

STATE OF CALIFORNIA  
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY  
STATE WATER RESOURCES CONTROL BOARD

**DIVISION OF WATER RIGHTS**

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**IN THE MATTER OF WATER RIGHT PERMIT 11359 (APPLICATION 12321)  
OF CITY OF SACRAMENTO**

**PETITION FOR TEMPORARY CHANGE INVOLVING THE TRANSFER OF UP TO  
5,183 ACRE-FEET OF WATER TO  
SANTA CLARA WATER DISTRICT AND STATE WATER CONTRACTOR AGENCIES**

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SOURCE: American River

COUNTY: Sacramento

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**ORDER APPROVING TEMPORARY CHANGES**

BY THE DEPUTY DIRECTOR FOR WATER RIGHTS:

**1.0 OVERVIEW**

On May 5, 2022, the City of Sacramento (Sacramento, Permittee, or Petitioner) filed with the State Water Resources Control Board (State Water Board), Division of Water Rights (Division), a petition for temporary change under Water Code section 1725, et seq. to transfer up to 5,183 acre-feet (AF) of water from July 1 through November 30, 2022. The proposed surface water transfer will be made available to Santa Clara Valley Water District (SCVWD) and State Water Contractor (SWC) agencies participating in the State Water Project's (SWP) Dry Year Transfer Program. The SWC agencies will include Metropolitan Water District of Southern California, Kern County Water Agency, Alameda County Water District, Napa County Flood Control and Water Conservation District, County of Kings, Palmdale Water District, Dudley Ridge Water District, Zone 7 Water Agency, Central Coast Water Authority, and Antelope Valley-East Kern Water Agency (hereinafter collectively referred to as SWC Agencies). Temporary changes approved pursuant to Water Code section 1725 may be effective for up to one year.

Sacramento proposes to transfer water to the SWC Agencies through groundwater substitution. Under temporary transfer petitions for Permit 11359 and Permit 11360, Sacramento proposes to transfer 10,366 AF of surface water and Sacramento, Sacramento Suburban Water District (SSWD), and Sacramento County Water Agency (SCWA) will collectively pump 10,366 AF of groundwater to serve their customers that

would otherwise have received surface water diverted by Sacramento. Half of the proposed 10,366 AF transfer by Sacramento is included within this specific order. The remaining half is included in a companion petition under Sacramento Permit 11360.

Sacramento's proposed transfer of up to 10,366 AF of water to SWC Agencies is part of a collective amount of 16,101 AF that also includes the Carmichael Water District (Carmichael), the San Juan Water District (SJWD), the Citrus Heights Water District (CHWD), and the Fair Oaks Water District (FOWD). Sacramento proposes to transfer surface water and Sacramento, SSWD, SCWA will pump groundwater in lieu of using Sacramento surface water supplies. Carmichael will deliver surface water supplies under a proposed transfer petition for License 1387 and use groundwater in lieu of the surface water supplies. SJWD will transfer surface water supplies under their pre-1914 Statement of Diversion and Use (S000656) and CHWD and FOWD will use groundwater in lieu of the transferred surface water supplies.

## **2.0 TRANSFER TYPE**

Petitioner proposes to make water available by pumping groundwater in lieu of rediverting previously stored water under Permit 11359.

### **2.1 Groundwater Substitution**

Under a groundwater substitution transfer, surface water supply is made available for transfer as a result of a petitioner reducing the amount of water it would have diverted under its surface water right and replacing those diversions with groundwater pumping. Depending on various factors including the distance of the groundwater well(s) from the surface stream, depth of the well(s), and local hydrogeologic conditions, the increase in groundwater pumped by the Petitioner to enable the transfer results in a reduction in the amount of water that would otherwise have accrued to the stream due to the interconnection of surface water and groundwater (streamflow depletion). Consequently, groundwater pumping for transfer operations will provide water at the expense of current and future streamflow. Flow reduction in a river, stream, canal, or drain due to groundwater substitution transfers has the potential to have an unreasonable effect on fish and wildlife as well as injure other legal users of water if it occurs when the Delta is in balanced conditions<sup>1</sup> or there is limited streamflow in the

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<sup>1</sup> The Delta is in balanced conditions when the SWP and CVP agree that releases from upstream reservoirs, plus unregulated flow, approximately equal water supply needed to meet Sacramento Valley in-basin uses and Project exports. During balanced conditions in the Delta when water must be withdrawn from storage to meet Sacramento Valley and Delta requirements, 75 percent of the responsibility to withdraw from storage is borne by the CVP and 25 percent by the SWP.

channel from which the water is being transferred.

Proposals for transfers of water through Central Valley Project (CVP) and/or State Water Project (SWP) facilities that involve groundwater substitution are developed consistent with the Draft Technical Information for Preparing Water Transfer Proposals (Draft Technical Information), dated December 2019, prepared by the Department of Water Resources (DWR) and the U.S. Bureau of Reclamation (Reclamation). Depending on well location and associated impacts to surface water supply, DWR and Reclamation determine which wells are appropriate for groundwater substitution transfer use. DWR and Reclamation well criteria used to evaluate groundwater substitution transfers are intended to minimize impacts to streamflow during balanced conditions in the Delta and potential impacts to SWP and CVP operations.

DWR and Reclamation are currently applying a minimum 13 percent streamflow depletion factor (SDF) to most groundwater substitution transfer projects meeting the criteria contained in the Draft Technical Information unless available information analyzed by DWR and Reclamation supports the need for the development of a site-specific streamflow depletion factor. Transfer proponents may also submit site-specific technical analysis supporting a modified proposed streamflow depletion factor for review and consideration by DWR and Reclamation.

All groundwater substitution transfers are subject to applicable county regulations, including any regulations prohibiting transfers. The boundaries of Sacramento and SSWD are within the North American Subbasin, which includes all of Sacramento County north of the American River. SCWA is located within the South American Subbasin, which includes all of Sacramento County south of the American River (the above three agencies will pump groundwater in lieu of using Sacramento's surface water supplies under this order). Portions of the North American Subbasin relevant to the transfer are managed by the Sacramento Groundwater Authority. Portions of the South American Subbasin relevant to the transfer are managed by Sacramento Central Groundwater Authority. Sacramento has notified the Groundwater Sustainability Agencies (GSA) points of contact regarding the proposed groundwater substitution activity within the GSA boundaries. Groundwater substitution transfers are also required to comply with current groundwater management law under the 2014 Sustainable Groundwater Management Act (SGMA). SGMA requires GSAs to avoid depletions of interconnected surface waters that have significant and unreasonable adverse impacts on beneficial uses of surface water (significant and unreasonable depletions). GSAs will avoid significant and unreasonable depletions through the implementation of one or more GSPs. The transfer proposed by Sacramento will be subject to the requirements of the adopted GSP.

