

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

DIVISION OF WATER RIGHTS

**IN THE MATTER OF PERMIT 11360 (APPLICATION 12622)
PETITION FOR TEMPORARY CHANGE
INVOLVING THE TRANSFER OF UP TO 14,000 ACRE-FEET OF WATER FROM
CITY OF SACRAMENTO
TO STATE WATER CONTRACTOR AGENCIES**

SOURCE: American River

COUNTY: Sacramento

BY THE DEPUTY DIRECTOR FOR WATER RIGHTS:

1.0 SUBSTANCE OF PETITION

On May 1, 2020, the City of Sacramento (Sacramento, City, 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 14,000 acre-feet (AF) of water from July through November 2020. The proposed surface water transfer will be made available to State Water Contractor (SWC) agencies participating in the State Water Project's (SWP) Dry Year Transfer Program (DYTP). The SWC agencies will include Dudley Ridge Water District, Kern County Water Agency, Tulare Lake Basin Water Storage District, County of Kings, Palmdale Water District, and Alameda County Water Agency (hereinafter collectively referred to as SWC Agencies). Temporary changes approved pursuant to Water Code section 1725 may be effective until November 30, 2020.

1.1 Description of the Transfer

Sacramento proposes to transfer up to 14,000 AF of water under Permit 11360 (Application 12622) to participating SWC Agencies to provide additional water for domestic, municipal, industrial, and irrigation uses. This transfer is part of a multi-agency groundwater substitution transfer from the American River region for up to 18,500 AF of water. Sacramento is part of a six-agency group of sellers (Sellers) that rely on the American River for their surface water supplies that are concurrently

petitioning the State Water Board in 2020¹. To facilitate this transfer, Sacramento is requesting the following temporary changes to its Permit 11360: (1) the addition of the SWP's Harvey O. Banks Pumping Plant (Banks Pumping Plant) as a point of diversion; (2) the addition of San Luis Reservoir as a point of rediversion, (3) the addition of a portion of the service area of the SWP as an additional place of use, and (4) the addition of domestic, industrial, and irrigation purposes. The groundwater substitution will involve the use of groundwater pumped from the North American Subbasin and South American Subbasin by Sacramento, Sacramento Suburban Water District (SSWD), and Sacramento County Water Agency (SCWA) in exchange for reduced surface water diversions that will remain in the Lower American River for diversion at the proposed additional downstream point of diversion (Banks Pumping Plant). Absent the proposed temporary transfer, Sacramento would have diverted the entire quantity of water proposed for transfer at the authorized points of diversion and rediversion under Permit 11360.

1.2 Groundwater Substitution

Sacramento proposes to transfer water to the SWC Agencies through groundwater substitution. Sacramento will pump up to 3,990 AF of groundwater in lieu of using surface water under Permit 11360. SSWD will pump up to 8,510 AF of groundwater to replace surface water that would have been used under Permit 11360. Of this total, 2,880 AF will be in lieu of Permit 11360 water historically used in SSWD under the 2004 *Wholesale Agreement between the City of Sacramento and SSWD*. The remaining 5,630 AF will be delivered by SSWD to Sacramento through an intertie located on Enterprise Road and operated as part of SSWD's Enterprise Pumping Plant and Storage Reservoir. SCWA will pump 1,500 AF to replace surface water that would have been used under Permit 11360.

Under a groundwater substitution transfer, surface water supply is made available for transfer as a result of the 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.

¹ The Sellers include Sacramento, Carmichael Water District, Fair Oaks Water District, Golden State Water Company, Sacramento County Water Agency, and Sacramento Suburban Water District. Collectively, the Sellers are proposing to transfer up to 18,500 AF, however only City of Sacramento and Carmichael Water District are proposing to transfer water pursuant to Water Code section 1725.

Flow reduction in a river, stream, canal, or drain due to groundwater substitution transfers has the potential to injure other legal users of water if it occurs when the Delta is in balanced conditions² or there is limited streamflow in the channel from which the water is being transferred.

Proposals for transfers of water through Central Valley Project (CVP) and/or SWP facilities that involve groundwater substitution are developed to be consistent with the Draft Technical Information for Preparing Water Transfer Proposals (Draft Technical Information), dated December 2019 and 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. The DWR and Reclamation well criteria used to evaluate groundwater substitution transfers is intended to minimize impacts to streamflow during balanced conditions in the Delta and potential impacts to SWP and CVP operations.

Sacramento indicates that the proposed groundwater substitution transfer will be consistent with the Draft Technical Information. Previous technical analysis and review led by the Sacramento Groundwater Authority (SGA) showed an average streamflow depletion factor (SDF) of eight percent. DWR and Reclamation concurred that streamflow impacts resulting from groundwater pumping to replace transferred water would be eight percent for transfers in 2010, 2013, and 2018. Discussions following submittal of the petition for the 2020 transfer between DWR, State Water Board staff, and SGA have led to application of a 13 percent SDF to the 2020 transfer. To account for those impacts, Sacramento will only transfer 87 percent of the total quantity of groundwater pumped in exchange for the foregone surface water diversions.

Sacramento and SSWD are located 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 Groundwater Subbasin relevant to the transfer are managed by the SGA. Portions of the South American Subbasin relevant to the transfer are managed by SCWA.

² 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.

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.

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 utilized results from modeling efforts conducted for Reclamation's Long-Term Water Transfers Environmental Impact Statement/Environmental Impact Report, published October 2019, to establish an estimated minimum 13 percent average SDF for single year transfers requiring the use of SWP or CVP facilities.

DWR and Reclamation anticipate ongoing refinement of groundwater substitution transfer modeling will allow them to more accurately evaluate potential long and short-term surface water depletion impacts from individual transfers, and condition future transfers as necessary to protect against those impacts.

