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

DIVISION OF WATER RIGHTS

IN THE MATTER OF LICENSE 2685 (APPLICATION 1224) OF MERCED IRRIGATION DISTRICT

PETITION FOR TEMPORARY CHANGE INVOLVING THE TRANSFER OF 10,000 ACRE-FEET OF WATER

SOURCE:

Merced River

COUNTY:

Mariposa and Merced

BY THE DEPUTY DIRECTOR FOR WATER RIGHTS:

1.0 SUBSTANCE OF PETITION

1.1 Description of the Transfer

On July 2, 2012, Merced Irrigation District (MID or Licensee) filed with the State Water Resources Control Board (State Water Board), Division of Water Rights (Division), a Petition for Temporary Change pursuant to Water Code sections 1725 through 1732.

Pursuant to the petition, MID seeks to transfer up to 10,000 acre-feet (af) of water previously diverted to storage in Lake McClure under its License 2685 (Application 1224) for use on lands within Westlands Water District (Westlands). In order to facilitate the transfer, MID has requested the following temporary changes to License 2685: 1) the addition of the Central Valley Project's (CVP) Jones Pumping Plant, the State Water Project's (SWP) Banks Pumping Plant, the Banta-Carbona Irrigation District Pumping Plant; and Patterson Irrigation District's (Patterson) Pumping Plant as points of rediversion; and 2) the addition of the service area of the CVP to the place of use.

In conjunction with this transfer, the U.S. Bureau of Reclamation (Reclamation) is approving a conveyance Warren Act Contract with an exchange component for delivery of up to 10,000 af of water via the Delta-Mendota Canal (DMC) to provide MID's non-CVP water to Westlands. If the DMC has no capacity to move the water, the DMC-California Aqueduct Intertie will be used to convey CVP water in the California Aqueduct. This operation would provide capacity in the DMC for conveyance of transfer water. Westlands has an existing Wheeling Agreement with the Department of Water Resources (DWR) for this type of movement of CVP water.

MID states that in the absence of the proposed temporary change, the 10,000 af of water would remain in storage in Lake McClure.

Temporary changes under Water Code section 1725 may be effective for a period of up to one year from the date of approval.

1.2 Place of Use Under the Proposed Transfer

MID proposes to add the service area of the CVP to the current place of use under License 2685 in order to facilitate the transfer of water to Westlands. The service area of the CVP is shown on Map 214-208–12581 on file with the Division under Reclamation water right Application 5626.

1.3 Points of Rediversion Under the Proposed Transfer

MID proposes to temporarily add four points of rediversion to License 2685 as described in Section 1.1. These four points of rediversion will provide flexibility in the location at which the proposed releases from Lake McClure are rediverted in the case that capacity or other limitations reduce the availability of one or more of the facilities. Westlands is coordinating with Patterson for the use of its facilities, which are the preferred diversion and conveyance facilities for the water transferred from MID. If the water is transferred using the other identified facilities, Westlands will coordinate the transfer with the owners for each of the other facilities as necessary.

1.4 Refill Criteria

MID's releases of previously stored surface water for the transfer will require refill of Lake McClure, which normally occurs during periods of high runoff. Refill criteria developed in coordination with Reclamation and DWR are necessary to ensure that future refill of the reservoir space made available in Lake McClure from this transfer does not adversely impact downstream water rights including the water rights for the CVP and the SWP. The refill criteria provide for an accounting of refill of Lake McClure resulting from this proposed transfer. Pursuant to the criteria, any refill occurring during balanced or restricted conditions in the Delta is subject to repayment to DWR and Reclamation according to a schedule agreed to by DWR, Reclamation, and the Licensee.

2.0 BACKGROUND

2.1 Substance of License 2685

Original Water Rights under License 2685

License 2685 was issued to MID on August 11, 1944, pursuant to Application 1224. License 2685 allows the direct diversion of 1,500 cubic feet per second (cfs) of water from the Merced River from about March 1 through about October 31 of each year. License 2685 also allows the diversion from the Merced River to storage of 266,400 af per annum (afa) from about October 1 of each year to about July 1 of the succeeding year.

The point of diversion is at the New Exchequer Dam on Lake McClure. There are also two points of rediversion downstream of New Exchequer Dam – Merced Falls Diversion Dam for the North Side Canal and Crocker-Huffman Diversion Dam for the Main Canal. Water rediverted through the North Side Canal and the Main Canal is used for irrigation and domestic purposes on 164,395 gross acres within the boundaries of MID.