*Long-Term Impacts to Stream Flow from Groundwater Substitution Transfers*

Depletion of surface stream flows due to groundwater pumping, including groundwater substitution transfers, has been a long-standing issue of concern in California. Part of the concern involves whether the SDFs being used pursuant to groundwater substitution transfers are stringent enough to protect against long-term negative impacts to surface water flows. The depleting effect of increased groundwater pumping on surface flows persists for years following the increased groundwater pumping.

Sacramento, Carmichael, and SJWD (Sellers) acknowledge that prior groundwater substitution transfers have required a one-time SDF between 8 percent and 13 percent on the Lower American River to mitigate for losses of surface water over extended periods due to water transfers. The Sellers also acknowledge the State Water Board's concern that the 13 percent statewide SDF may not be adequately protective due to successive dry years barring a program to actively accelerate recharge. However, the Petition states the Sellers have participated in an actively managed regional conjunctive use program for the past two decades and have shown that some areas of the North American Subbasin and the South American Subbasin have recovered by nearly 20 feet during the 20-year period. Because groundwater levels have been increasing over this period, the Sellers believe depletions from the lower American River have also declined, further supporting continued use of the 13 percent SDF.

Because real-time streamflow depletion due to groundwater pumping cannot be directly measured, DWR and Reclamation have estimated impacts on streamflow due to groundwater pumping by using analytical and numerical groundwater models. DWR and Reclamation utilize information from modeling conducted for Reclamation's 2019 Long-Term Water Transfers EIS/EIR (Transfer EIS/EIR) to establish a minimum 13 percent SDF mitigation measure for single year transfers requiring the use of SWP or CVP facilities. The Transfer EIS/EIR selected a 13 percent minimum SDF based on a modeling analysis of groundwater substitution transfers occurring across ten different individual years within the modeling period and assessed the total volume of depletions over a duration of ten years from the start of each transfer year. The analysis showed the SDF ranged from 14 percent to over 40 percent, with an uncertainty of +/- 1 percent, hence 13 percent was selected as the minimum<sup>2</sup>. The Transfer EIS/EIR mitigation measures also state that stream depletions vary based on hydrologic conditions and are in part dependent on hydrologic conditions following the transfer.

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<sup>2</sup> Technical consulting staff involved in the preparation of the Transfer EIS/EIR presented a summary of the basis for the 13 percent SDF to State Water Board staff on January 26, 2022. The presentation showed that the modeled single-year depletion percentages used as the basis for the 13 percent mitigation measure ranged from 14 percent to over 40 percent, with increases to over 40 percent occurring when the transfer occurred at the beginning of a sequence of dry years.

Review of modeling results from the Transfer EIS/EIR, which analyzed groundwater substitution transfers by all potential sellers in the aggregate, shows that the surface water depletions due to groundwater pumping and surface water and groundwater interaction over the modeled period of record compared to total groundwater substitution transfers during those same years result in an average SDF of approximately 25 percent<sup>3</sup>. Further, the Transfer EIS/EIR states that during a period of multiple dry years, the impacts during a single year can be greater and can have a potentially significant effect on water supply.

Because 2022 is the third consecutive year of dry conditions as emphasized by the Governor's Executive Order N-7-22, it is necessary to implement a more conservative approach to the SDF reflective of the risk of continued dry conditions to ensure avoidance of injury to other lawful users of water and unreasonable effects on fish and wildlife during this year and future years. Given that the DWR and Reclamation imposition of SDFs for transfers require transfer-specific considerations based on the hydrologic circumstances of the transfer year, and the Transfer EIS/EIR indicates depletions increase during a sequence of dry years, the State Water Board will condition this Order to ensure future impacts of depletions are addressed, should new information come to light demonstrating those impacts. Consistent with the analysis used as the basis for SDFs applied to transfers under the Transfer EIS/EIR, which assessed cumulative depletions over a period of ten years following the transfer, the consideration of additional impacts shall also be applicable for a period of ten years following this Order. The Sacramento Valley Groundwater-Surface Water Simulation Model (SVSim) developed by DWR to assess streamflow depletions, has completed calibration and was released to the public on June 8, 2022. The availability of the calibrated SVSim model constitutes new information regarding streamflow depletion. However, as of the date of this Order, Division staff have not had the opportunity to review SVSim and the related model documentation in order to apply it to specific transfers. Other examples of potential new information include new management actions, such as groundwater recharge, undertaken to offset depletions and monitoring related to those management actions.

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<sup>3</sup> Based on Transfer EIS/EIR Figure 3.1-3: Potential Changes in Total Exports at the Delta Pumping Station as a Result of Surface Water and Groundwater Interaction and Figure K-14: Annual Available Water Transfer Supply (EIR/EIS), from Reclamation's March 2019 Long-Term Water Transfers EIS/EIR. The figures provide the annual modeled surface water depletion amounts and the annual modeled groundwater pumping amounts due to transfers. The total of the annual amounts from the two figures indicates a long-term average SDF of approximately 25 percent over the modeled period.

### 3.0 PETITIONS FOR TEMPORARY CHANGE INVOLVING TRANSFER

#### 3.1 Description of the proposed temporary changes

In order to facilitate the transfer, Sacramento proposes to temporarily add the following to Permit 11359:

- 1) SWP's Banks Pumping Plant via the Clifton Court Forebay as a point of diversion, located within NW $\frac{1}{4}$  of SE $\frac{1}{4}$  of projected Section 20, T1S, R4E, MDB&M;
- 2) Barker Slough Pumping Plant as a point of diversion, located within NE $\frac{1}{4}$  of SW $\frac{1}{4}$  of Section 18, T5N, R2E, MDB&M;
- 3) San Luis Reservoir as a point of rediversion, located within SW $\frac{1}{4}$  of SE $\frac{1}{4}$  of projected Section 15, T10S, R8E, MDB&M;
- 4) Castaic Dam as a point of rediversion, located within N $\frac{1}{2}$  of SW $\frac{1}{4}$  of projected Section 18, T5N, R16W, SBB&M;
- 5) Perris Dam as a point of rediversion, located within N $\frac{1}{2}$  of SE $\frac{1}{4}$  of projected Section 4, T4S, R3W, SBB&M;
- 6) Pyramid Dam as a point of rediversion, located within SW $\frac{1}{4}$  of NW $\frac{1}{4}$  of projected Section 2, T6N, R18W, SBB&M;
- 7) a portion of the SWP's service area as shown on Maps 1878 – 1, 2, 3, and 4 filed with the Division under Application 5630; and
- 8) Municipal, domestic, industrial, and irrigation purposes of use.

The proposed petition will facilitate Sacramento's temporary transfer up to 5,183 AF of surface water from July 1 to November 30, 2022, which will be made available by groundwater substitution, prior to subtracting streamflow depletion loss, to Santa Clara Valley Water District, Metropolitan Water District of Southern California, Kern County Water Agency, Alameda County Water District, Napa County Flood Control and Water Conservation District, County of Kings, Palmdale Water District, Dudley Ridge Water District, Zone 7 Water Agency, Central Coast Water Authority, and Antelope Valley-East Kern Water Agency in order to provide an additional water supply for municipal, domestic, industrial, and irrigation purposes of use. Groundwater substitution involves the use of groundwater pumped to customers within Sacramento's service area in exchange for a like amount of surface water that will remain instream for diversion at the proposed additional points of diversion.

