IN THE MATTER OF LICENSE 2840 (APPLICATION 10030)
PETITION FOR TEMPORARY CHANGE
INVOLVING THE TRANSFER OF UP TO 3,520 ACRE-FEET OF WATER
FROM TULE BASIN FARMS
TO STATE WATER CONTRACTOR AGENCIES

SOURCE: West Borrow Pit of Sutter Bypass
COUNTY: Sutter

BY THE DEPUTY DIRECTOR FOR WATER RIGHTS:

1.0 SUBSTANCE OF PETITION

On April 18, 2018, Tule Basin Farms (TBF 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. TBF has requested to transfer up to 3,520 acre-feet (AF) of water to participating State Water Contractor (SWC) Agencies. The SWC Agencies that will use the water include: Dudley Ridge Water District and Kern County 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 from the date of approval.

1.1 Description of the Transfer

TBF proposes to transfer up to 3,520 AF of water under water right License 2840 (Application 10030) to SWC Agencies in order to provide an additional water supply for irrigation, municipal, industrial, and domestic purposes. To facilitate this transfer, TBF is requesting the following changes to its License 2840: (1) the temporary addition of the State Water Project’s (SWP) Harvey O. Banks Pumping Plant (Banks Pumping Plant) as a point of diversion; (2) add San Luis Reservoir as a point of rediversion, (3) add a portion of the service area of the SWP as an additional place of use, and (4) add municipal, industrial, and domestic purposes under Tule Basin Farm’s License 2840 (Application 10030).

1.2 Groundwater Substitution

TBF will make surface water available for transfer via groundwater substitution. The groundwater substitution will involve the use of groundwater pumped to produce crops within TBF in exchange for up to 3,520 AF of surface water that will remain instream for diversion at the proposed additional point of diversion (Banks Pumping Plant). Absent the proposed temporary transfer, TBF would divert the entire quantity of surface water proposed for transfer from the West Borrow Pit of the Sutter Bypass pursuant to License 2840 to meet its irrigation demands.

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
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 2015 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.

DWR and Reclamation are currently applying a minimum 13 percent streamflow depletion factor to each groundwater substitution transfer project 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.

TBF has indicated that its proposed transfer of water will be consistent with the Draft Technical Information. As such, the groundwater substitution component of this transfer is conditioned to allow use of only those wells found acceptable by DWR and Reclamation, and the wells must be in compliance with DWR’s and Reclamation’s well construction, location and monitoring criteria as well as the application of the streamflow depletion factor. DWR’s and Reclamation’s streamflow depletion factor of 13 percent will be applied to TBF’s groundwater substitution transfer. Therefore, to account for streamflow depletion related to groundwater pumping, TBF will only transfer 87 percent of the total quantity pumped in exchange for the surface water available for transfer.

All groundwater substitution transfers are subject to applicable county regulations, including any regulations prohibiting transfer. The boundaries of TBF are within Sutter County, which completed and submitted an Alternative Submittal to comply with the Sustainable Groundwater Management Act (SGMA) of 2014. SGMA requires that either a Groundwater Sustainability Plan or Alternative Submittal be developed for designated medium and high priority groundwater basins in California. In addition, TBF has permitted DWR to install a multi-completion continuous groundwater monitoring well in 2010 near the center of TBF to further assist in documenting groundwater elevations.

**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 streamflow depletion factors 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.

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1. The Delta is considered to be 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.
conducted for Reclamation’s Long-Term Water Transfers Environmental Impact Statement/Environmental Impact Report dated March 2015 to establish its estimated minimum 13 percent average streamflow depletion factor for single year transfers requiring the use of SWP or CVP facilities.