Modified Water Rights under License 2685

Effective February 16, 1995, License 2685 was modified from its original conditions to allow the direct diversion of 5,000 afa of water from the Merced River at a rate not to exceed 7 cfs from November 1 of each year to February 29 of the following year for municipal use in the Mariposa Town Planning Area. Storage under License 2685 is reduced in the amount of water diverted to the Mariposa Town Planning Area, up to 1,667 afa. Combined maximum direct diversion and storage under License 2685

cannot exceed 345,440 afa. The point of diversion for the water delivered to the Mariposa Town Planning Area is located approximately 40 miles upstream of New Exchequer Dam.

License 2685 was further amended effective June 20, 2003 to include an additional point of rediversion and modify the place of use resulting from MID's consolidation with the El Nido Irrigation District. The new point of rediversion downstream of New Exchequer Dam is on Duck Slough. Water rediverted through Duck Slough is used for irrigation purposes on 9,418.6 acres within the boundaries of El Nido Irrigation District.

3.0 PUBLIC NOTICE AND COMMENTS ON THE PROPOSED TRANSFER

Public notice of the petition for temporary change was provided on July 9, 2012 on the Division's internet site and via regular mail and email to interested parties, and by publication in the Merced Sun-Star on July 6, 2012. Timely comments regarding the proposed temporary change were submitted by California Fisheries and Water Unlimited (CFWU), DWR, Douglas N. Brower, Gallo Cattle Company (Gallo), Department of Fish and Game (DFG), U.S. Fish and Wildlife Service (USFWS), Reclamation, and Stockton East Water District (SEWD). The comments and the State Water Board's responses are briefly summarized below.

3.1 Comments from CFWU and and to allised listered and baseon like shull ask and approximately

Comments on the proposed transfer were provided on July 12 and August 25, 2012 by Robert Baiocchi on behalf of CFWU. Mr. Baiocchi stated that CFWU objects to the proposed transfer and has the following recommendations: 1) the SWP and CVP pumps must be shut down when water is being transferred and/or during the downstream migration of juvenile listed and non-listed salmon and when listed steelhead are migrating through the Delta to the Pacific Ocean in order to prevent fish losses at the SWP pumps and the CVP pumps; 2) there must be accountability regarding the transferred water and information must be submitted to the Division showing the places of use, amounts used and season of use resulting from the transferred water; 3) Licensee shall consult with DFG, Reclamation, USFWS, and U.S. NOAA Fisheries regarding the effects to salmon, steelhead, and Sacramento splittail from the proposed transfer.

State Water Board Response:

- DWR and Reclamation are not transferring SWP or CVP water pursuant to the petition and as such, the Division cannot require modification of operation of the SWP and CVP pumps pursuant to approval of the transfer.
- 2) Pursuant to this order MID and Westlands will be required to report information to the Division including the monthly and total amounts of water delivered to Westlands as well as the locations of where transferred water was used within Westlands to the extent possible.
- 3) DFG and USFWS provided comments regarding the proposed transfer. MID will work with DFG and USFWS to schedule the transfer and flow rates to the benefit of Merced River anadromous fisheries.

3.2 Comments from DWR

By letter dated July 19, 2012, DWR objected to the proposed temporary change based on potential injury to water rights of the SWP. DWR indicated that the transfer has the potential to adversely impact operations of the SWP if refill of the vacated storage in Lake McClure occurs when the Delta is in balanced conditions. DWR indicated that MID must work with DWR and Reclamation to develop acceptable refill criteria. DWR also indicated it must determine the adequacy of Licensee's proposed

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method for determining the quantity of transfer water released from Lake McClure ultimately available at the selected points of rediversion along the San Joaquin River or in the Delta after transportation losses.

State Water Board Response:

As stated in Section 1.4 of this Order, refill criteria are needed to ensure that the refill of Lake McClure resulting from the proposed temporary change does not adversely impact operations and/or water rights of the SWP or CVP or other downstream water rights. This Order requires the Licensee to comply with the refill criteria developed by DWR, Reclamation and MID as detailed in Section 3.6 of this Order. Development of the refill criteria included DWR's input into the methodology used for determining the quantity of water available at the points of rediversion.