### **3.2 Summary of Sacramento's Permit 11359**

Permit 11359, issued on May 7, 1958, authorizes Sacramento to divert water from the South Fork Silver Creek and Silver Creek and redivert from locations on the South Fork American River, Lower American River, and the Sacramento River for municipal, domestic, industrial, and recreational purposes. Up to 275,000 AF per annum of water is permitted to be stored in Ice House Reservoir and Union Valley Reservoir between November 1 of each year and July 31 of the succeeding year under the Upper American River Project. Stored water is released under control and management of the Sacramento Municipal Utility District (SMUD) for non-consumptive purposes and then dedicated to Sacramento for consumptive use downstream.

The primary point of diversion on the Lower American River under Permit 11359 is the E. A. Fairbairn Water Treatment Plant on the Lower American River, located by CCS83, Zone 2, North 1,966,187 feet and East 6,728,358 feet, being within NW $\frac{1}{4}$  of SE $\frac{1}{4}$  of projected Section 10, T8N, R5E, MDB&M. On the Sacramento River, the primary point of diversion is located at the diversion and water treatment plant at the confluence of the American and Sacramento Rivers located by CCS83, Zone 2, North 1,977,788 feet and East 6,702,758 feet, being within NE $\frac{1}{4}$  of SE $\frac{1}{4}$  of projected Section 35, T9N, R4E, MDB&M. Permit 11359 authorizes direct diversion of water between November 1 of each year and August 1 of the succeeding year.

### **3.3 Governor Newsom's 2021 and 2022 Proclamations of a Drought State of Emergency**

California is experiencing severe to exceptional drought conditions across the state. Water Year 2020-2021 was a second consecutive dry year with record-breaking high temperatures. In response to California's severe drought conditions in 2021, Governor Gavin Newsom proclaimed a regional drought state of emergency on April 21, 2021 for the Russian River Watershed, and on May 10, 2021 he signed a proclamation expanding the drought state of emergency to the Klamath River, Sacramento-San Joaquin Delta, and Tulare Lake Watersheds. On July 8, 2021, the Governor signed a proclamation further expanding the regional drought state of emergency to include nine counties where drought effects are increasingly severe or where state emergency response may be needed. The Governor's drought proclamations brought a total of 50 of the state's 58 counties under the drought state of emergency.

The Governor's July 8, 2021 Proclamation states:

"since my May 10, 2021 Proclamation, California's water supplies continue to be severely depleted, and high temperatures are now increasing water loss from reservoirs and streams (especially north of the Tehachapi Mountains), and thus demands by communities and agriculture have increased, supplies of cold water needed for salmon and other anadromous fish that are relied upon by tribal,

commercial, and recreational fisheries have been reduced, and risk has increased of drought impacts continuing in 2022 because of continued water loss from climate change-driven warming temperatures and less water available in reservoirs and streams from two years of below average precipitation.”

The July 8, 2021 Proclamation directed the State Water Board to consider,

“modifying requirements for reservoir releases or diversion limitations to conserve water upstream later in the year in order to protect cold water pools for salmon and steelhead, enhance instream conditions for fish and wildlife, improve water quality, protect carry over storage, or ensure minimum health and safety water supplies. The Water Board shall require monitoring and evaluation of any such changes to inform future actions.”

On October 19, 2021, the Governor extended the drought emergency proclamation to include California’s remaining eight counties.

On March 28, 2022, the Governor issued Executive Order N-7-22, finding that “early rains in October and December 2021 gave way to the driest January and February in recorded history for the watersheds that provide much of California’s water supply” and that “the ongoing drought will have significant, immediate impacts on communities with vulnerable water supplies, farms that rely on irrigation to grow food and fiber, and fish and wildlife that rely on stream flows and cool water.” The March 28, 2022 Order applies various measures to encourage water conservation and to increase resilience of state water supplies during prolonged drought conditions.

#### **4.0 PUBLIC NOTICE OF THE PROPOSED TEMPORARY CHANGE**

On May 10, 2021, Governor Gavin Newsom declared a State of Emergency for the Klamath River, Sacramento-San Joaquin Delta, and Tulare Lake Watershed Counties due to drought. The signed proclamation modifies noticing requirements and notice duration for temporary transfers of water. Consistent with the Governor’s proclamation, the Division noticed Sacramento’s petition on May 16, 2022, to the Division’s website and via the State Water Board’s electronic subscription mailing list pursuant to modified Water Code section 1726, subdivision (d).

The comment deadline was May 31, 2022. Timely comments on the transfer were received from 1) Tulare Lake Basin Water Service District (Tulare Lake), 2) California Department of Fish and Wildlife (CDFW), 3) Bureau of Reclamation (Reclamation), and 4) Central Delta Water Agency (CDWA). Petitioner provided responses to the comments by letters to the Division dated June 6, 2022 and June 8, 2022 and are available in the record for Permit 11359.



#### **4.1 Comments of Tulare Lake**

By correspondence dated May 18, 2022, Tulare Lake commented on the transfer participants shown on the public notice. The letter states that the “County of Kings” had been incorrectly listed as “Kings County Water District” and that the County of Kings is a State Water Project Contractor and a participant of the proposed transfer.

##### Petitioner Response

Sacramento agrees that County of Kings had been incorrectly listed as Kings County Water District. County of Kings has been included in the list of SWC Agencies for Sacramento’s 2022 transfer.

##### State Water Board Response

The State Water Board acknowledges the incorrect naming of County of Kings as a participant in the 2022 temporary transfer of water under Permit 11359. Kings County Water District was listed as a participant in the petition filed by Sacramento and was noticed as such. Kings County Water District has been removed as a participant and County of Kings added. The complete list of participants for this temporary transfer is included in Condition 9 of this order.

#### **4.2 Comments of CDFW**

By letter dated May 18, 2022, CDFW commented on Sacramento’s proposed temporary transfer. CDFW noted that transfer-related groundwater pumping lowers groundwater levels, potentially harming groundwater dependent ecosystems (GDEs) where groundwater-surface water interconnectivity exists. CDFW had the following comments regarding groundwater-related transfers.

CDFW recommended a more protective groundwater level trigger to reduce or cease pumping groundwater pursuant to the transfer to avoid adverse impacts on GDEs after sequential dry or critically dry years. Additionally, the Petitioner should ensure that the groundwater pumping reduction and cessation triggers used during the transfer period are at least as protective as the sustainable management criteria in the applicable subbasin GSP.

CDFW noted that multiple wells included in the proposed transfer are in close proximity to the American River and that relying on the minimum SDF of 13 percent included in the Draft Technical Information may underestimate surface water depletion caused by lowered groundwater levels induced by transfer pumping, especially during consecutive dry years. CDFW acknowledges the petitioner’s technical analysis and review with the Sacramento Groundwater Authority and asks for the analysis to be available for review and comment.