2.0 BACKGROUND

2.1 Substance of Sacramento's Permit 11360

Permit 11360, issued on May 7, 1958, authorizes Sacramento to divert 500 cubic feet per second (cfs) from Rubicon River, 500 cfs from South Fork Rubicon River, 200 cfs from Rock Bound Creek, 75,000 AF annually (afa) by storage collected from Rubicon River, 200,000 afa by storage collected from South Fork Rubicon River, 14,000 afa by storage collected from Rock Bound Creek and 25,000 afa by storage collected from Gerle Creek. The primary points of rediversion under Permit 11360 are 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, and the Sacramento River 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 11360 authorizes direct diversion of water between November 1 of each year and August 1 of the succeeding year and storage of water between November 1 of each year and August 1 of the succeeding year. The authorized purpose of use under Permit 11360 is municipal.

2.2 Proposed Temporary Changes

In order to facilitate the transfer, the following will be added to Permit 11360 (Application 12622):

- 1) Banks Pumping Plant via the Clifton Court Forebay as a point of diversion, located within NW¼ of SE¼ of projected Section 20, T1S, R4E, MDB&M; and
- 2) San Luis Reservoir as a point of rediversion, located within SW¼ of SE¼ of projected Section 15, T10S, R8E, MDB&M. A portion of the SWP service area would be temporarily added to the place of use of Permit 11360 to facilitate the temporary water transfer to the participating SWC Agencies. This portion of the service area of the SWP is shown on Maps 1878-2 and 1878-3 on file with the Division under Application 5630. Irrigation, domestic, and industrial uses would also be temporarily added as purposes of use under Permit 11360.

3.0 PUBLIC NOTICE AND COMMENT TO THE PROPOSED TEMPORARY CHANGE

On May 11, 2020, public notice of the petition for temporary change was provided by posting on the Division's website and via the State Water Board's electronic notification system (LYRIS). In addition, on May 11, 2020, the Petitioner noticed the project via publication in the Sacramento Bee newspaper. Also on May 11, 2020, the Petitioner mailed the notice via first class mail to a list of interested parties, provided by the State Water Board, which included downstream water diverters on the Lower American River between Sacramento and the confluence with the Sacramento River. The comment deadline was June 10, 2020.

The State Water Board received comments regarding the proposed temporary change from the following: 1) Richard Morat, 2) California Department of Fish and Wildlife (CDFW), 3) Florin Resource Conservation District/Elk Grove Water District, 4) Reclamation, 5) DWR, and 6) Central Delta Water Agency (CDWA)³, and 7) jointly submitted comments from AquAlliance, California Water Impact Network (C-WIN), and California Sportfishing Protection Alliance (CSPA). These comments and responses are summarized below.

³ In its comments, CDWA stated that it was "unaware" of water right holders having been provided notice of the proposed transfer under the procedure set forth in Water Code section 1726, subdivision (d) and requested that the timeline for processing the proposed transfer be adjusted to provide additional notice. However, CDWA did not name any water right holder(s) who will be affected by the transfer but did not receive notice. Given this lack of specific information provided by CDWA and the other forms of public notice, the State Water Board declines to adjust the timeline of the proposed transfer.

3.1 Comments of Richard Morat

By letter dated May 11, 2020, Richard Morat commented on the proposed transfer. Mr. Morat requested terms and conditions that better protect public trust resources and that the transfer will not result in an unreasonable effect on fish and wildlife or other instream beneficial uses. Mr. Morat also commented that the transfer should be conditioned for only essential uses in 2020, and that transfer of water that otherwise would have remained in storage be conditioned “such that conservation storage replenishment of the transferred amount be timed and amounts allowed to be conserved scoped to the affected river’s and the estuary’s capacity to reasonably forego those flows.”

Sacramento Response:

In a letter dated June 4, 2020, Sacramento responded that the water transfer petitions are consistent with California law that is supportive of voluntary transfers.

Sacramento also indicated that the temporary water transfer will *add* to, not *reduce*, the amount of flow in the American and Sacramento Rivers and to the interior Delta. These additional flows also would occur within historical flow patterns for all portions of the system that would otherwise be present by virtue of releases by DWR, Reclamation, and other water right holders that will be made for environmental, consumptive, and other beneficial uses and legal requirements. The proposed transfer will generate new, additional water that will flow through the system, and will be conditioned by the State Water Board, DWR, and Reclamation to avoid any impacts to fish or wildlife.

State Water Board Response:

The State Water Board is responsible for considering public trust resources, and while it does not anticipate any adverse public trust impacts to result from this transfer, the State Water Board is aware of long-standing challenges with regard to management of flows and maintaining habitat conditions that are suitable for protection of fish and wildlife in the Delta and its tributaries. Current outflow and water quality requirements are established by State Water Board Revised Water Right Decision 1641 (D-1641) and applicable Biological Opinions, which are the responsibility of DWR and Reclamation to fulfill during the entirety of this transfer.

The State Water Board is supportive of transfers to provide water where it is needed. It is anticipated that SWC Agencies involved in this transfer will only receive 20 percent of their SWP allocation this year. The temporary change petition seeks to add irrigation, industrial, and domestic purposes of use through November 2020.

The State Water Board is aware of challenges regarding management of flows and maintaining habitat conditions suitable for protection of fish and wildlife in the Delta and its tributaries. Current outflow and water quality requirements are established by D-1641 and applicable Biological Opinions, which are the responsibility of DWR and Reclamation to fulfill during the entirety of this transfer.

The proposed temporary transfer by Sacramento is for water that would have otherwise been diverted pursuant to its permit. By approving the transfer, additional water will flow down the American River to the Sacramento 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 other instream beneficial uses.

3.2 Comments of the Department of Fish and Wildlife (CDFW)

By letter dated June 1, 2020, CDFW commented on Sacramento's proposed temporary transfer. CDFW expressed concern over the potential direct and cumulative adverse impacts from changes in the quantity, timing, and duration of water transfers on the sensitive anadromous and/or resident fisheries within the Lower American River.

CDFW recommended close coordination with Reclamation and regulatory agencies in scheduling the release of transfer water from Folsom Reservoir to maximize cold water pool gains associated with a water transfer. CDFW also recommended optimizing releases to provide stable flows across summer and fall months at a targeted release rate that minimizes warming in Lake Natoma.