3.3 Comments from Douglas Brower

Mr. Brower's comments regarding the proposed transfer were received by the Division on August 1 and August 28, 2012. Mr. Brower is a partner in Uhrhammer Properties which owns water right License 6419 for diversion of up to 0.85 cfs of water from the Merced River downstream of Lake McClure from March 1 to November 1 of each year. Mr. Brower is concerned regarding the potential impact to his downstream water rights as well as how the replenishment of up to 10,000 af of water to storage in Lake McClure will impact the overall health of the Merced River.

State Water Board Response:

The water proposed for transfer is already in storage in Lake McClure. The priority of MID's water right License 2585 dates from 1919, which pre-dates the Uhrhammer Properties' license priority of 1949. MID has full control of the stored water and absent the transfer will only release that water for use within the District boundaries or potentially for flood control. Thus, the transfer water would not have been available for diversion by Brower.

MID will consult with DFG and USFWS and release transfer flows in a manner that will be advantageous for fishery resources in the Merced River to the extent possible. MID will also implement refill criteria pursuant to agreement with Reclamation and DWR to ensure that downstream water rights (including the Uhrhammer Properties right) will not be impacted during refill of Lake McClure.

3.4 Comments from Gallo

By letter dated August 2, 2012, Gallo Cattle Company (Gallo) provided comments to the proposed transfer. Gallo's comments included the following issues: 1) MID failed to provide the minimum information needed for the State Water Board to evaluate the transfer; 2) the proposed transfer should not be exempt from CEQA; and 3) the lack of date of transfer contained in MID's proposal prevents Gallo from determining whether it would be injured by the transfer.

State Water Board Response:

1) Gallo claims that MID failed to provide the Division information required in DWR's and Reclamation's *Draft Technical Information for Water Transfers in 2012*, in its petition for temporary transfer. The information is requested by DWR and Reclamation when those agencies evaluate proposed transfers and their potential impacts to the State and Federal Water Projects. That information is *not* required by the Division in order to process a petition for temporary transfer.

- 2) In its August 23, 2012 response to Gallo, MID cited State Water Board Corrected Order WR 2010-0029-DWR, which indicates that petitioners for temporary change who request a series of approvals of similar temporary changes are not subject to CEQA. The CEQA exemption for temporary transfers is still applicable for a series of temporary transfers.
- 3) The water proposed to be transferred by MID is already in storage in Lake McClure. Consequently, the timing of the releases for transfer to Westlands will not affect Gallo's ability to divert because that water is not available for diversion by Gallo regardless of when it is transferred.

3.5 Comments from DFG and USFWS

DFG's August 7, 2012 comment letter and USFWS's August 8, 2012 comment letter contain essentially the same issues as both agencies are concerned that the timing of the water transfer could have a beneficial impact to fisheries downstream from the discharge if the transfer is made at the appropriate time of the year to benefit anadromous fisheries of the Merced River, San Joaquin River, and Delta. Both agencies believe that implementing the transfer in the early spring would provide a separate and/or complementary pulse of cool water that could be beneficial for juvenile salmonids emigrating from the Merced River. USFWS also indicated that transferring water as a spring pulse flow at the right time could inundate newly created floodplain habitat in the Merced River and contribute towards Delta flow objectives at Vernalis.

State Water Board Response:

In an August 22, 2012 response to DFG's and USFWS's concerns, MID indicated that it will attempt to coordinate releases to the Merced and San Joaquin Rivers for Westlands with both agencies such that it may provide additional benefit to the Merced River anadromous fisheries. This Order contains a condition that the Licensee coordinate its releases with DFG and USFWS as much as practicable to benefit downstream fisheries

3.6 Comments from Reclamation

By letter dated August 8, 2012, Reclamation comments that a refill agreement is necessary in order for the proposed temporary change to not adversely impact the water rights or operations of the CVP. Reclamation requests MID enter into a reservoir refill agreement containing conditions, criteria and procedures that ensure that CVP operations and water rights are not adversely impacted by future refill following the release of transfer water. The agreement must protect CVP water rights and operations from injury regarding Reclamation's ability to meet all applicable water quality standards cited in Permits 16597, 20245, and 16600 (Applications 14858A, 14858B, and 19304, respectively) for New Melones Reservoir pertaining to the San Joaquin River and Sacramento-San Joaquin Delta Estuary. The agreement will also protect Reclamation's water right Permits 11315, 11316, 11967, 11969, 11971, 11973, 12364, 12721, 12722, 12723, 12727, 12860, and 15149 (Applications 13370, 13371, 5628, 15374, 15375, 16767, 17374, 5626, 9363, 9364, 15764, 9368, and 21542) and operations for the Jones Pumping Plant.