### Petitioner Response

Sacramento responded to CDFW's comments in a joint letter with Carmichael covering seven general subject areas. The areas are as follows: 1) Groundwater Dependent Ecosystems, 2) Sustainable Groundwater Management Act, 3) Monitoring, 4) Mitigation, 5) Streamflow Depletion Factors, 6) Well Recovery, and 7) American River Transfer Timing. Sacramento's responses are below.

Sacramento responded by stating that all wells used to replace surface water will be operated within historical baseline pumping amounts and the basin's respective safe yield amounts in accordance with the GSPs in the North American Subbasin and the South American Subbasin. The wells used in the transfer will be certified and approved by DWR and Reclamation staff, and all pumping will be in accordance with the mitigation, monitoring, and reporting plans that both Sacramento and Carmichael will be required to comply with as a condition of the water conveyance agreement that each transferor will enter into with DWR.

The prospect for additional dry-year extractions was included in the GSP as a key adaptation tool to respond to variations in surface water availability. The dry-year scenarios in the GSP include a determination to avoid undesirable impacts on GDE's and other sustainability criteria. A GSP consistency determination from SGA and SCGA was included in the original petitions for both Carmichael and Sacramento. The SGA and SCGA letters acknowledge that the proposed transfers comport with respective GSPs and SGMA's sustainability criteria incorporated therein.

Sacramento and Carmichael acknowledged that Monitoring and Mitigation Plans are necessary and included draft Monitoring and Mitigation Plans with their respective petitions. Final Monitoring and Mitigation plans will require approval by DWR.

Regarding SDF, Sacramento and Carmichael prefer the use of a previously approved 8 percent factor for use in this transfer, which is based on site-specific modeling and analysis that the SGA undertook in 2010. Additionally, Sacramento has approved "refill" agreements with its partnering agencies in the North American Subbasin and the South American Subbasin to accelerate recharge of both basins post-transfer, as has been performed in prior transfers. This accelerated recharge will exceed the transfer amount by up to an additional 25 percent. While Sacramento and Carmichael believe the prior technical work, the regional conjunctive use program, and Sacramento's refill agreements all present a compelling case for a reduced SDF, the petition request for 13 percent reflects consistency with the current status of technical discussions with DWR and Reclamation.

CDFW's comments regarding potential impacts on surface water resources generally concern potential changes in flows released from Folsom Reservoir into the Lower American River to effectuate the 2022 regional water transfer and related potential

impacts to the Folsom cold water pool and the Lower American River fishery. The proposed regional water transfer by Sacramento and Carmichael will not affect storage levels or the cold-water pool in Folsom Reservoir, because the transfer does not change the amount of water released from the reservoir. Absent the transfer, the same amount of water would have been delivered from the reservoir to Sacramento's and Carmichael's points of diversion downstream.

#### State Water Board Response

Condition 3 addresses CDFW's comments regarding SDF. In accordance with requirements of the Draft Technical Information, Sacramento will provide DWR and Reclamation with documentation of Sacramento Groundwater Authority's and Sacramento Central Groundwater Authority's determinations that the proposed transfer is consistent with its adopted GSP. Further, in order to avoid impacts to groundwater, Conditions 15, 16, and 17 of this Order require Sacramento to measure the daily average pumping rate of groundwater pumped in excess of that which would have been pumped in the absence of this transfer, and to monitor the groundwater elevations within the vicinity of the wells utilized for the transfer prior to the proposed transfer.

The proposed temporary transfer by Sacramento is for water that would have otherwise been diverted pursuant to Permit 11359. By approving the transfer, additional water will flow down the Lower American River and into the Delta. In light of the above explanation, it is not anticipated that this transfer will result in an unreasonable effect on fish and wildlife or Groundwater Dependent Ecosystems.

#### **4.3 Comments of Reclamation**

By letter dated May 26, 2022, Reclamation commented on the proposed transfer. To protect Reclamation's water rights and operations for the American River, Reclamation requested information and that the transfer be conditioned as follows:

- Only wells approved by Reclamation and DWR for suitability and acceptability may be used for the groundwater substitution.
- The amount of transferable water credited to the Petitioner's groundwater substitution water transfer is subject to determination by Reclamation and DWR.
- Transferable water may be credited only during balanced conditions in the Sacramento-San Joaquin River Delta.
- Before commencing the proposed transfer, the Petitioner shall submit groundwater monitoring and mitigation plans to DWR and Reclamation for evaluation and approval.

- The amount of water transferred shall not exceed an SDF of 13 percent as set forth in the Draft Technical Information.

### Petitioner Response

Reclamation commented that SWRCB D-893 does not expressly authorize storage within Folsom Reservoir. Sacramento agrees that the issue of storage in Folsom Reservoir is addressed more comprehensively by Exhibits 10 and 11 of D-893, which are the 1957 operating agreement between Reclamation and Sacramento and the SMUD assignment of Permits 11359 and 11360. The State Water Board agrees with Reclamation and Sacramento that water released by SMUD into the American River and then Folsom Reservoir is not considered to be identified as storage within Folsom Reservoir.

Sacramento continues to state that they do not oppose the five conditions requested by Reclamation and accept their incorporation into the 2022 transfers. Sacramento and Carmichael also acknowledge one other contrasting element between their proposed transfers: differences between Carmichael and Sacramento's water rights. Reclamation notes for Carmichael the potential for curtailments by the State Water Board. Sacramento's petition focuses on redirection of previously stored water, and that comment from Reclamation was not included.

### State Water Board Response

In order to avoid injury to Reclamation's and DWR's water rights, the transfer is conditioned such that Sacramento's groundwater substitution proposal is subject to the evaluation and approval by Reclamation and DWR, consistent with the approval criteria of the Draft Technical Information. In addition, the Delta was declared to be in balance by DWR in May 2022 and is expected to remain so through at least the end of the transfer period. The SDF is addressed by Condition 3 of this Order.

### **4.4 Comments of CDWA**

By letter dated March 31, 2022, CDWA commented on the proposed transfer. CDWA's comments are summarized as follows:

- 1) No transfer of water for export from the Delta watershed should be allowed unless D-1641 requirements (without temporary urgency changes) are and will be met.
- 2) The petition lacks information to support that the transferred water is surplus to the Delta and not cause injury to other users of water or unreasonably affect fish, wildlife, or other instream beneficial uses. CDWA believes that water exported from the Delta and stored in reservoirs should be held until it is shown that

D- 1641, without temporary changes or other relaxation, can be met in 2022 and in future dry years. If necessary, that water should be released to the Delta to meet D-1641 requirements.