Additionally, CDFW shared concerns with proposed and future water transfers that have the potential to impact groundwater dependent ecosystems (GDEs). Water transfers made available by groundwater substitution have the potential to affect groundwater hydrology due to increased groundwater use. The Sustainable Groundwater Management Act (SGMA) requires Groundwater Sustainability Agencies (GSAs) to consider the interests of all beneficial uses and users of groundwater, including GDEs, during the development and implementation of Groundwater Sustainability Plans (GSPs).

Sacramento Response:

Sacramento and Carmichael Water District (CWD), jointly responded to CDFW comments in a letter dated June 12, 2020. The response letter addressed two subject areas commented on by CDFW: matters concerning surface water resources and groundwater resources.

The petition states that the regional transfer, referring to the total amount of 18,500 proposed by the Sellers, 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 points of diversion downstream. The addition of 40 to 70 cfs to these flows would represent an increase over the five-year average flows of between 1.7 percent and 3.1 percent during the transfer period. Thus, the flow increases associated with the proposed transfer represent minimal increases, compared to without-transfer conditions. CDFW's comments also stated that the groundwater deliveries and surface water supplies made available for transfer will be provided on a relatively regular pattern, rather than in block releases, and that a steady-state release pattern is proposed for this transfer. In addition, Sacramento will coordinate with Reclamation on release rates from the reservoir in order to minimize any temperature- or flow-related impacts on the Lower American River.

In response to CDFW's concern regarding the eight percent SDF, Sacramento noted that the 13 percent factor stated in the DWR/Reclamation Draft Technical Information is based on large-scale Sacramento Valley-wide modeling that is not sufficiently site-specific to the American River and that the eight percent factor proposed for use in this transfer is based on site-specific modeling and analysis that the Sacramento Groundwater Authority ("SGA") undertook in 2010.

Sacramento's response also stated that all wells will be operated within historical baseline pumping amounts as well as within the basins' respective safe yield amounts in accordance with the SGA's and the SCGA's existing AB 3030 groundwater management plans (GMPs) and anticipated requirements of the GSPs under development. The wells used in the transfer will be certified and approved by DWR and Reclamation, and all pumping will be in accordance with the mitigation, monitoring, and reporting plans required pursuant to the water conveyance agreement with DWR. In addition, Sacramento noted that the Water Accounting Framework (WAF) administered by SGA in the North American Subbasin accounts for the conjunctive use activities proposed by the transfer.

Sacramento has notified the GSAs of the transfer as required, and neither GSA has objected to the proposed transfers. Thus, Sacramento has coordinated the proposed transfer with the GSAs to ensure that any impacts on the basin are avoided. Consistent with its ordinance governing groundwater, the Sacramento County Water Agency has issued an export permit to Sacramento for the proposed transfer.

State Water Board Response:

The State Water Board agrees with Sacramento that the proposed groundwater substitution transfer would not affect storage levels or the cold-water pool in Folsom Reservoir, since the transfers would not change the amount of water released from the reservoir. Without the transfer, the same amount of water would have been delivered from the reservoir to points of direct diversion downstream of the reservoir. With the transfer, there would be a minimal flow increase along the Lower American River of between approximately 40 cfs and 70 cfs at the lowest diversion point used in the without-transfer scenario.

Additionally, the proposed groundwater deliveries and surface water supplies made available for transfer would be provided in a regular pattern, rather than via block releases. As noted in the CDFW comment letter, a stable, optimized flow from Folsom Reservoir is preferable to block releases. Further, Sacramento must work with Reclamation to develop an agreement for release of water from Folsom and Nimbus Dam into the Lower American River.

Groundwater substitution transfers are subject to compliance with the groundwater management requirements in the Draft Technical Information, applicable existing GMPs, and SGMA, which is currently in the development and implementation phase. SGMA requires GSAs to consider the interests of all beneficial uses and users of groundwater, including GDEs, during the development and implementation of GSPs pursuant to Water Code section 10723.2. The Sacramento transfer is coordinated with SGA and SCGA, who are the GSAs for the North American and South American Subbasins, respectively, that cover the transfer. The State Water Board agrees that early coordination with GSAs will help determine whether water transfer activities in a basin have potential impacts on GDEs, and GSPs should consider these impacts in the development of sustainability goals, minimum thresholds, and measurable objectives for comprehensive sustainable management criteria. The State Water Board is monitoring the progress of development of GSPs and may further condition future groundwater sustainability transfers accordingly. Finally, the transfer is conditioned with a 13 percent SDF; additional discussion is available below in section 3.4.

3.3 Comments of Florin Resource Conservation District/Elk Grove Water District

On June 5, 2020, Baker, Manock & Jensen commented on behalf of Florin Resource Conservation District/Elk Grove Water District on Sacramento's proposed water transfer. The commenters expressed concern about the impact of the groundwater substitution transfer on the South American Subbasin. They indicated that there has been no data collected, no environmental review, and no establishment of a groundwater banking program or groundwater management

program to identify what impacts such an extraction and exportation of groundwater will have on the subbasin. They requested that the State Water Board deny the portion of the petition as it relates to the additional pumping of approximately 4,000 acre-feet of groundwater out of the South American Subbasin. They indicated that the transfer had not been vetted with the Sacramento Central Groundwater Authority (SCGA). They did not object to the groundwater substitution transfer out of the North American Subbasin, which they state has an established groundwater management program.

Sacramento Response:

Sacramento stated that all wells will be operated within historical baseline pumping amounts as well as within the basins' respective safe yield amounts in accordance with the SGA's and the SCGA's existing AB 3030 GMPs and anticipated requirements of the GSPs under development. The wells used in the transfer will be certified and approved by DWR and Reclamation, and all pumping will be in accordance with the mitigation, monitoring, and reporting plans required pursuant to the water conveyance agreement with DWR. In addition, the WAF administered by SGA in the North American Subbasin accounts for the conjunctive use activities proposed by the transfer. The SCGA, which was formed in 2006, adopted a GMP to provide data collection and environmental review for the South American Subbasin. Sacramento acknowledged that the SCGA does not maintain an accounting framework that matches SGA, but SCGA does compile records and estimates of surface and groundwater usage within the managed area. SCGA submitted basin reports in 2018 and 2019 to DWR as part of annual reporting required pursuant to SGMA that indicate increased groundwater recharge over recent years in excess of the transfer amounts.