State Water Board Response: As stated in Section 1.4 of this Order, refill criteria are needed to ensure that the refill of Lake McClure resulting from the proposed temporary change does not adversely impact operations and/or water rights of the SWP or CVP or other downstream water rights. This Order requires the Licensee to comply with the following refill criteria as agreed to by Reclamation, DWR and MID via emails dated October 17, 2012.

The Reservoir Release and Lake McClure Refill Criteria and Procedures, referred to as Exhibits 1 and 2 agreed upon between Licensee, DWR, and Reclamation, shall govern the conditions under which releases of water pursuant to this Order occurs, including the conditions under which refill

and refill impacts may accrue. At the conclusion of refilling water in Lake McClure for the water released pursuant to this Order, if a refill impact has accrued, Licensee is required to release that amount of water to DWR and Reclamation on a schedule agreed to between Licensee, DWR, and Reclamation.

The Licensee has an ongoing approved transfer of water from Lake McClure which is subject to refill criteria. The State Water Board will condition this transfer to require satisfaction of the earlier transfer refill prior to refill for the later transfer.

3.7 Comments from Stockton East Water District

By letter dated August 8, 2012, SEWD commented on the proposed transfer based on the potential injury to their contractual water supply via Reclamation and the CVP. SEWD is concerned that the reservoir refill provisions originally proposed in MID's petitions could impact Reclamation's operations at New Melones Reservoir, thereby potentially decreasing the water allocated to SEWD from the Stanislaus River.

In its comment letter SEWD requested the inclusion of the following refill language in any order granting the petition for temporary transfer:

Licensee agrees that the replenishment of stored water in Lake McClure released for the transfer may impact Reclamation. Reclamation is impacted during periods when Reclamation's releases from New Melones Reservoir, in addition to its releases absent the Reclamation-MID Agreement, are made to meet the State Water Board's Vernalis salinity objective, or when Standard Permit Term 93 is in effect. Licensee shall account for the impact to New Melones in an annual report to the State Water Board and will compensate for the impact by releasing an equivalent quantity of water from Lake McClure at times when releases from New Melones are being made to meet the State Water Board's Vernalis salinity objective, or when Standard Permit Term 93 is in effect, on a schedule coordinated with Reclamation. The Deputy Director for Water Rights shall maintain authority to ensure that this condition is not used by Reclamation to increase the obligations of Licensee.

State Water Board Response:

The State Water Board agrees to include the proposed term in this Order; however the following line will also be included in the term for clarification purposes:

The impact will be set to zero if Reclamation makes a flood release from New Melones prior to or during releases by Licensee to compensate for an impact.

4.0 REQUIRED FINDINGS OF FACT

4.1 Availability of Water for Transfer.

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 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 is currently stored in Lake McClure pursuant to the

terms of License 2685. The petition states that in the absence of the proposed change, the 10,000 af of water proposed for transfer would remain in storage in Lake McClure. Under License 2685, Licensee can both directly divert and collect water to storage. Licensee will not provide water by direct diversion under License 2685 to Westlands.

In light of the above, I find in accordance with Water Code section 1726, subdivision (e) that the proposed transfer involves only an amount of water that would have been stored in the absence of the proposed temporary change.

4.2 No Injury to Other Legal Users of Water.

Before approving a temporary change due to a transfer or exchange of water pursuant to Article 1 of Chapter 10.5 of Part 2 of Division 2 of the Water Code, 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).) This Order requires the Licensee to comply with refill criteria to ensure that future refill of the reservoir space made available in Lake McClure from this transfer does not adversely impact downstream diverters including the SWP, CVP, and Uhrhammer Properties.

MID will continue the same surface water deliveries to its existing customers with or without the proposed temporary water transfer. In addition, MID is required to release water to meet its other existing downstream commitments and requirements below the inlet to its Main Canal. Therefore, there will be no downstream decrease in streamflow, water quality, timing of diversion, return flows, effects on legal users of water, or change in the purposes of use authorized by License 2685 during the period of the proposed temporary transfer.

