Semitropic's turn-in facilities for delivery to the SWP service area south of Semitropic, or use Valley Water's previously stored water within its own service area. In exchange, DWR will deliver an equal amount of SWP water to Valley Water through either the SBA and/or to Reclamation in O'Neill Forebay for Reclamation to deliver through the San Felipe Division. The proposed exchange would not increase the total amount of CVP or SWP water allocated to Valley Water by DWR or Reclamation.

Absent this proposed exchange, Semitropic would not be able to return Valley Water's CVP water directly. Valley Water's CVP supplies would be returned via CVP-CVP exchanges. The SWP water to be exchanged would be supplied to other SWP contractors within their existing allocations.

## **B. Kern County Water Agency**

Kern County Water Agency (Kern County WA) is a SWP contractor with numerous member units within Kern County. Only some of its member units are inside the CVP place of use, while Kern County WA is entirely inside the SWP place of use. The proposed exchanges between Kern County WA and other entities will be **up to a total of 126,780 acre-feet** under the actions listed below.

### ***i. Kern County Water Agency–Kern-Tulare Water District Exchange: Cross Valley Canal Capacity Limitations***

Kern-Tulare Water District (Kern-Tulare) is located within Kern County and has a contract for CVP water through the CVC. Due to limited capacity at Jones, when SWP capacity is available, DWR facilitates conveyance of CVP water for delivery to the CVC under an existing agreement. In the situation that there is no capacity to move CVC water through Jones or Banks, to assist Kern-Tulare in meeting peak irrigation demands, DWR will deliver **up to 53,300 acre-feet** of Kern County WA's SWP water to Kern-Tulare within the SWP place of use during the 2021 summer months.

With the approval of this Petition, Reclamation will return the same amount of Kern-Tulare's CVP water in later 2021 and/or early 2022 through the CVC or other points of delivery as approved for delivery to Kern County WA.

Absent this proposed exchange, Kern Tulare would use its CVP water at a later time and Kern County WA would use its SWP water within its service area.

### ***ii. Kern County Water Agency–Westlands Water District Exchange of Banked CVP Water in the Semitropic Bank***

Westlands Water District (Westlands), a CVP contractor outside of the SWP place of use, has stored CVP water in the Semitropic Bank. To recover this banked water in an energy efficient manner, Kern County WA proposes to send SWP water to Westlands and use the banked CVP water within the Kern County WA service area.

With the approval of this Petition, DWR will make available **up to 23,680 acre-feet** of Kern County WA's SWP water at O'Neill Forebay for Reclamation. Reclamation will then deliver this water to Westlands through the Joint-Use San Luis Canal. In return, an equivalent amount of Westland's CVP water stored in the Semitropic Bank will be delivered to Kern County WA to use in their service area in the same year.

Absent this proposed exchange, Westlands' CVP supplies stored in the Semitropic Bank would be returned via CVP-CVP exchanges. Semitropic would retain its SWP water for use within its service area.

***iii. Kern County Water Agency – Tulare Irrigation District – Lindsay-Strathmore Irrigation District – SJRRP Recaptured Water Exchange***

This proposed exchange provides operational flexibility by delivering Kaweah River water located on the eastside to water users on the eastside of the San Joaquin valley (Friant Division contractors, Tulare Irrigation District, and Lindsay-Strathmore Irrigation District [Lindsay-Strathmore]) and delivering SJRRP Recaptured water to water users on the westside of the San Joaquin valley (Belridge, Berrenda Mesa, and Lost Hills – members of Kern County WA that are outside of the CVP place of use).

Westside Mutual Water Company (Westside Mutual) holds lands within several CVP contract service areas and one of its members (Wutchumna Water Company) holds a pre-1914 water right for Kaweah River water and makes water available for transfer through a combination of land fallowing and groundwater substitution. Belridge, Berrenda Mesa, and Lost Hills will purchase Kaweah River water from Westside Mutual. Tulare Irrigation District (Tulare ID) and Lindsay-Strathmore are CVP Friant Unit contractors that have SJRRP Recaptured water stored in San Luis Reservoir.

With the approval of this Petition, Reclamation will make available **up to 3,000 acre-feet** of SJRRP Recaptured water at O'Neill Forebay for DWR to deliver to Kern County WA.

In return, Westside Mutual will deliver an equivalent amount of Kaweah River water to Tulare ID and Lindsay-Strathmore. (This action does not require SWRCB approval.)