Sacramento disagreed that 4,000 AF of groundwater is being exported from the region. SCWA will be providing 1,500 AF to Sacramento for its consumptive use as part of Sacramento's petition. As previously stated, all pumping will be within or under historic pumping by the respective agencies and there has been an increase in total storage over recent years which has helped recharge the subbasin.

Sacramento notified SCGA of the transfer on April 28, 2020 and the transfer was included on the May 13, 2020 SCGA Board agenda. In the meeting discussion, some board members suggested that water transfers should be considered in future GSP development. Sacramento also states that the City will return any groundwater pumped by SCWA for the transfer in a subsequent year, resulting on a net zero change to the basin. Under the management of the SCGA, Sacramento and SCWA support the concept that any groundwater used for the 2020 transfers will be replaced in an upcoming year, resulting in net zero change to the basin.

State Water Board Response:

All groundwater use, including any groundwater pumped for the transfer will be coordinated with the SGA or SGGA, who are the GSAs for the respective portions of the North American and South American Subbasins where the pumping related to the transfer will occur. The participating agencies identified within this transfer petition are members of the SGA or SCGA. The pumping occurring in the North American Subbasin will be subject to the WAF. While the pumping in South American Subbasin is not subject to the WAF, SCWA and Sacramento have an agreement dated June 25, 2020 stating that Sacramento shall deliver an amount of surface water equal to the amount of groundwater SCWA pumps to make water available for the transfer. As pointed out by Sacramento's response, the return of water in an upcoming year will result in no net change in groundwater storage. The State Water Board agrees that coordination with GSAs regarding water transfer activities and accounting frameworks will enable development of more comprehensive sustainable management criteria and GSPs. The State Water Board is monitoring the progress of development of GSPs and may further condition future groundwater sustainability transfers accordingly.

3.4 Comments of Reclamation

By letter dated June 8, 2020, Reclamation commented on Sacramento's proposed water transfer. To protect Reclamation's water rights and operations for the American River, Reclamation requested information and that the transfer be conditioned as follows:

- An eight percent SDF was used to support a transfer of 8,200 AF by Sacramento in 2018. The proposed transfer of 14,000 AF is almost twice the amount transferred by Sacramento in 2018; the combined total of 18,500 AF to be transferred is over 60 percent greater than the combined total for transfers from the lower American River for 2018. Due to this significant increase in the amount of water to be transferred, Reclamation requests that Sacramento provide additional information (including recent modeling data) to support the continued use of an eight percent SDF.
- The Petitioner's water transfer proposal shall not harm other groundwater pumpers in the North American and South American Subbasins due to additional pumping for the transfer in that region.
- If flow at Sacramento's Fairbairn Water Treatment Plant is less than the applicable Hodge Flow Criterion, no water will be transferred to the State Water Contractors.

- 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 and groundwater elevation maps including production and monitoring wells identified in the map to DWR and Reclamation for evaluation and baseline pumping determinations.
- The proposed water transfer shall be carried out in compliance with all existing regulatory constraints in the Delta and shall cause no harm to other legal water users or impact on water quality.

Sacramento Response:

Sacramento responded to Reclamation's comments in a letter dated June 16, 2020 and stated 1) the SAC IGSM regional groundwater model developed by SGA supports an eight percent SDF and 2) the proposed transfer will not will not cause harm to other legal water users or the environment and will comply with all regulatory criteria. Sacramento stated that the 2010 analysis using SAC IGSM modeled a 7.47 percent SDF with 16,000 AF of groundwater substitution transfer, which has been relied upon by DWR and Reclamation for prior transfers in the region. Sacramento also summarized a technical memorandum by stating that the model is still applicable to existing groundwater conditions.

State Water Board Response:

The eight percent SDF derived from SAC IGSM was based on analysis of three hypothetical transfer years, 1976, 1987, and 1994, with 16,000 AF of groundwater pumping occurring during the transfer year. For each of these scenarios, the effect of the groundwater pumping on stream losses was evaluated. The three years were chosen to represent the effects across different hydrologic year types. The cumulative stream losses that had occurred after a five-year period due to the groundwater pumping were calculated and compared against the 16,000 acre-feet of groundwater pumped to develop the percent of stream losses. The stream losses for each scenario were then averaged to arrive at a 7.47 percent SDF.

The Draft Technical Information relied upon by DWR and Reclamation to evaluate transfer proposals states that the minimum SDF applied to groundwater substitution transfers is 13 percent, unless new information indicates a substantial difference in local conditions that warrants a change in the SDF. The 13 percent is based on modeling using SACFEM2013 that was done to support Reclamation's Long-Term Water Transfers Environmental Impact Statement/Environmental Impact Report (Transfer EIS/EIR), published in October 2019. This modeling evaluated ten different transfer

year scenarios and evaluated cumulative stream losses caused by the transfer for nine years after the transfer year. DWR and State Water Board staff asked SGA, who conducted the technical analysis for Sacramento related to SDF, to provide calculations of depletions accumulated over the same time period as Reclamation's using SAC IGSM output data. Following discussion between DWR, SGA, and State Water Board staff, SGA stated that 13 percent is an appropriate SDF for this transfer, given the challenges of using SAC IGSM to estimate SDF using the same methodology used for the Transfer EIS/EIR within the time available. Therefore, given the broader set of scenarios considered, and consideration of ten years of accumulated depletions, the State Water Board finds that the Draft Technical Information relied upon by DWR and Reclamation more appropriately approximates SDF for the purposes of this transfer. The transfer is conditioned with a 13 percent SDF.

In order to avoid injury to Reclamation's and DWR's water rights, the transfer is also 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.