In light of the above, I find in accordance with Water Code section 1727, subdivision (b)(1) that the proposed temporary transfer will not injure any legal user of the water.

4.3 No Unreasonable Effect on Fish, Wildlife, or Other Instream Beneficial Uses.

Water Code section 1729 exempts temporary changes involving transfer of water from the requirements of the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000, et seq.). However, the State Water Board may approve a temporary change due to a transfer of water only if it determines that the proposed temporary change would not unreasonably affect fish, wildlife, or other instream beneficial uses. (Wat. Code, § 1727, subd. (b)(2).)

Licensee is required to maintain specified instream flows pursuant to State Water Board Water Right Decision 1641 and Federal Energy Regulatory Commission License No. 2179 for the Exchequer Merced River Project. The flow requirements are set forth in License 2685. Licensee will be required to comply with the License 2685 instream flow requirements at all times while transferring water pursuant to this Order.

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

5.0 STATE WATER BOARD DELEGATION OF AUTHORITY

On July 6, 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.

6.0 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:

- The proposed temporary change will not injure any legal user of the water.
- The proposed temporary change will not unreasonably affect fish, wildlife, or other instream beneficial uses.
 - 3. The proposed transfer involves only an amount of water that would have been consumptively used or stored in the absence of the temporary change.

ORDER

NOW, THEREFORE, IT IS ORDERED that the petition filed for temporary change in the place of use and points of rediversion under License 2685 (Application 1224) of MID for the transfer of 10,000 af of water to Westlands is approved.

All existing terms and conditions of License 2685 remain in effect, except as temporarily amended by the following provisions:

- 1. The transfer is limited to the period commencing on the date of this Order and continuing for one year.
- Only water that would have been stored absent the transfer within Lake McClure may be transferred. Water shall not be provided to Westlands by direct diversion.
- 3. The place of use under License 2685 is temporarily expanded to include the service area of the CVP in order to facilitate the temporary water transfer to Westlands. The service area of the CVP is shown on Map 214-208–12581 on file with the Division under Application 5626.
- 4. The following points of rediversion shall be temporarily added to License 2685:
- a. Jones Pumping Plant –being within the NE¼ of SW¼ of Projected Section 29, T1S, R4E, MDB&M
- b. Banks Pumping Plant via the Clifton Court Forebay –being within the NW¼ of SE¼ of Projected Section 20, T1S, R4E, MDB&M
 - c. Banta-Carbona Irrigation District Pumping Plant on the San Joaquin River being within the NE¼ of NW¼ of Section 34, T2S, R6E, MDB&M
 - d. Patterson Irrigation District Pumping Plant on the San Joaquin River being within the NW¼
 of SW¼ of Projected Section 15, T5S, R8E, MDB&M
 - 5. Licensee shall maintain continuous records of water released from storage and separately record the quantities diverted at each point of rediversion. If recorded data on rediversions is not available, the quantities rediverted shall be documented using an alternative methodology acceptable to the Deputy Director for Water Rights. Daily rediversions shall not exceed reservoir releases minus losses.
 - 6. The Reservoir Release and Lake McClure Refill Criteria and Procedures, referred to as Exhibits 1 and 2 agreed upon between Licensee, DWR, and Reclamation, shall govern the conditions under which releases of water pursuant to this Order occurs, including the conditions under which refill and refill impacts may accrue. At the conclusion of refilling water in Lake McClure for the water released pursuant to this Order, if a refill impact has accrued, Licensee is required to release that amount of water to DWR and Reclamation on a schedule agreed to between Licensee, DWR, and

Reclamation. No refill shall occur until the refill criteria for prior transfer(s) is fully satisfied. This refill criteria may be modified upon mutual agreement of DWR, Reclamation, and Licensee.