- 3) Inadequate information exists for potential effects of a recharge agreement with the entities that pump groundwater during the 2022 water transfer based on past transfers.
- 4) The petitions did not include sufficient information to evaluate and approve the transfers. For example, the petitions are devoid of information necessary to analyze the monitoring or mitigation plan as well as inadequate analysis on quantifying conveyance losses.
- 5) The notice and petition state that the surface supply comes from previously stored water. CDWA believes this statement should be supported with a demonstration that the previously stored water that is being considered for transfer was stored within the terms and condition of the petitioner's permits.

#### Petitioner Response

Sacramento offered the following joint responses with Carmichael to CDWA's comment letter:

- 1) Sacramento responded that their petitions meet all legal requirements for temporary transfers provided by California law and regulations. Moreover, Sacramento notes that in the event the transfers did not occur, the water supply that is the subject of the transfer would be rediverted and used in Sacramento's respective service areas.
- 2) Sacramento's temporary groundwater substitution transfers are fully compliant with the Draft Technical Information. The participating transferors identify the wells that will be used for the temporary transfer, demonstrate how the water will be made available for transfer, and provide a Monitoring and Mitigation Plan for review and adoption by the regional agencies and DWR.

Sacramento provided the information related to baseline operations for groundwater wells participating in this transfer through the WTIMS registration website which is available for the public to view. These data are fully supported by technical documentation required by the regulatory agencies guiding this transfer, including DWR and Reclamation.

Sacramento and Carmichael are area-of-origin agencies, and their water rights and supplies are not owned or controlled DWR and Reclamation and thus

subject to the statutes cited. Thus, CDWA's comments related to area-of-origin are not relevant to the proposed transfers.

- 3) Sacramento delivers surface water supplies to areas in both the North American Subbasin and South American Subbasin that also have access to groundwater resources. Sacramento has historically provided surface water to these areas in lieu of their using groundwater in order to support sustainability objectives in both basins. These surface water deliveries from Sacramento have helped improve long-term water supply conditions in both basins and allowed agencies to bank groundwater supplies for use in dry conditions. This continued conjunctive use effort has stabilized both groundwater basins and increased groundwater levels over historical lows. Sacramento's additional actions to provide as much as 25 percent additional supply to augment any potential negative groundwater conditions resulting from the 2022 transfers provide more assurance that management of the groundwater basins will continue the positive trend. Finally, the consistency determinations by the GSAs, SGA and SCGA, affirm that regional groundwater sustainability will not be impacted by Sacramento's proposed transfers and that Sacramento's additional assurances to improve groundwater conditions will address any potential undesirable effects not already fully captured in the regional planning actions.

The agreement to return surface water to those pumping additional groundwater due to the transfer was approved by the Sacramento City Council on May 31st and can be located at the following location:

<http://www.cityofsacramento.org/Clerk>

- 4) Sacramento states that each GSA, SGA and SCGA, have independently determined that the regional groundwater substitution transfers are consistent with their respective GSPs. CDWA attempts to impose its own interpretation into SCGA's GSP by characterizing regional transfers as transfers that only occur within the greater Sacramento region. CDWA did not participate in the development of SCGA's or SGA's GSPs.

The Mitigation and Monitoring Plan submitted with the petitions support the project and the objectives of both state and regional agencies to ensure no undesirable results occur from the temporary groundwater substitution transfers.

Sacramento explains that for through-Delta water transfers using federal or state conveyance, losses are calculated from the point of delivery to the new points of diversion and rediversion and transfers are charged a carriage loss to account for supply reduction factors like evaporation. For Sacramento's transfers, the point of delivery to the Buyer is the location where the water supplies would have been diverted by Petitioners. From that point, conveyance losses are calculated by the

Buyers in their agreements with DWR, based on an analysis determined by DWR and Reclamation as to a particular year's conditions. In addition, Petitioners, as sellers, also are subject to a SDF which directly reduces the amount of water available to buyers to mitigate for impacts from pumping groundwater as a means of making transfer water available.

- 5) CDWA states that the temporary water transfers of Sacramento and Carmichael should be characterized as a reservoir reoperation transfer rather than a groundwater substitution transfer. CDWA provides no facts or material information that supports this assertion in its comment letters. Carmichael's water supplies are direct diversion rights and have no storage potential. As such, any characterization that Carmichael is reoperating a storage system to provide water for their temporary water transfer is wrong.

Sacramento's water supplies are derived from natural flow in the American River and flow derived from reservoir releases from SMUD's Upper American River Project (UARP). Sacramento has no jurisdiction to regulate how SMUD operates its reservoirs. SMUD operates its UARP to capture water when supplies are available under its water rights and then releases the captured water throughout the course of the year to generate power. As of May 19th, 2022, SMUD reported at the American River Operations Group that UARP storage was 346 thousand AF (TAF) and runoff was 110 percent of average. Sacramento's water rights under the Permits attach to the power generation releases at eight storage reservoirs in SMUD's UARP. Sacramento will forego water it would have otherwise rediverted and used reasonably and beneficially from its diversion rights, and its rediversion rights to SMUD's water captured in the UARP, to make water available for areas in the state in dire need of dry-year water supplies.

#### State Water Board Response

- 1) Sacramento owns the water right for the water proposed to be transferred. Water diverted, used, or transferred under Permit 11359 cannot be redirected for existing or potential needs in the Delta pursuant to Reclamation's obligations. By approving the transfer, additional water will flow through the Lower American River and the Delta. Absent the transfer, this water would not be available to meet requirements such as those established in Decision 1641.
- 2) The State Water Board disagrees with CDWA's assertions that the Watershed Protection Act applies to the water that is the subject of the proposed transfer and that the proposed transfer would result in the export of non-surplus water from the Delta. Water Code section 11460 applies to DWR and Reclamation. (*State Water Resources Control Bd. Cases (2006) 136 Cal.App.4th 674, 754.*) Further, CDWA fails to explain how the proposed transfer would "deprive" the Delta of flows it would receive absent the transfer (Wat. Code, § 11460) or

otherwise result in diminished flows to the Delta or to CVP or SWP operations compared to the without-transfer scenario. As discussed above, the proposed transfer would increase the flow of water to the Delta. In addition, the Delta Protection Act provides the State Water Board with discretion to “balance in-Delta needs and export needs.” (*State Water Resources Control Bd. Cases, supra*, 136 Cal.App.4th at pp. 770-771, quotation marks and citation omitted.)

Water exported from the Delta to facilitate this transfer cannot be held in storage and released to the Delta in order to meet D-1641 requirements as the water is being diverted and transferred pursuant to Sacramento’s water right and is not water diverted under DWR’s or Reclamation’s water rights. DWR and Reclamation are the parties responsible in meeting D-1641 requirements with water that is diverted under SWP and CVP water rights.