Westside Mutual's demand exceeds their supplies. Absent this exchange, Westside Mutual would retain the Kaweah River water for consumptive use or exchange with other entities; Tulare ID and Lindsay-Strathmore would retain their SJRRP Recaptured water in San Luis Reservoir for use via a future exchange.

***iv. Kern County Water Agency – Arvin Edison Water Storage District SJRRP Recaptured Water Exchange***

Westside Mutual holds lands in Kern County WA, located in Kern County, that are within the SWP place of use but outside the CVP place of use (see previous item). Arvin-Edison is a CVP contractor with SJRRP Recaptured supplies stored in San Luis Reservoir. Arvin-Edison and

Kern County WA propose an exchange of Project supplies to more efficiently manage their available water supplies and allow for additional flexibility, as provided for in the SJRRP. The exchange will not result in an increase in allocation to any district.

With the approval of this Petition, Reclamation will make **up to 10,000 acre-feet** of Arvin-Edison's SJRRP Recaptured water available at the O'Neill Forebay for DWR's delivery to Kern County WA. In return, DWR will make available an equivalent amount of SWP water at the O'Neill Forebay for Reclamation to deliver to Arvin-Edison.

Absent this exchange, Kern County WA would use the SWP water at a later time; Arvin-Edison would seek to exchange SJRRP Recaptured water with another party.

***v. Kern County Water Agency – Westlands Water District Exchange of Banked CVP Water in the Kern Water Bank***

With the approval of this Petition, DWR will make available **up to 2,500 acre-feet** of Kern County WA's SWP water at O'Neill Forebay for Reclamation to deliver it to Westlands. In exchange, the CVP water stored in the Kern Water Bank by Westlands will be used by Kern County WA.

Absent this exchange, Kern County WA will retain its SWP water for use within its service area and Westlands will seek supplemental water supplies or an exchange with another CVP contractor to effect return of the banked CVP water.

***vi. Kern County Water Agency– Exchange of Banked CVP Water in the Rosedale Bank***

Rosedale-Rio Bravo Water Storage District (Rosedale) is a member unit of Kern County WA that receives SWP water. It operates a groundwater bank inside both the CVP and SWP place of use that stores CVP water, SWP water, and local water for its banking partners. Three of the banking partners, who are SWP contractors, want to recover portion of stored water in Rosedale: Santa Clarita Valley Water Agency (Santa Clarita) will recover up to 6,000 acre-feet of previously stored SWP and Kern River water; Coachella Valley Water District (Coachella) will recover up to 7,000 acre-feet of previously stored Kern River water; and Irvine Ranch Water District (Irvine Ranch) will recover up to 2,000 acre-feet of previously stored SWP water and Kern River water.

With the approval of this Petition, Santa Clarita, Coachella, and Irvine Ranch will make available **up to 15,000 acre-feet** of their water stored in the Rosedale Bank to Rosedale's CVP banking



partners (Kern-Tulare, Delano-Earlimart ID, Arvin-Edison and/or the San Joaquin River Exchange Contractors Water Authority [SJRECWA]). In return, Reclamation will deliver an equivalent amount of CVP SJRRP Recaptured water or CVP Delta (SJRECWA) water from the CVP banking partners to DWR at the O'Neill Forebay for delivery to Santa Clarita, Coachella, and Irvine Ranch.

Absent this proposed exchange, Rosedale's banked SWP water would be conveyed from the CVC to the California Aqueduct for delivery to the Santa Clarita, Coachella and Irvine Ranch. Absent this proposed exchange, Kern-Tulare, Delano-Earlimart, and Arvin-Edison's CVP SJRRP Recaptured water would be banked or transferred; SJRECWA's Settlement CVP water would be conveyed through the Delta-Mendota Canal and Mendota Pool for delivery to SJRECWA or SJRECWA would continue its consumptive use reduction actions and facilitate a different exchange.

***vii. Kern County Water Agency – San Joaquin River Exchange Contractors Water Authority – Rosedale Unbalanced Exchange Program***

In 2017 and 2019, SJRECWA and Rosedale entered into an unbalanced (2:1) exchange program. Based on consumptive use reductions, SJRECWA delivered 23,522 acre-feet of its CVP water, in 2017 and 7,500 acre-feet of its CVP water in 2019 to lands within Rosedale service area in the CVP place of use for banking and direct use. To complete the exchange Rosedale will make **up to 5,000 acre-feet** of their SWP water available for delivery to SJRECWA and/or SJRECWA's project partners throughout the CVP place of use.

With approval of this Petition, DWR will Rosedale's SWP supply available at the O'Neill Forebay for Reclamation to deliver to the SJRECWA or a CVP contractor within the CVP service area.