- 7. Licensee agrees that the replenishment of stored water in Lake McClure released for the transfer may impact Reclamation. Reclamation is impacted during periods when Reclamation's releases from New Melones Reservoir, in addition to its releases absent the Reclamation-MID Agreement, are made to meet the State Water Board's Vernalis salinity objective, or when Standard Permit Term 93 is in effect. Licensee shall account for the impact to New Melones in an annual report to the State Water Board and will compensate for the impact by releasing an equivalent quantity of water from Lake McClure at times when releases from New Melones are being made to meet the State Water Board's Vernalis salinity objective, or when Standard Permit Term 93 is in effect, on a schedule coordinated with Reclamation. The impact will be set to zero if Reclamation makes a flood release from New Melones prior to or during releases by Licensee to compensate for an impact. The Deputy Director for Water Rights shall maintain authority to ensure that this condition is not used by Reclamation to increase the obligations of Licensee.
- 8. The transfer shall be coordinated with DFG and USFWS to provide benefits to Delta fisheries to the extent feasible to do so.
- No transfer water shall be diverted from the San Joaquin River at the point of rediversion at Banta-Carbona Irrigation District's Pumping Plant without the written consent of Reclamation and DWR. A copy of said consent shall be provided to the Deputy Director for Water Rights.
- 10. Within 90 days of completion of the transfer, but not later than November 30, 2013, the Licensee 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. The quantity of water (in af) delivered to Westlands pursuant to Condition 3 of this Order;
 - b. locations where the transferred water was used within Westlands;
 - c. the monthly amounts of water each location received;
 - d. the average application rate of water at each location;
 - e. the daily average rate of water that is released from Lake McClure pursuant to this Order;
 - f. documentation that daily rediversion did not exceed reservoir releases minus losses; and
 - g. the points of rediversion used for this transfer.
- 11. Licensee shall provide a report to the Deputy Director for Water Rights by July 1, 2013 describing its refill of the transferred amount of water pursuant to this Order. For periods of refill or refill impacts, including any releases made by the Licensee to address a refill impact, the report shall include the daily values for these periods. If reservoir refill or releases for refill impacts are not complete by July 1, 2013, subsequent reports shall be submitted by July 1 of each year until completion.
- 12. Licensee shall comply with the License 2685 instream flow requirements at all times while transferring water pursuant to this Order.
- 13. Pursuant to Water Code sections 100 and 275 and the common law public trust doctrine, all rights and privileges under this transfer and temporary change Order, including method of diversion, method of use, and quantity of water diverted are subject to the continuing authority of the State Water Board in accordance with law and in the interest of 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 the 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 that results in the taking of a threatened or endangered species or any act that 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 licensee shall obtain authorization for any incidental take prior to commencing transfer of water. Licensee shall be responsible for meeting all requirements of the applicable Endangered Species Act for the temporary transfer authorized under this Order.
 - 15. I reserve 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

Barbara Evoy, Deputy Director

Division of Water Rights

Attachments: Exhibits 1 and 2

Dated:

OCT 2 4 2012

RESERVOIR RELEASE

The following definitions and criteria apply to Merced Irrigation District's (Merced) water transfer to Westlands Water District (Westlands):

1. **DEFINITIONS**

When used in this Exhibit 1 and Exhibit 2, the following terms have the meanings as set forth below.

- a. "Actual Storage" is the observed end of day storage in Lake McClure as reported in the U.S. Army Corps of Engineers Water Control Data System.
- b. "Allowable Storage" is the top of conservation storage in Lake McClure as reported in the U.S. Army Corps of Engineers Water Control Data System.
- c. "Balanced Conditions" means those periods when the Department of Water Resources (DWR) and US Department of the Interior's Bureau of Reclamation (Reclamation) agree that releases from upstream reservoirs plus unregulated flow approximately equals the water supply needed to meet Sacramento Valley in-basin uses plus exports, as defined in Article 3b of the "Agreement Between The United States of America And The State of California For Coordinated Operations Of The Central Valley Project And The State Water Project" (COA) dated November 24, 1986.
- d. "Baseline Flow" means the mean daily flow in the Merced River that would exist absent Transfer Water at Merced's Shaffer Bridge gage or at DWR's gage near Cressey (California Data Exchange Center station code 'CRS'). The Baseline Flow is defined as the flow listed in the following table, plus additional flows for Merced's Fall Pulse Flow that will be scheduled with the Department of Fish and Game (also see Paragraph 3 of Exhibit 1, below).

Time Period	FERC/Davis-Grunsky Flow Requirements (cfs)	Agreed Upon Base Flow ² (cfs)
Oct 16-31	75 or 60 ¹	85
Nov 1- Mar 31	180 to 220	220

Existing minimum flows pursuant to FERC No. 2179. The higher value is used when the DWR May 1 Bulletin 120 forecasted April through July inflow to Lake McClure was greater than or equal to 450 TAF, otherwise the lower value is used.