The Hodge Flow Criterion was added to amended Permit 11360 under water right order dated August 24, 2001 and is applicable to this transfer. Hodge conditions limit Sacramento's diversion from the American River when flows are below the "Hodge" flows, and becomes operative when the expanded water treatment capacity to be provided by Sacramento's Water Facilities Project is available for use by Sacramento. Sacramento may continue to divert at authorized points of diversion/rediversion downstream of the American River, to the extent water is available and diversions are consistent with existing rights. The SSWD portion of water involved with this transfer is subject to the terms and conditions of the conveyance agreement with DWR and the wholesale water contract SSWD holds with Sacramento, which includes a condition that no water will be delivered to SSWD if flow at Sacramento's E.A. Fairbairn Water Treatment Plant is less than the applicable Hodge Flow Criterion. Therefore, a condition is included in this Order that water that would have been delivered to SSWD, up to 2,880 acre-feet according to the petition, may not be transferred while the Hodge Flow Criterion is in effect.

3.5 Comments of DWR

By letter dated June 9, 2020, DWR commented on the proposed transfer. DWR stated it will be necessary for Sacramento to enter a conveyance agreement for the proposed temporary transfer. The conveyance agreement will include provisions related to groundwater substitution transfers that are consistent with the Draft Technical Information. DWR requested that the transfer be conditioned on Sacramento complying with all groundwater substitution transfer provisions contained in the conveyance agreement.

Also, DWR pointed out that Sacramento proposes using an eight percent streamflow depletion factor (SDF) for the proposed transfer, supported by a modeling analysis led by the Sacramento Groundwater Authority (SGA) in 2010, but that some of the 2020 transfer wells were not part of the 2010 SGA analysis. To ensure that the 2010 analysis results are still applicable to the 2020 proposed transfer, DWR requested Sacramento provide technical information to support the suggested SDF factor. DWR expressed its willingness to work with Sacramento to establish a suitable SDF for the 2020 transfer.

Sacramento Response:

Sacramento responded to DWR's comments in a letter dated June 15, 2020. Sacramento acknowledged the need to enter into and follow a conveyance agreement with DWR. Sacramento will comply with the requirements in the conveyance agreement. Sacramento also explained why it believes the regional groundwater model supports the eight percent stream depletion factor for the regional groundwater substitution transfer. Sacramento provided similar information to their response to Reclamation's comments regarding the 2010 SAC IGSM modeling analysis conducted by SGA to evaluate SDF.

State Water Board Response:

Public notice for the proposed Sacramento transfer stated that an amount of up to 14,000 AF would be transferred. This amount was determined by Sacramento at the time of petition submittal and does not include the SDF. Sacramento's petition includes a table (Table 1 – Groundwater Substitution and Surface Water Transfer Quantities by Seller) showing 8,510 AF of groundwater to be pumped by SSWD, 1,500 AF to be pumped by SCWA, and 3,990 AF to be pumped by Sacramento to facilitate the transfer. The surface water portion of Table 1 shows that with the proposed eight percent SDF, SSWD, SCWA, and Sacramento would transfer a total of 12,880 AF (14,000 AF less an eight percent SDF).

The State Water Board response to Reclamation's comments regarding SDF is also applicable to DWR's comments. The transfer is conditioned to a 13 percent SDF. The conveyance agreement between DWR, Reclamation, and Sacramento will include provisions related to groundwater substitution transfers that are consistent with the Draft Technical Information. A condition is included in the order to comply with the Draft Technical Information.

3.6 Comments of CDWA

By letter, dated June 10, 2020, CDWA commented on Sacramento's proposed transfer. CDWA stated that it was not clear from the petition submitted by Sacramento how Sacramento will satisfy the requirements for groundwater substitution transfers set forth in Water Code section 1745.10.

CDWA asserted that Sacramento's petition was not in compliance with DWR and Reclamation requirements provided in the Draft Technical Information for multiple reasons. First, Sacramento's petition did not include monitoring or mitigation plans. Second, Sacramento failed to timely provide location and other information (including data on historic operations) for the proposed transfer wells, which precludes a determination of the amount of transferable water available. Third, Sacramento's petition utilized an eight percent SDF without providing an analysis supporting a deviation from the Draft Technical Information's minimum SDF of 13 percent.

CDWA stated that Water Code section 11460 (the Watershed Protection Act) and section 12204 (the Delta Protection Act of 1959) "expressly prohibit the export of water that is not surplus to the needs of the Delta or areas where the water originates." CDWA further commented that Sacramento's petition did not demonstrate that the water proposed to be transferred was truly surplus and would not be needed to meet requirements in the Delta such as the State Water Board's Revised Water Right Decision 1641 (D-1641). CDWA also stated that Petitioner should demonstrate that the proposed transfer would not injure water right holders subject to Term 91.⁴

In addition, CDWA commented that an accurate analysis and quantification of losses is required to prevent injury to legal users of water. CDWA requested that this analysis include losses from the source of the transferred water to the export pumps, carriage losses, and losses from the export pumps to the ultimate places of use.

Finally, CDWA noted that a similar groundwater substitution transfer involving Sacramento occurred in 2018, and requested that the State Water Board explain how temporary transfers are distinguished from "long-term" transfers.

Sacramento Response:

Sacramento and CWD jointly responded to CDWA's comments in a letter dated June 16, 2020.

First, Sacramento responded to CDWA's comments regarding compliance with Water Code section 1745.10, stating that its petition was consistent with existing GMPs. Sacramento then provided additional details regarding groundwater management.

⁴ The State Water Board has included Term 91 in permits and licenses issued after August 16, 1978 that authorize the diversion of water within the Sacramento-San Joaquin River Delta watershed at a rate greater than one cubic foot per second or authorize the collection to storage within the Delta of more than 100 acre-feet of water per year. There are 115 active water right permits and licenses that include Term 91.

Sacramento stated that all wells used for the proposed transfer would be operated within historical baseline pumping amounts and subbasin-specific safe yield amounts in accordance with the SGA's and SCGA's existing AB 3030 GMPs. Sacramento stated that this pumping was also within safe yield amounts currently forecasted in the GSPs being developed for both subbasins. Sacramento informed the GSAs for both subbasins, and neither GSA had objected to the proposed transfer. In addition, Sacramento requested and received local approval for the proposed transfer from SCWA.