For the SJRECWA, this exchange will not result in additional return flows to the San Joaquin River. They have reduced consumptive use to make exchange water available, and may also use the return water to irrigate their lands that otherwise would have been irrigated by groundwater, resulting in less or the same amount of return flows with or without the exchange.

Absent this exchange, Rosedale would either bank their SWP water or use it in their service area.

***viii. Kern County Water Agency – Kern-Tulare Water District Exchange of Banked CVP Water in the West Kern and Rosedale Banks; Facilitation of a non-Project Transfer to Westlands Water District***

Kern-Tulare, a CVP contractor outside of the SWP place of use, has stored CVP water in the West Kern and Rosedale Banks. Both banks are member units of Kern County WA within the SWP place of use. Westlands, a CVP contractor, has acquired 3,000 acre-feet of CVP Friant water and/or pre-1914 Kings River water from Fresno Irrigation District (Fresno ID), but this water cannot be directly conveyed to Westlands. To facilitate this transfer and the return of banked water, a two-way exchange is proposed. Fresno ID will make its pre-1914 Kings River water available for transfer through groundwater substitution.

Reclamation will deliver **3,000 acre-feet** of CVP Friant water and/or Kings River water from Fresno Irrigation District to Kern-Tulare, who can physically take delivery of the water through the Friant-Kern Canal. (This action does not require SWRCB approval.)

With the approval of this Petition, DWR will deliver 3,000 acre-feet of Kern County WA's SWP water to Westlands, and Kern County WA will use 3,000 acre-feet of Kern-Tulare's banked CVP water within its service area.

Absent this proposed exchange, Kern County WA's SWP water would be conveyed from the California Aqueduct for delivery to its service area. Kern-Tulare's previously banked CVP water would be recovered and conveyed to the Friant-Kern Canal from the CVC for in-district use. Westlands would not receive water from Fresno ID. Fresno ID would consumptively use its CVP and Kings River water, transfer the Kings River water, or exchange either with another entity.

***ix. Kern County Water Agency – Pixley Irrigation District and Lower Tule River Irrigation District – Tulare Irrigation District, Porterville Irrigation District, and Saucelito Irrigation District***

Homer, LLC. (Homer) owns farmland in member units of Kern County WA (Belridge, Berranda Mesa, Lost Hills, Wheeler Ridge-Maricopa Water Storage District [Wheeler Ridge] and West Kern), and in CVP contractors' service areas: Pixley Irrigation District (Pixley), Lower Tule River Irrigation District (Lower Tule), Tulare Irrigation District (Tulare), and Porterville Irrigation District (Porterville). Homer receives Kaweah River water in the CVP place of use under the Wutchumna Water Company pre-1914 right and proposes to make water available for transfer through a combination of land fallowing and groundwater substitution.

Porterville has previously banked CVP water in a private banking facility within the district. Porterville anticipates meeting its irrigation demand with its allocated CVP supplies. CVP contractor Terra Bella ID (Terra Bella) has SJRRP Recirculation water stored in San Luis Reservoir.

Homer proposes to transfer its pre-1914 Kaweah River water to Tulare. In exchange, Tulare will transfer/make available an equivalent amount of pre-1914 Tule River and CVP Friant water to Pixley and Lower Tule River ID. Porterville will deliver previously banked CVP water to Terra Berra. (These actions are not subject to SWRCB approval).

With approval of this Petition, Reclamation will make available up to **11,300 acre-feet** of Pixley and Lower Tule River ID's CVP CVC water and/or Terra Bella's SJRRP Recaptured water at O'Neill Forebay for DWR to deliver to Kern County WA.

Pixley and Lower Tule River ID receive CVP Friant water and CVC water. Absent this proposed exchange, Pixley and Lower Tule River ID would exchange their CVC water with other CVP contractors. Kern County WA would consumptively use their SWP water. Tulare, Porterville, and Saucelito would consumptively use their Tule River and/or CVP water supplies or leave those supplies in existing storage reservoirs. Terra Bella would exchange their SJRRP Recaptured water with other CVP contractors.

### **C. Arvin-Edison Water Storage District–Metropolitan Water District**

Metropolitan Water District of Southern California (Metropolitan) is a SWP contractor. Arvin-Edison is a CVP contractor within both the CVP and SWP places of use. With the approval of this petition, the CVP place of use will be expanded to include Metropolitan's service area, which will allow Arvin-Edison to exchange **up to a total of 140,000 acre-feet** of CVP water supplies (SJRRP Recaptured and Friant) with Metropolitan's SWP water under the three (3) programs described below.