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- Base flow negotiated by Merced and Reclamation pursuant to the October 1997 Fall Transfer.
 - e. "Excess Conditions" means periods when releases from upstream reservoirs plus unregulated flow exceed the water supply needed to meet Sacramento Valley in-basin uses, Delta water quality and outflow requirements and Delta exports, as defined in the COA.
 - f. "Delta E/I Ratio" is identified in the State Water Resources Control Board's (SWRCB) Decision 1641 (D1641) and may be controlling Project exports from the Delta.
 - g. "OMR Flow Criteria" is identified in the Biological Opinions for Salmon and Delta Smelt and may be controlling Project exports from the Delta during the months of December through June of each year.
 - h. "Projects" means the federal Central Valley Project (CVP) and the California State Water Project (SWP).
 - i. "Point of Transfer" refers to the location where Merced delivers the Transfer Water to Westlands, as specified in this Exhibit 1.
 - j. "Refill Impacts" mean the quantity of water accumulated in the storage vacated by the transfer during periods when the Delta is in Balanced Conditions, the Delta is in Restricted Conditions, or Reclamation is operating New Melones Reservoir to meet Vernalis objectives, that would have been released by Merced had the transfer not occurred. DWR and Reclamation will determine refill impacts using the Accounting Procedures set forth in Exhibit 2 and any other information DWR and Reclamation deem necessary for a final evaluation of refill impacts.
 - k. "Refill Period" means the period extending from the cessation of Merced releases of Transfer Water until the Transfer and Cumulative Refill Impact Account Balances (End of Day) equal zero.
 - I. "Restricted Conditions" means periods when the Delta is in Excess Conditions but Projects' operations are constrained by the following circumstances included in the Biological Opinions and the SWRCB's D1641 governing the Projects' operations in the Delta:
 - (1) during December through June, when OMR Flow Criteria is limiting Project exports from the Delta (for the purpose of this Exhibit 1 and

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- Exhibit 2, it is assumed that 50% of the flow in the San Joaquin River tracks into the Old River and the Middle River), or
- (2) during April and May, when the daily flow measured in the San Joaquin River at Vernalis is between 6,000 cfs and 21,750 cfs, and Project exports from the Delta are limited by the San Joaquin River I/E Ratio ranging between 1:1 and 4:1.
- (3) during February through June, when the Delta E/I Ratio is 35%, and during July through January, when the Delta E/I Ratio is 65% or such variations in percentages as provided for in the SWRCB's D1641.

Restricted Conditions do not exist during a period when the Projects' exports from the Delta are limited to a fixed rate because of "Take" limits.

- m. "San Joaquin River I/E Ratio" is identified in the Biological Opinion for Salmon and may be controlling Project exports from the Delta during the months of April and May of each year.
- "Theoretical Storage" is the sum of Actual Storage plus the Transfer Account Balance.
- "Transfer Account Balance" reflects the quantity of Transfer Water released and the vacated storage refill.
- p. "Transfer Period" means approximately October 1, 2012 through March 31, 2013 when Merced will make Transfer Water available to Westlands at the Point of Transfer.
- q. "Transfer Water" means water made available by Merced to Westlands by release of water from Lake McClure that would have been held in storage absent the transfer.
- r. "Vernalis Requirements" means the periods when Reclamation is releasing water from New Melones Reservoir to comply with San Joaquin River objectives as provided in the SWRCB's D1641 or any other regulatory requirements containing water quality or flow objectives at Vernalis.
- 2. The Point of Transfer will be the Merced water measurement gage at Shaffer Bridge when flows are less than 220 cfs or the DWR water measurement gage on the Merced River at Cressey (California Data Exchange Center (CDEC) station code 'CRS') when flows are greater than 220 cfs. However, if Reclamation and Merced agree that the Shaffer Bridge gage can be accurately rated above 220 cfs, then that gage may be used. During periods when the Shaffer Bridge gage is relied upon for measuring

RESERVOIR RELEASE

Transfer Water, Merced will provide daily flow measurements to Reclamation, Westlands, Patterson Irrigation District (Patterson), and/or Banta-Carbona Irrigation District (Banta-Carbona) on each day during the Transfer Period.