Sacramento also noted that the SGA administers a WAF for the North American Subbasin and South American Subbasin, agencies participating in the proposed transfer have banked over 200,000 AF of water through in-lieu banking, and Sacramento has transferrable balances in the WAF. Sacramento's response also indicated that over the past two decades, regional conjunctive use efforts have resulted in increasing groundwater levels in the North American Subbasin and South American Subbasin.

Sacramento stated that although SCGA does not maintain an accounting framework, it has prepared and submitted basin reports which demonstrate increased recharge of groundwater over recent years that exceed the proposed transfer amounts.

Second, Sacramento responded to CDWA's comments regarding monitoring and mitigation plans, historic well operations data, and SDF. As an initial matter, Sacramento noted that the Draft Technical Information requires a transfer proponent to submit significant technical information to DWR and Reclamation, which it has done. Sacramento stated that it has uploaded historic well data, baseline groundwater pumping data, and its monitoring and mitigation plans to DWR's transfer proposal database, known as WTIMS. Sacramento explained that all pumping will be done in accordance with these plans as well as reporting plans required by DWR as a condition of the conveyance agreement. Sacramento also stated that it began monitoring groundwater levels in March 2020 as suggested by the Draft Technical Information.

In response to CDWA's comments regarding SDF, Sacramento explained that a 2010 modeling analysis conducted by SGA with input from DWR and Reclamation showed an average stream depletion factor of 7.47 percent for a 16,000 AF groundwater substitution transfer. With DWR and Reclamation's agreement, an eight percent stream depletion factor was used in groundwater substitution transfers occurring in 2010, 2013, and 2018. Sacramento also stated that it has prepared a technical memorandum for DWR (which has been uploaded to WTIMS) demonstrating that an eight percent SDF is appropriate for the proposed transfer.

Sacramento concluded its response by stating that it would fully comply with all requirements of the Draft Technical Information.

State Water Board Response:

The proposed temporary transfer is for water that would have otherwise been diverted from the American River pursuant to Sacramento's permit. By approving the transfer, additional water will flow down the American and Sacramento Rivers and the Delta. Absent the transfer, this water would not be available to meet temperature or other requirements such as those established by State Water Board Revised Water Right Decision 1641.

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.)

The State Water Board is supportive of transfers to provide water where it is needed. It is anticipated that the SWC agencies involved in this transfer will only receive 20 percent of their SWP allocation this year. The temporary change petition seeks to add irrigation, domestic, and industrial purposes of use.

Sacramento's points of diversion and redirection are at its diversion works for the E.A. Fairbairn Water Treatment Plant on the lower American River ("Fairbairn Diversion") and its diversion works for the Sacramento River Water Treatment Plant are at the confluence of the American and Sacramento Rivers. The waterways from Sacramento's diversion area to SWP's project pumps are currently controlled by Term 91 which restricts diversions from streams tributary to the Sacramento-San Joaquin Delta and the Delta.

With the proposed temporary transfer, Sacramento would forego diversion of surface water and pump groundwater to meet its water needs. The amount of water available for transfer by Sacramento is determined by their water rights and groundwater production with established beneficial use histories and system inerties that allow regional groundwater deliveries where necessary to facilitate the transfer. The Draft Technical Information requires a conveyance agreement between

Sacramento, DWR, and Reclamation as the transferred water is non-project water being conveyed through SWP facilities. According to the Draft Technical Information, only that portion of the proposed transfer that is determined to represent new water to the system is transferable using SWP or CVP facilities.

DWR and Reclamation have a shared responsibility for meeting Delta water quality and environmental requirements. Appendix A of the Draft Technical Information addresses potential adverse effects of transfers on the SWP and the CVP. If water transferred is not new water to the system, it will instead come out of the supply for SWP contractors. DWR's Draft Carriage Water Overview for Non-Project Water Transfers (Carriage Water Overview) dated October 2019 describes how DWR and Reclamation account for the losses of water as it is transferred from the seller to the buyer. The Carriage Water Overview provides a methodology for determining carriage losses through the Delta. The transfer proposed by Sacramento will be subject to this accounting as part of the conveyance agreement between Sacramento and DWR. Once the water has been conveyed through the Delta, the SWP is responsible for delivering the transferred quantities and making up any potential conveyance losses to the final place of use for the transfer.

Water Code section 1728 defines temporary changes as those involving a change in point of diversion, place of use, or purpose of use for a period of one year or less. Water Code sections 1735 et seq. authorize the State Water Board to consider a petition for a long-term transfer of water or water rights involving a change of point of diversion, place of use, or purpose of use only for any period in excess of one year, and such transfers are subject to the California Environmental Quality Act (CEQA). Because the proposed 2020 water transfer is for a one-year duration or less, it does not meet the criteria for a long-term transfer pursuant to Water Code section 1735. Responses provided by the State Water Board in section 3.7 provide additional explanation.

The responses provided by the State Water Board to Reclamation's comments regarding the SDF are also applicable to CDWA's comments regarding SDF. The transfer is conditioned with a 13 percent SDF.

3.7 Comments of AquAlliance, C-WIN, and CSPA

By letter dated June 29, 2020, AquAlliance, C-WIN, and CSPA, collectively Commenters, submitted a protest to the proposed transfer. Based on Water Code section 1725 et seq., the public can submit comments, not protests, on a temporary transfer petition. Therefore, the protest is considered a comment.

The Commenters indicated that the notice of the transfer petition only mentioned the Sacramento transfer, while the petition mentioned a larger "multi-agency" transfer of 18,500 AF. They also indicated that the transfer was mischaracterized as a temporary

change that occurs over one year or less per Water Code section 1728. They state that the transfer should instead be a long-term change per Water Code section 1735 because Sacramento regularly participates in water transfers. They indicated that since transfers per Water Code section 1735 are subject to CEQA requirements, the State Water Board must conduct a CEQA analysis of the transfer.