For each of the three (3) programs, the following conveyance mechanisms would take place for Metropolitan to receive Arvin-Edison's CVP water:

- Arvin-Edison's CVP Friant water (including other CVP Friant water acquired by Arvin-Edison) would be conveyed either: (1) from the Friant-Kern Canal through Arvin-Edison's distribution system connected to the California Aqueduct at Milepost 227 (Reach 14C), or (2) from the Friant-Kern Canal through the CVC to the California Aqueduct (Tupman), or;

- Reclamation will make Arvin-Edison's CVP SJRRP Recaptured water (including other CVP water acquired by Arvin-Edison) available at the O'Neill Forebay for DWR to deliver through the California Aqueduct to Metropolitan.

***i. Groundwater Banking***

Currently, depending on annual SWP allocations, Metropolitan stores a portion of its SWP supply in the Arvin-Edison Bank, located within Arvin-Edison's service area in the CVP place of use and the SWP place of use. When requested by Metropolitan, Arvin-Edison is obligated to return Metropolitan's previously banked SWP water to Metropolitan. Absent this proposed exchange, Arvin-Edison would return previously banked SWP water through groundwater extraction and deliver the water to Metropolitan through the California Aqueduct.

To increase the flexibility of returning water to Metropolitan, Arvin-Edison seeks to exchange Metropolitan's previously banked water with their CVP water supplies. Arvin-Edison would use Metropolitan's previously banked SWP water within their service area. This also allows Arvin-Edison greater flexibility in the scheduling and use of its CVP water supplies, as well as a reduction in energy and costs associated with the groundwater extraction. Furthermore, this will enhance the water quality and timing of water returned to Metropolitan.

With approval of this Petition, Reclamation will deliver Arvin-Edison's CVP water supplies to Metropolitan to use in their service area in lieu of Arvin-Edison physically extracting and delivering Metropolitan's previously stored SWP water. Upon Arvin-Edison's CVP water delivery to Metropolitan, Metropolitan will transfer an equivalent amount of its stored SWP water in the groundwater bank to Arvin-Edison for Arvin-Edison's use. This will be a balanced exchange (one-for-one) and will only occur if Metropolitan has a positive balance in Arvin-Edison's groundwater banking facilities.

Absent the approval of this Petition, Arvin-Edison would extract Metropolitan's banked SWP supplies and return them directly at a return rate limited to 170 cfs and Arvin Edison would consumptively use its CVP water within the CVP place of use.

***ii. Regulation Program***

Arvin-Edison has a limited opportunity to use CVP water under current CVP operations. Metropolitan has more system flexibility to regulate available water supplies. Through the proposed exchange, Metropolitan can facilitate Arvin-Edison's management of its CVP water supplies to better match irrigation demands.

With the approval of this Petition, Metropolitan takes delivery of Arvin Edison's CVP water and later returns SWP water from the Delta/San Luis Reservoir.

Absent the exchange, Arvin-Edison would use more energy to recharge CVP supplies when available and extract the stored CVP water later. The proposed exchange also reduces the need to directly recharge supplemental supplies and subsequently extract water stored in groundwater bank. This is also a balanced exchange, i.e., one acre-foot of Arvin-Edison's CVP water for one acre-feet of Metropolitan's SWP water. Absent the approval of this Petition, Arvin-Edison would seek to reschedule CVP supplies in CVP reservoirs, transfer, exchange, or bank with other approved banking programs subject to storage capacity. This program only occurs when San Luis Reservoir is full.

***iii. Spill Prevention Program***

Wet hydrologic conditions may limit carry over of Arvin-Edison's CVP water in CVP reservoirs. To reduce the risk of spill and subsequent potential loss of water supplies, Arvin-Edison proposes to exchange their CVP water with Metropolitan's SWP water. Metropolitan is willing to provide water management services to assist in regulating the available CVP supplies.

This is an unbalanced exchange to reflect Metropolitan's willingness to provide water management services to Arvin-Edison and therefore, Metropolitan would return a lesser amount (i.e., two acre-feet for every three acre-feet received). In the absence of the exchange with Metropolitan, Arvin-Edison would attempt to avoid spilling the water by delivering the available CVP contract supplies to groundwater banking programs within the Arvin-Edison service area or other areas that are within the CVP place of use.