DWR and Reclamation have indicated that to address continued concerns related to streamflow depletion, they have initiated development of a new modeling tool to more accurately estimate an appropriate streamflow depletion factor for individual transfer proposals. In addition, DWR and Reclamation have developed a Sacramento Valley Stream Flow Depletion Factor Management Group, composed of key stakeholders in the Sacramento Valley and the areas south and west of the Delta, to provide management and technical guidance to the groundwater modeling improvements being undertaken by DWR, Reclamation, and the State Water Contractors. DWR and Reclamation anticipate on-going 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 be able to condition future transfers as necessary to protect against those impacts.

2.0 BACKGROUND

2.1 Substance of TBF’s License 2840

License 2840 authorizes the direct diversion of up to 21.05 cfs of water from the West Borrow Pit of the Sutter Bypass between April 1 and November 1 of each year for irrigation purposes. The authorized point of diversion for License 2840 is located on the West Borrow Pit of the Sutter Bypass, by California Coordinate System of 1983, Zone 2, North 2,157,587 feet and East 6,628,158 feet, being within SE¼ of SE¼ of Section 5, T14N, R2E, MDB&M. The authorized place of use consists of 842.13 acres within the North Basin Tract.

2.2 Proposed Temporary Changes

In order to facilitate the transfer, the following will be added to License 2840 (Application 10030): 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 as a point of diversion; 2) San Luis Reservoir as a point of redersion, located within the SW¼ of SE¼ of Projected Section 15, T10S, R8E, MDB&M; 3) add a portion of the service area of the SWP as an additional place of use, and (4) add municipal, industrial, and domestic purposes of use.

3.0 PUBLIC NOTICE OF THE PROPOSED TEMPORARY CHANGE

On April 27, 2018, 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. In addition, on April 27, 2018, the Petitioner noticed the project via publication in the Sacramento Bee newspaper and mailed the notice via first class mail to interested parties. Comments were timely received from Mr. Richard Morat and the Bureau of Reclamation.

3.1 Comments of Mr. Richard Morat

By letter dated April 30, 2018, 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.
State Water Board Response:

As Mr. Morat indicated, the State Water Board is responsible to consider 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 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 Water Right Decision D-1641 and applicable Biological Opinions, which are the responsibility of DWR and Reclamation to fulfill during the entirety of this transfer. Additionally, the State Water Board is in the process of reviewing and revising the Bay-Delta Water Quality Control Plan, including an effort that will include determination of flows protective of fish and wildlife in the Feather River and Sacramento-San Joaquin River Delta estuary. The proposed changes to the Bay-Delta Plan include: new inflow requirements for the Sacramento River, its tributaries, and eastside tributaries to the Delta (the Mokelumne, Calaveras and Cosumnes Rivers); new and modified Delta outflow requirements; new requirements for cold water habitat; new and modified interior Delta flow requirements; recommendations for complementary ecosystem protection actions that others should take; and adaptive management, monitoring, evaluation, special study, and reporting provisions.

The proposed temporary transfer by TBF is for water that would have otherwise been diverted pursuant to its license. By approving the transfer, additional water will flow down the Sacramento River and 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 Bureau of Reclamation

By letter dated May 16, 2018, Reclamation commented on the proposed transfer. In order to protect its water rights, Reclamation requested that the transfer be conditioned as follows:

- Only wells approved by Reclamation and DWR for suitability and acceptability may be used for groundwater substitution.

- The amount of transferable water credited to Petitioner’s groundwater substitution water transfer operation is subject to the determination of Reclamation and DWR.

- Before commencing the groundwater substitution operation, Petitioner shall submit a Monitoring Program Plan and Mitigation Program Plan to DWR and Reclamation for evaluation and prior approval.

- The amount of water transferred pursuant to this Order shall not exceed the stream flow depletion factor of 13% as set forth in the Draft Technical Information.

- Transferable water may be credited only during balanced conditions in the Sacramento-San Joaquin River Delta.

State Water Board Response:

In order to avoid injury to Reclamation’s and DWR’s water rights, the transfer is conditioned that TBF’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.
4.0 COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Water Code section 1729 exempts temporary changes involving a transfer of water from the requirements of CEQA. (Pub. Resources Code, § 21000, et seq.) The State Water Board will issue a Notice of Exemption for this project.