The Commenters expressed concern over declining groundwater levels due to pumping for multi-year groundwater substitution transfers. They indicated that DWR classified the North American and South American Subbasins as high priority basins in 2019. They also state that declining groundwater levels in the Sacramento Valley necessitated full disclosure of the groundwater conditions in and around the proposed project area. Subsidence caused by lowering groundwater levels was also listed as a concern. The Commenters suggested that subsidence monitoring activities and results should be required for all groundwater substitution transfers, and made publicly available, preferably in a CEQA analysis. The Commenters also noted the suggested eight percent SDF is significantly lower than the 13 percent SDF DWR asserted is necessary in the Draft Technical Information. They requested a justification for the lower SDF.

Finally, the Commenters stated it is essential that the State Water Board protect public trust by requiring a public trust analysis. In particular, they were concerned about protection of young salmon and steelhead from the effects of water diversion in the Lower American River, including cumulative impacts in the Sacramento-San Joaquin River Delta.

State Water Board Response:

The Commenters characterize the transfer proposed in the Petition as one component of a single, larger “multi-agency project.” Additionally, the Commenters question whether this transfer qualifies as a “temporary” transfer under Water Code section 1728, based on the Board’s approval of similar transfers in prior years, and accordingly whether the statutory CEQA exemption for such temporary transfers should apply in this case. Although DWR is facilitating multiple cross-Delta water transfers through SWP facilities this year as part of its DYTP, each transfer still constitutes a distinct project requiring a distinct petition and a distinct approval from the State Water Board. Factors that are unique to individual petitioner-sellers’ water rights and local hydrology and hydrogeology preclude the Board from considering all of the various DYTP transfer petitions jointly as a single project. Rather, the Board has evaluated them independently according to the Water Code’s statutory criteria for temporary transfers and has devised appropriate conditions of approval that are specific to the petition. Also, the temporary change petitions involved in this year’s DYTP are not interrelated components of a single project; no DYTP transfer is dependent upon approval of any other DYTP transfer.

The fact that some temporary transfers are proposed and approved in multiple years does not transmute those transfers into “long-term transfers” for which the statutory CEQA exemption in Water Code section 1729 is unavailable. Approval of a temporary transfer lasts at most one year and must be petitioned for, defended, and approved according to the criteria in Water Code sections 1725 et seq., each and every year the petitioner wishes to engage in the transfer. In contrast, a long-term transfer need only be approved once before the transfer can proceed in each subsequent year. The one-year transfer that is the subject of this Petition meets the statutory definition of a “temporary” transfer, and Water Code section 1729 therefore exempts approval of the Petition from CEQA.

The responses by Sacramento and the State Water Board provided above in sections 3.1 through 3.6 address the concerns of groundwater monitoring and streamflow depletion raised by the Commenters. Additional information pertaining to the comments is also provided in section 1.2. As described below in Section 6.0, 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).

Regarding subsidence monitoring, the GMPs prepared by SGA and SCGA for the North American and South American Subbasins, respectively, address the issue of subsidence. SGA states in its 2014 GMP that there may be occurrences of historical subsidence in the basin near former McClellan Air Force Base due to historical groundwater declines, but that overall subsidence has been minimal with no known impacts to infrastructure. SGA included a basin management objectives (BMO) that maintains groundwater levels to prevent subsidence, and developed a subsidence monitoring plan, which is described in Appendix D of the GMP. SCGA addressed subsidence in its 2006 GMP by adopting a BMO to limit subsidence to no more than 0.007 feet per 1 foot of drawdown in the groundwater basin. Also, in the 2006 GMP, SCGA relies on three subsidence monitoring stations maintained by DWR to indicate that inelastic subsidence has not been an issue in the basin. Moving forward, both SGA and SCGA are developing GSPs that will be required to address subsidence and subsidence monitoring. The State Water Board is monitoring the progress of development of GSPs and may further condition future groundwater sustainability transfers accordingly.

4.0 POTENTIAL CURTAILMENT

During any Notice of Water Unavailability (curtailment) period in 2020 that includes Sacramento’s permit, Sacramento will be required to cease all diversions under the permit, including any diversions for temporary transfer, regardless of whether the actual diversion would be facilitated by DWR or other SWP facilities. A condition is therefore

included in this Order that the transfer must cease should the State Water Board issue notification that water is unavailable for American River diversions that would apply to Sacramento's Permit 11360.

5.0 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 issue a Notice of Exemption for this project.

6.0 CRITERIA FOR APPROVING THE PROPOSED TEMPORARY CHANGES

Pursuant to Water Code section 1725, "a permittee or licensee may temporarily change the point of diversion, place of use, or purpose of use due to a transfer or exchange of water or water rights if the transfer would involve only 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, would not injure any legal user of the water, and would not unreasonably affect fish, wildlife, or other instream beneficial uses." (Wat. Code, § 1725.)

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).

7.0 REQUIRED FINDINGS OF FACT

7.1 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 right holders in the absence of the proposed temporary change or conserved pursuant to 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.” The water proposed for transfer consists of surface water made available through groundwater pumping.

To the extent that the additional groundwater pumped does not affect streamflow, this water represents water which would not be available for use in the downstream water supply. This Order limits the amount of water available for transfer to 87 percent of the groundwater pumped.

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

7.2 No Injury to Other Legal Users of 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).) The water proposed for transfer consists of surface water made available through groundwater pumping. This transfer is conditioned with a 13 percent SDF. The transfer is also conditioned to require that Sacramento meet the requirements of the Draft Technical Information and enter a conveyance agreement with DWR and Reclamation to ensure 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 1.2 of this Order includes mitigation and monitoring plans to address the impacts of additional pumping for this transfer. This Order requires compliance with these plans. In general, the transfer of water that would otherwise be stored or consumptively used will not result in injury to other legal users of water.

Water Code section 1745.10 requires that groundwater substitution transfers be either “(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.” Sacramento received a response letter from the SGA dated April 29, 2020 supporting the temporary transfer and stating that the transfer is consistent with its GMP. The SCGA considered the transfer at its May 13, 2020 SCGA Board meeting and did not object to the transfer. The groundwater pumped from the South American Subbasin will be returned in a subsequent year through an agreement between Sacramento and SCWA.