- 3) Sacramento has demonstrated that conjunctive use of their water rights in the North American and South American Subbasins have increased groundwater levels in the areas around their groundwater wells. This increase is documented in DWR’s recent release of Bulletin 118 shows increasing groundwater trends (1998-2018) within the Sacramento region and the North American and South American Subbasins.
- 4) Sacramento has submitted groundwater monitoring, reporting, and mitigation plans as a condition of participation in the proposed temporary transfers. These plans were submitted with the petitions and include explanations on conveyance losses and stream flow depletion factors. The State Water Board is aware of the determination of conveyance losses. SDF is addressed by Condition 3 of this Order.
- 5) Sacramento has shown that previously stored water has been made available for transfer under their submitted petitions. The State Water Board has determined that the water Sacramento proposes to transfer has been stored and will be released by SMUD under their commitments to Federal Energy Regulatory Commission and the Upper American River Project (UARP) and are within the terms and conditions of Permits 11359 and 11360 for rediversion. The released water is dedicated to Sacramento under D-893 and moved through Folsom Reservoir and Lake Natoma under a June 28, 1957 contract with Reclamation and Sacramento.

Information submitted to the State Water Board shows that sufficient water has been collected to storage at Loon Lake, Ice House Reservoir, and Union Valley Reservoir (UARP reservoirs). The American River Group reports that as of May 2022, 346 TAF had been collected in the above reservoirs and May releases at Chili Bar are 60 TAF. Total basin releases for WY2022 are estimated to be 650 TAF into the American River.



## **5.0 POTENTIAL CURTAILMENT**

During any period in 2022 that Permit 11359 is curtailed, Sacramento will be required to cease all direct diversions under Permit 11359 in accordance with the curtailment order. A condition is therefore included in this Order that direct diversions must cease should the State Water Board curtail Permit 11359. Previously stored water released by SMUD under State Water Board Decision 893 and made available for transfer by Sacramento may continue to be rediverted and transferred under this Order. Rediversion of previously stored water under Permit 11359 (water that was stored prior to the curtailment order) is not subject to curtailment under the emergency regulation.

## **6.0 COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT**

Water Code section 1729 exempts temporary changes involving a transfer of water from the requirements of the California Environmental Quality Act. (Pub. Resources Code, § 21000 et seq.) The State Water Board will file a Notice of Exemption.

## **7.0 CRITERIA FOR APPROVING THE PROPOSED TEMPORARY CHANGES**

The State Water Board shall approve a temporary change involving the transfer of water under Water Code section 1725 et seq., if it determines that a preponderance of the evidence shows both of the following:

- a. The proposed change would not injure any legal user of water, during any potential hydrologic condition that the State Water Board determines is likely to occur during the proposed change, through significant changes in water quantity, water quality, timing of diversion or use, consumptive use of water, or reduction in return flows.
- b. The proposed change would not unreasonably affect fish, wildlife, or other instream beneficial uses.

(Wat. Code, § 1727, subd. (b).)

In addition, the proposed change must involve only the amount of water that would have been consumptively used or stored in the absence of the temporary change. (*Id.*, § 1726, subd.(e).)

Temporary changes pursuant to Water Code section 1725 may be effective for a period of up to one year from the date of approval. (Wat. Code, § 1728.) “The one-year period does not include any time required for monitoring, reporting, or mitigation before or after the temporary change is carried out.” (*Ibid.*)

The State Water Board also has an independent obligation to consider the effect of the proposed project on public trust resources and to protect those resources where feasible. (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419.) The State Water Board considers the evaluation of public trust resources as part of its evaluation of impacts to fish, wildlife, or other instream beneficial uses under Water Code section 1727, subdivision (b)(2) (see Section 8.3 of this Order).

## **8.0 REQUIRED FINDINGS OF FACT**

### **8.1 Transfer Only Involves Water That Would Have Been Consumptively Used or Stored**

Before approving a temporary change due to a transfer or exchange of water pursuant to Chapter 10.5 of Part 2 of Division 2 of the Water Code, the State Water Board must find that the transfer would only involve the amount of water that would have been consumptively used or stored by the permittee or licensee in the absence of the proposed temporary change or conserved pursuant to Water Code section 1011. (Wat. Code, §§ 1725, § 1726.) Water Code section 1725 defines “consumptively used” to mean “the amount of water which has been consumed through use by evapotranspiration, has percolated underground, or has been otherwise removed from use in the downstream water supply as a result of direct diversion.”

In their petition(s), Sacramento states that the surface water that will be transferred would have been consumptively used but for the transfer as required under the Water Code. Specifically, Sacramento has historically used its surface water supply to meet consumptive uses within the water right’s place of use. In this instance, Sacramento will forego using previously stored surface water and use groundwater in lieu of the surface water transferred. Thus, the only water transferred will be water that otherwise would have been consumptively used.

But for the transfer, Sacramento and the participating groundwater pumpers would have used the surface water supplies described in the Petition to meet their customers’ demands. As such, the groundwater that will be used in lieu of the transferred surface water will only be pumped because of the transfer.

The State Water Board conducted an independent evaluation of its records. The combined annual use under Permit 11359 was 11,643 AF, 7,665 AF, 12,137 AF, 11,390 AF, and 13,203 AF during 2017, 2018, 2019, 2020, and 2021 respectively. These data indicate that the Sacramento has put the amount proposed to be transferred to recent beneficial use.

In light of the above, and in accordance with Water Code section 1726, subdivision (e), the State Water Board finds that the water proposed for transfer pursuant to this Order would be consumptively used or stored in the absence of the proposed temporary change.

## **8.2 No Injury to Other Legal Users of the Water**

Before approving a temporary change due to a transfer or exchange of water, the State Water Board must find that the transfer would not injure any legal user of the water during any potential hydrologic condition that the State Water Board determines is likely to occur during the proposed change, through significant changes in water quantity, water quality, timing of diversion or use, consumptive use of the water, or reduction in return flows. (Wat. Code, § 1727, subd. (b)(1).)

Thus, with respect to the “no injury” inquiry under Water Code sections 1727, the State Water Board must evaluate whether the change will injure any legal user of the water involved in the change. The controlling consideration in the State Water Board’s inquiry is the effect of the change on the rights of others. (State Water Resources Control Bd. Cases (2006) 136 Cal.App.4th 674, 743, 805.) A person who claims injury from a proposed change “must show the change will interfere with his or her right to use the water, whatever the source of that right may be.” (Id. at p. 805, italics in original.) It is not enough for a water user to show that it will receive less water as a result of the change. Instead, a water user claiming injury must demonstrate that it has a right to the greater amount of water claimed and that the proposed change will interfere with that right. (*Ibid.*)

In general, the transfer of water that would have been consumptively used or stored will not result in injury to other legal users of water.

The water proposed for transfer consists of previously stored surface water made available through increased groundwater pumping. DWR and Reclamation have reviewed the proposed transfer and determined that, with the inclusion of the 13 percent depletion factor, as well as their oversight of the groundwater substitution operations described in Section 2.1 of this Order, the SWP and CVP will not be injured from the additional groundwater pumping associated with the transfer. The groundwater substitution conveyance agreement described in Section 2.1 of this Order includes mitigation and monitoring plans to address the impacts of additional pumping for this transfer. This Order requires compliance with these agreements and plans. To the extent that new information becomes available indicating that additional depletions due to this transfer are impacting surface flows when the Delta is in balanced conditions, this Order requires Sacramento to consult with DWR and Reclamation to develop a plan, potentially including a water diversion reduction schedule or other measures including groundwater recharge, to address and offset the reduced stream flows that occurred as a result of the transfer.