Absent the approval of this Petition, Arvin-Edison would seek to reschedule CVP supplies in CVP reservoirs, transfer, exchange, or bank with other approved banking programs subject to storage capacity. This program only occurs when San Luis Reservoir is full.

**D. Tulare Lake Basin Water Storage District–Westlands Water District, San Luis Water District, and Pleasant Valley Water District – Exchanges to Facilitate a Transfer**

Westlands, San Luis, and City of Coalinga are CVP contractors within the CVP place of use. Pleasant Valley Water District (Pleasant Valley) is not a CVP contractor, but a portion of the district falls within the City of Coalinga that is within the CVP place of use. Growers within these three districts will purchase up to 65,000 acre-feet of pre-1914 Kings River water from J. G. Boswell Company (Boswell), a local landowner within Tulare Lake Basin Water Storage District

(Tulare Lake). Tulare Lake is a SWP contractor located within both SWP and CVP places of use.

Tulare Lake will receive **up to 65,000 acre-feet** of Boswell's pre-1914 Kings River water purchased by Westlands, San Luis and Pleasant Valley as Boswell will reduce its consumptive use through cropland idling and/or shifting. (This action does not require SWRCB approval.)

With the approval of this Petition, DWR will deliver a like amount of Tulare Lake's SWP water to Westlands, San Luis and Pleasant Valley through the Joint Use San Luis Canal or make a like amount of Tulare Lake's SWP water available to Reclamation in O'Neill Forebay for Reclamation to deliver to Westlands, San Luis, and Pleasant Valley .

Absent the approval of this Petition, Tulare Lake Basin WSD would use SWP water within its service area; J.G. Boswell would retain its Kings River water for use within its water right terms and conditions. CVP contractors would seek alternative supplemental supplies.

## **Potential of Additional Exchanges**

The above exchanges are 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 exchanges that meet certain specific criteria. To allow the State Water Board to make the findings required by Water Code Section 1725, any exchanges not specifically detailed above would need to meet the following criteria:

1. The exchange 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 would have been consumptively used or stored in the absence of the exchange.
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 will not result in the net loss of San Joaquin River or Sacramento River flow.
5. The exchange will not result in an increase in saline drainage to the San Joaquin River.
6. Prior to initiating any exchange not specifically listed above, DWR or Reclamation will provide the State Water Board with a description of the proposed exchange for review and approval of a change in place of use.
7. DWR and Reclamation will develop, in coordination with the State Water Board staff, a reporting plan that will account for all water exchanged under the provisions of any order approving the consolidated place of use. The reporting plan will include the parties to the exchange, how much water was exchanged, how the water was made available, and the facilities required to affect the exchange.

## **General Information**

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

The proposed exchanges under this Petition, including any potential future exchanges meeting the criteria outlined above, involve water that is part of the SWP and/or CVP contractors 2021 and 2022 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 2021 and 2022 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 proposed exchanges will allow agencies to recover previously stored water or optimize the beneficial use of their existing water supplies.

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

The water to be 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 D-1641, the current Biological Opinions, and the Incidental Take Permit. 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. There are no other legal users downstream of the points of diversion that would be affected by the proposed 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.

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. Therefore, the proposed exchanges will not result in a measurable change in quantity or quality of return flows.

Exchanges similar to those proposed above were conducted in several previous years consistent with the State Water Board orders approving DWR's and Reclamation's Petitions for Change to consolidate the SWP and CVP places of use. No measurable effects on other legal users of water, fish and wildlife or the environment were noted from those exchanges.

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

The water to be exchanged was previously or will be 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, the current Biological Opinions, and the Incidental Take Permit. The proposed exchanges are conducted south of the Delta and will not affect pumping from the Delta. 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. All the water to be exchanged is water that would have been consumptively used or stored in the absence of the exchanges. The change requested by DWR and Reclamation will not result in unreasonable impacts to fish and wildlife or the environment.



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. The proposed exchanges will not result in a measurable change in quantity or quality of return flows.

Exchanges like those proposed above have been implemented in previous years by both DWR and Reclamation. No measurable effects on other legal users of water, fish and wildlife or the environment were noted from those exchanges. 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.

***The Exchanges Associated with Groundwater Banks Already Account for Banking Losses***

The quantities of exchanges associated with groundwater banks listed above already account for banking losses incurred during recharge (i.e., minus groundwater bank losses pursuant to respective groundwater banking agreements). Banking loss is 10 percent in Semitropic Bank, 10 percent in Arvin-Edison Bank, 10 percent in Kern Water Bank, 11 percent in Rosedale Bank, and 10 percent in West Kern Bank.