In light of the above, I find in accordance with Water Code section 1727, subdivision (b)(1) that the proposed transfer will not injure any legal user of the water. I also find that use of groundwater to replace surface water that is transferred pursuant to this Order meets the requirement of Water Code section 1745.10, subdivision (a).

7.3 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 (Regional Board) with a copy of the petition in accordance with California Code of Regulations, title 23, section 794, subdivision (c). CDFW provided comments regarding proper basin management to avoid potential future impacts to GDEs resulting from groundwater substitution transfers, which is discussed in Section 3.2 of this Order. The Regional 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 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 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 be subject to Biological Opinions issued by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service under the federal Endangered Species Act and relevant court orders.

In light of the above, I find in accordance with Water Code section 1727, subdivision (b)(2) that the proposed transfer would not unreasonably affect fish, wildlife, or other instream beneficial uses.

8.0 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. This Order is adopted pursuant to the delegation of authority in Section 4.4.2 of Resolution 2012-0029.

9.0 CONCLUSIONS

The State Water Board has adequate information in its files to make the evaluation required by Water Code section 1727, and therefore I find as follows:

I conclude that, based on the available evidence:

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 not injure any legal user of the water.
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 transfer of up to 14,000 AF of water under Permit 11360 is approved.

All existing terms and conditions of Permit 11360 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 through November 30, 2020.
2. The transfer under Permit 11360 is limited to a total of up to 14,000 AF prior to subtracting the streamflow depletion loss by groundwater substitution.
3. Sacramento shall reduce its diversion rate at the original points of diversion authorized under Permit 11360 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 12,180 AF.
4. The place of use under Permit 11360 is temporarily expanded to include a portion of the service area of the SWP as shown on Maps 1878-2 and 1878-3 on file with the Division under Application 5630. Water transferred pursuant to this Order shall only be delivered to the following: 1) Dudley Ridge Water District, 2) Kern County Water Agency, 3) Tulare Lake Basin Water Storage District, 4) County of Kings, 5) Palmdale Water District, and 6) Alameda County Water Agency.
5. The following point of diversion is temporarily added to Permit 11360:

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.
6. The following point of rediversion is temporarily added Permit 11360:

San Luis Reservoir located as follows: California Coordinate System, Zone 3, NAD83, 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.

7. Domestic, industrial, and irrigation uses are temporarily added as authorized purposes of use under Permit 11360.
8. Diversion of water at Banks Pumping Plant pursuant to this Order is subject to compliance by the SWP project operator with the objectives set forth in Tables 1, 2 and 3 on pages 181 to 187 of State Water Board's Revised Water Right Decision 1641 (D-1641), or any future State Water Board Order or decision implementing Bay-Delta water quality objectives at that point of diversion, including compliance with the various plans required under D-1641 as prerequisites for the use of the Banks Pumping Plant by DWR. Diversion of water at the Banks Pumping Plant pursuant to this Order is subject to compliance by the pumping plant operator with all applicable biological opinions, court orders, and any other conditions imposed by other regulatory agencies applicable to these operations.

Diversion of water at the Banks Pumping Plant pursuant to this Order is subject to compliance by the pumping plant operator with all applicable biological opinions, court orders, and any other conditions imposed by other regulatory agencies applicable to these operations.

9. During the period of transfer, Petitioner shall comply with the Draft Technical Information and all applicable terms and conditions imposed by other regulatory agencies. This Order shall not be construed as authorizing the violation of any agreement entered into by the Petitioner.
10. If at any time during the period of transfer the Hodge Flow Criterion become applicable pursuant to the conditions of Permit 11360, water (up to 2,880 acre-feet) that would have been delivered to Sacramento Suburban Water District (SSWD) for consumptive use may not be transferred.
11. The Petitioner shall comply with any applicable requirements of the groundwater sustainability plans adopted for the North American Subbasin or the South American Subbasin, or related implementation actions of the plans, such as regulations, adopted by the Sacramento Groundwater Authority or the Sacramento Central Groundwater Authority.
12. If at any time prior to, or during the period of the transfer, the State Water Board issues notification that water is unavailable for diversion pursuant to Permit 11360, the transfer shall immediately cease. No transfer credit shall accrue for groundwater substitution during a period of water unavailability. This term does not apply to stored water releases.

13. Within 90 days of the completion of the transfer, Permittee shall provide to the Deputy Director for Water Rights a report describing the transfer authorized by this Order. The report shall include the following information.
 - a. General locations where the transferred water was used;
 - b. The daily average rate water is made available for transfer pursuant to this Order;
 - c. The daily average diversion rate for water diverted pursuant to Permit 11360 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 and volumes of groundwater pumped by each groundwater well pursuant to the transfer in excess of that which would have been pumped in the absence of this transfer, and the daily volumes of groundwater pumped during the transfer period that will be claimed as conjunctive use in the 2020 Report of Permittee for Permit 11360; and
 - f. Groundwater elevations within the vicinity of Sacramento and SSWD 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 or the South American Subbasin, as applicable. The methods and units used to measure groundwater elevations will be consistent with those utilized in the Groundwater Sustainability Plans and related annual reports.

Permittee shall also develop and submit to the Deputy Director for Water Rights, by July 1 of each year following 2020, a map defining the groundwater elevations within the vicinity of Sacramento, Sacramento County Water Agency, and SSWD, 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 in the Groundwater Sustainability Plan for the North American Subbasin or the South American Subbasin, as applicable. The methods and units used to measure groundwater elevations will be consistent with those utilized in the Groundwater Sustainability Plans and related annual reports.

14. Pursuant to Water Code sections 100 and 275 and the common law public trust doctrine, all rights and privileges under 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.

15. This Order does not authorize any act which results in the taking of a 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 and Game Code sections 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). If a “take” will result from any act authorized under this temporary transfer, the Petitioner shall obtain authorization for an incidental take permit prior to construction or operation. The Petitioner shall be responsible for meeting all requirements of the applicable Endangered Species Act for the temporary transfer authorized under this Order.
16. The State Water Board reserves jurisdiction 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: JUL 06 2020