Water Code Section 1745.10 requires that groundwater substitution transfers be (a) consistent with a groundwater management plan adopted pursuant to state law for the affected area or (b) approved by the water supplier from whose service area the water is to be transferred and that water supplier, if a groundwater management plan has not been adopted, determines that the transfer will not create, or contribute to, conditions of long-term overdraft in the affected groundwater basin. As indicated in Section 2.1 of this Order, the boundaries of Sacramento and SSWD are within the North American Subbasin, which includes all of Sacramento County north of the American River. SCWA is located within the South American Subbasin, which includes all of Sacramento County south of the American River. Portions of the North American Subbasin relevant to the transfer are managed by the Sacramento Groundwater Authority. Portions of the South American Subbasin relevant to the transfer are managed by the Sacramento Central Groundwater Authority, and Sacramento has notified the Groundwater Sustainability Agencies points of contact regarding the proposed groundwater substitution activity within the GSA boundaries.

In light of the above, and in accordance with Water Code section 1727, subdivision (b)(1), the State Water Board finds that the proposed temporary changes would not injure any legal user of the water during any potential hydrologic condition that the State Water Board determines is likely to occur during the proposed change, through significant changes in water quantity, water quality, timing of diversion or use, consumptive use of the water, or reduction in return flows, or otherwise unreasonably affect a legal user of water.

### **8.3 No Unreasonable Effect on Fish, Wildlife, or Other Instream Beneficial Uses**

Before approving a temporary change in order to facilitate a transfer of water, the State Water Board must find that the proposed change would not unreasonably affect fish, wildlife, or other instream beneficial uses. (Wat. Code, § 1727, subd. (b)(2).) The Petitioner provided CDFW and the Central Valley Regional Water Quality Control Board (Central Valley Water Board) with a copy of the petition in accordance with California Code of Regulations, title 23, section 794, subdivision (c). CDFW provided comments regarding the transfer as described in Section 4.2. The Central Valley Water Board did not provide any comments to the State Water Board regarding potential effects of the proposed changes on water quality, fish, wildlife, and other instream beneficial uses.

In general, North of Delta transfers result in an incremental increase in instream flows between the Petitioner's point(s) of diversion and the location where the water is removed from the stream system. The increase in flows is not anticipated to be harmful to instream resources, provided that the transfer water does not cause instream temperatures to increase to harmful levels and also does not result in false fish attraction flows to streams not suited for fish rearing. No information is available that

suggests the transfer flows will contribute to false fish attraction flows or significantly change stream temperatures or water quality. The transfer will also be subject to all applicable federal and State Endangered Species Act requirements, including applicable Biological Opinions, Incidental Take Permits, court orders, and any other conditions imposed by other regulatory agencies applicable to diversions and exports of water at the SWP and CVP Delta pumps.

In light of the above, and in accordance with Water Code section 1727, subdivision (b)(2), the State Water Board finds that, as conditioned, the proposed transfer will not unreasonably affect fish, wildlife, or other instream beneficial uses.

## **9.0 STATE WATER BOARD'S DELEGATION OF AUTHORITY**

On June 5, 2012, the State Water Board adopted Resolution 2012-0029, delegating to the Deputy Director for Water Rights the authority to act on petitions for temporary change if the State Water Board does not hold a hearing. Resolution No. 2012-0029 authorizes the Deputy Director to redelegate this authority, and this authority has been so redelegated by memorandum dated June 6, 2022.

## **10.0 CONCLUSIONS**

The State Water Board has adequate information in its files to make the evaluation required by Water Code section 1725 et seq.

The State Water Board concludes that, based on the available information:

1. The proposed transfer involves only an amount of water that would have been consumptively used or stored in the absence of the temporary change.
2. The proposed temporary change will neither injure, nor unreasonably affect, any legal user of water, including during any potential hydrologic condition that the Board determines is likely to occur during the proposed change, through significant changes in water quantity, water quality, timing of diversion or use, consumptive use of water or return flows.
3. The proposed temporary change will not have an unreasonable effect upon fish, wildlife, or other instream beneficial uses.
4. Any increase in groundwater pumping associated with this transfer (i.e., groundwater substitution) will be performed in compliance with Water Code section 1745.10.

## ORDER

**NOW, THEREFORE, IT IS ORDERED** that the petition filed for temporary change for the transfer of up to 5,183 acre-feet (AF) of water under the City of Sacramento (Sacramento, Permittee, Petitioner) Permit 11359 is approved.

All existing conditions of Permit 11359 remain in effect, except as temporarily amended by the following provisions:

1. The transfer is limited to the period commencing on the date of this Order and continuing through November 30, 2022.
2. The transfer amount under Permit 11359 is limited to a total of up to 5,183 AF prior to subtracting streamflow depletion loss by groundwater substitution.
3. The stream depletion factor (SDF) is initially set at 13 percent for the purposes of this transfer. If new information becomes available following the transfer that the Deputy Director for Water Rights determines demonstrates cumulative streamflow depletions due to the transfer are higher than 13 percent and the streamflow depletions are occurring or have occurred while the Delta is in balanced conditions within a ten-year period following the date of this Order, Sacramento shall prepare a plan and implementation schedule in consultation with Department of Water Resources (DWR) and the United States Bureau of Reclamation (Reclamation) to address the additional losses of State Water Project (SWP) or Central Valley Project (CVP) stored water identified by the Deputy Director for Water Rights. Sacramento shall reduce direct diversions under Permit 11359 equivalent to the losses to the SWP and CVP according to a schedule agreed to by DWR and Reclamation and approved by the Deputy Director for Water Rights. In lieu of reducing future direct diversions under Permit 11359, and with approval by the Deputy Director for Water Rights, Sacramento may make other water management actions, such as groundwater recharge, to compensate for the losses.
4. The Petitioner shall reduce its diversion and rediversion rate at the original point of diversion authorized under Permit 11359 by an amount equal to the rate of additional groundwater pumped in order to make water available for transfer pursuant to this Order (both measured as a daily average). The amount of water transferred pursuant to this Order shall not exceed 87 percent of the rate of additional groundwater pumping. Accordingly, the maximum amount of water available for transfer given a 13 percent depletion rate is 4,509 AF.
5. Only previously stored water released from storage by Sacramento Municipal Utility District under State Water Board Decision 893 and made available for transfer by Sacramento may be transferred under this order.