5.0 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 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, 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 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).

6.0 REQUIRED FINDINGS OF FACT

6.1 Transfers Only Involve 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.” The water proposed for transfer consists of surface water made available through increased 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. DWR and Reclamation have reviewed the proposed groundwater pumping proposal and determined that 13 percent of the additional groundwater pumping will affect streamflow. 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 have been consumptively used or stored in the absence of the proposed temporary change.

6.2 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 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 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 1.2 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 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 consumptively used will not result in injury to other legal users of water. This Order requires compliance with these portions of the conveyance agreement.

Water Code section 1745.10 subdivision (a) 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 1.2 of this Order, Sutter County has completed and adopted an Alternative Submittal to comply with the Sustainable Groundwater Management Act (SGMA) of 2014. The Alternative Submittal identifies that the Sutter Subbasin has been sustainably managed for a minimum period of 10 years without undesirable results, which are identified as chronic lowering of groundwater levels, depletion of groundwater storage, depletion of surface water, subsidence, sea water intrusion and degraded water quality.

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 the transfer of surface water that is replaced with groundwater pursuant to this Order meets the requirements of Water Code section 1745.10.
6.3 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 California Department of Fish Wildlife (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 and the Regional Board did not provide any comments 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 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. 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.

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.

7.0 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.

8.0 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 temporary change for the transfer of up to 3,520 AF of water under License 2840 is approved.

All existing terms and conditions of License 2840 remain in effect, except as temporarily amended by the following provisions:

1. The transfer is limited to the period commencing from July 1, 2018 up to September 30, 2018.

2. Municipal, industrial, and domestic uses are temporarily added as purposes of use.

3. The transfer under License 2840 is limited to a total of 3,062.4 AF (up to 3,520 AF prior to subtracting streamflow depletion loss) by groundwater substitution.

4. The petitioner shall reduce its diversion rate at the original point of diversion authorized under License 2840 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, and shall in no case exceed 21.05 cfs.

5. Petitioner shall comply with all provisions contained in the groundwater substitution agreement pursuant to the Draft Technical Information, between DWR, Reclamation, and TBF as a condition of transferring water pursuant to this Order.

6. The place of use under License 2840 is temporarily expanded to include a portion of the service area of the SWP (as shown on Map 1878 - 2 and 1878 - 3 filed with the Division under Application 5630).

7. The following point of diversion is temporarily added to License 2840:

   **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 the NW¼ of SE¼ of Projected Section 20, T1S, R4E, MDB&M.

8. The following point of rediversion is temporarily added to License 2840:

   **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 the SW¼ of SE¼ of Projected Section 15, T10S, R8E, MDB&M.

9. Diversion of water at Banks Pumping Plant is subject to compliance by the operators with the objectives currently required of DWR set forth in Tables 1, 2, and 3 on pages 181-187 of 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. Diversion of water is also subject to compliance by DWR with all applicable Biological Opinions and court Orders and any other conditions imposed by other regulatory agencies applicable to these operations.

   Diversion of water at Banks 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.
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 into by the Petitioner.

11. 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 License 2840, the transfer shall immediately cease. No transfer credit shall accrue for groundwater substitution during a period of water unavailability.

12. Within 90 days of the completion of the transfer, TBF 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 License 2840 during the transfer period;
   d. The average daily streamflow measured at the nearest representative gaging station on the Sacramento River;
   e. The daily average pumping rate of groundwater pumped by TBF in excess of that which would have been pumped in the absence of this transfer;
   f. Groundwater elevations within the vicinity of the TBF prior to the proposed transfer; and

TBF shall also develop and submit to the Deputy Director for Water Rights, by July 1 of each year following 2018, a map defining the groundwater elevations within the vicinity of TBF, until such time as these elevations correspond to pre-transfer levels.

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

14. 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.
15. 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: JUN 13 2018