6. Municipal, domestic, industrial, and irrigation uses are temporarily added as purposes of use.
7. The following points of diversion are temporarily added to Permit 11359:

Harvey O. Banks Pumping Plant (Banks Pumping Plant) via the Clifton Court Forebay located as follows:  
California Coordinate System, Zone 3, NAD 83, North 2,126,440 feet and East 6,256,425 feet, being within NW $\frac{1}{4}$  of SE $\frac{1}{4}$  of projected Section 20, T1S, R4E, MDB&M,

Barker Slough Pumping Plant located as follows:  
California Coordinate System, Zone 2, NAD 27, North 216,350 feet and East 2,064,750 feet, being within NE $\frac{1}{4}$  of SW $\frac{1}{4}$  of projected Section 18, T5N, R2E, MDB&M

8. The following points of rediversion are temporarily added to Permit 11359:

San Luis Reservoir located as follows:  
California Coordinate System, Zone 3, NAD 83, North 1,845,103 feet and East 6,393,569 feet, being within SW $\frac{1}{4}$  of SE $\frac{1}{4}$  of Projected Section 15, T10S, R8E, MDB&M.

Castaic Dam located as follows:  
California Coordinate System, Zone 5, NAD 83, North 2,012,680 feet and East 6,378,993 feet, being within N $\frac{1}{2}$  of SW $\frac{1}{4}$  of projected Section 18, T5N, R16W, SBB&M;

Perris Dam located as follows:  
California Coordinate System, Zone 6, NAD 83, North 2,254,478 feet and East 6,275,612 feet, being within N $\frac{1}{2}$  of SE $\frac{1}{4}$  of projected Section 4, T4S, R3W, SBB&M;

Pyramid Dam located as follows:  
California Coordinate System, Zone 5, NAD 83, North 2,057,463 and East 6,331,046 feet, being within SW $\frac{1}{4}$  of NW $\frac{1}{4}$  of projected Section 2, T6N, R18W, SBB&M.

9. The place of use under Permit 11359 is temporarily expanded to include the service areas of Santa Clara Valley Water District, Metropolitan Water District of Southern California, Kern County Water Agency, Alameda County Water District, Napa County Flood Control and Water Conservation District, County of Kings, Palmdale Water District, Dudley Ridge Water District, Zone 7 Water Agency, Central Coast Water Authority, and Antelope Valley-East Kern Water Agency (SWC Agencies) as

shown on information accompanying the Petition.

10. During the period of transfer, Petitioner shall comply with applicable terms and conditions imposed by other regulatory agencies. This Order shall not be construed as authorizing the violation of any agreement entered by the Petitioner.
11. Direct diversions pursuant to Permit 11359 must cease during any time when Permit 11359 is curtailed. No transfer credit shall accrue for groundwater substitution of direct diversions during any time when Permit 11359 is curtailed.
12. Carriage loss shall be deducted from any water transferred through the Delta and delivered under this Order.
13. Diversion/rediversion of water at the Banks Pumping Plant, Jones Pumping Plant, and San Luis Reservoir are subject to compliance by the operators (California Department of Water Resources (DWR), and U.S. Bureau of Reclamation (Reclamation)) with the objectives currently required of operators set forth in Tables 1, 2, and 3 on pages 181-187 of State Water Board Revised Water Right Decision 1641 (D-1641), or any future State Water Board Order or decision implementing Bay-Delta water quality objectives at those points of diversion/rediversion, including compliance with the various plans required under D- 1641 as prerequisites for the use of the Banks Pumping Plant by DWR and Jones Pumping Plant by Reclamation. Diversion of water is also subject to compliance by DWR and Reclamation with all applicable federal and State Endangered Species Act requirements (ESA), including applicable Biological Opinions (BOs), Incidental Take Permits (ITP), court orders, and any other conditions imposed by other regulatory agencies applicable to these operations.
14. Diversion/rediversion of water at Banks Pumping Plant and Jones Pumping Plant is also subject to compliance with any State Water Board Orders establishing temporary or interim operating conditions during the transfer period, except if the State Water Board has specifically exempted conveyance of transfer water from the Order.
15. Petitioner shall comply with all provisions contained in the groundwater substitution agreement pursuant to the Draft Technical Information for Preparing Water Transfer Proposals, between DWR, Reclamation, and Sacramento as a condition of transferring water pursuant to this Order.
16. Sacramento shall develop and submit to the Deputy Director for Water Rights, by April 1 of each year following 2022, a map defining the groundwater elevations within the vicinity of Sacramento, until such time as these elevations correspond to pre-transfer levels. Each monitoring well will be identified using the same numbering and naming convention as used by the associated GSA's. The methods and units



used to measure groundwater elevations shall be consistent with those utilized by each GSA.

17. The Petitioner shall comply with any applicable requirements of the groundwater sustainability plans adopted for the Sacramento Valley – North American Subbasin and the South American Subbasin, or related implementation actions of the plans, such as regulations, adopted by the GSAs.
18. By December 15, 2022, Sacramento shall provide to the Deputy Director for Water Rights one or more tables describing the transfer authorized by this Order. The table shall include the following information.
  - a. The general location of where water was delivered, and the acreage and/or population served by water delivered to SWC Agencies pursuant to this Order;
  - b. For each day of the transfer, the daily average rate of water made available for transfer pursuant to this Order;
  - c. For each day of the transfer, the daily average diversion rate of water rediverted pursuant to Permit 11359 during the transfer period;
  - d. The average daily streamflow measured at the nearest representative gaging station on the American River;
  - e. The daily average pumping rate of groundwater pumped by Permittee in excess of that which would have been pumped in the absence of this transfer; and
  - f. Groundwater elevations within the vicinity of the wells utilized for the transfer prior to the proposed transfer. Each monitoring well will be identified using the same numbering and naming convention as used in the Groundwater Sustainability Plan for the North American Subbasin and the South American Subbasin. The methods and units used to measure groundwater elevations will be consistent with those utilized in the groundwater sustainability plans and related annual reports.
19. Pursuant to Water Code sections 100 and 275 and the common law public trust doctrine, all rights and privileges under this transfer and temporary change Order, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use or unreasonable method of diversion of said water.

The continuing authority of the State Water Board also may be exercised by

imposing specific requirements over and above those contained in this Order to minimize waste of water and to meet reasonable water requirements without unreasonable draft on the source.

20. This Order does not authorize any act which results in the taking of a candidate, threatened or endangered species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish &G. Code, § 2050 et seq.) or the federal Endangered Species Act (16 U.S.C. § 1531et seq.). If a “take” will result from any act authorized under this Order, right holder shall obtain any authorization for an incidental take prior to commencing the transfer of water. Right holder shall be responsible for meeting all requirements of the applicable Endangered Species Act for the temporary transfer authorized under this Order.
21. The State Water Board reserves authority to supervise the transfer, exchange and use of water under this Order, and to coordinate or modify terms and conditions, for the protection of vested rights, fish, wildlife, instream beneficial uses, and the public interest as future conditions may warrant.

#### STATE WATER RESOURCES CONTROL BOARD

ORIGINAL SIGNED BY

*Erik Ekdahl, Deputy Director  
Division of Water Rights*

Dated: June 30, 2022