- 3. Merced shall make available up to 10,000 acre-feet of Transfer Water to be released from Lake McClure (New Exchequer Dam) during the Transfer Period. The schedule of releases by Merced will be provided to DWR and Reclamation prior to the Transfer Period. Any change to the schedule will be provided to DWR and Reclamation, together with the reason for the change. The effect of the change upon the transfer releases, if any, shall be agreed upon by DWR, Reclamation, and Merced. By the 10th day of each month during the Transfer Period, Merced will submit to DWR and Reclamation the actual release data for the previous month and an updated schedule of releases. All Transfer Water made available by Merced is subject to 10% conveyance losses from the Point of Transfer to the points of rediversion at Patterson and/or Banta-Carbona. The amount of Transfer Water made available to Westlands shall be the gross amount measured at the Point of Transfer on the Merced River, up to 10,000 acre-feet, less 10% conveyance loss. For example, if the maximum quantity of 10,000 acre-feet is made available at the Point of Transfer, conveyance losses of 1,000 acre-feet shall be assessed resulting in a net amount of Transfer Water of 9,000 acrefeet at the points of rediversion at Patterson and/or Banta-Carbona.
- 4. The release of Transfer Water shall be in addition to amounts otherwise scheduled to be released by Merced for diversion from the Merced River including, but not limited to required in-stream flows in the Merced River, water provided under the terms of any settlement agreements, regulatory requirements and other water transfers made by Merced.
 - Merced amounts of Transfer Water made available shall be the difference between the measured flow in the Merced River and the Baseline Flow, computed as a volume of water during the Transfer Period, up to 10,000 acre-feet, as measured at Merced's gage at Shaffer Bridge or DWR's gage near Cressey.
 - For purposes of verification of Transfer Water made available and to receive full credit, Merced will draw down Lake McClure to a storage 10,000 acre-feet or less below the storage absent the transfer, subject to the terms of this Exhibit 1 and Exhibit 2.

Lake McClure Refill Criteria And Procedures

Merced agrees that the refilling of vacated Lake McClure storage resulting from the water transfer to Westlands may adversely impact the operations of the CVP and SWP. Refill occurs when the daily Theoretical Storage goes above the Allowable Storage. The refilling of Lake McClure will impact the Projects if it occurs when either 1) the Delta is in Balanced Conditions; or, 2) the Delta is in Restricted Conditions; or, 3) Vernalis Requirements are being met with releases from New Melones Reservoir.

- 1. In the event DWR and/or Reclamation determine that there is a refill impact to the CVP and/or the SWP, Merced agrees to release additional water in an amount determined by DWR and/or Reclamation in excess of normal operating requirements from Lake McClure during Delta Balanced Conditions, as soon as practicable, and on a schedule coordinated with Reclamation and DWR to compensate for impacts. In addition, if DWR concurs with Reclamation's determination that the refill of Lake McClure has impacted New Melones storage, Merced agrees to release additional water in an amount determined by Reclamation in excess of normal operating requirements at times when releases from New Melones are being made to meet Vernalis Requirements and on a schedule coordinated with Reclamation to compensate for the impacts. When there is a change in the Projects' operating conditions and Merced is releasing water to compensate for refill impacts associated with the quantity of Transfer Water released, then DWR and/or Reclamation shall notify Merced of the changed conditions by telephone followed by written notice, electronic mail, or facsimile; and Merced shall cease releasing water within 48 hours of telephone notification.
- DWR and Reclamation coordinate operations under the terms of the COA. DWR will
 coordinate with Reclamation to allocate any Refill Impact between the Delta and
 Vernalis and to allocate the Delta portion of the Refill Impact between the two
 Projects.
- 3. The Refill Impact balance in New Melones Reservoir will be set to zero if Reclamation makes a flood release from New Melones Reservoir prior to achieving a Refill Impact balance of zero. Refill impact accounting will continue until the Transfer and the Cumulative Refill Impact Account Balances (End of Day) are zero.
- 4. The accounting procedure provided below, incorporating the concepts in this Exhibit, is to be used in calculating Lake McClure refill impacts on the Projects and New Melones Reservoir. General principles in this Exhibit are to be applied in accounting for any unusual operational conditions not set forth in the application example.
- Merced will not conduct another water transfer that could impair Merced's ability to fully comply with this Exhibit.

Lake McClure Refill Criteria And Procedures

Accounting Procedures for Determining Refill Impacts Of Merced Irrigation District's Water Transfer on the SWP and CVP

The following columnar description sets forth the format, criteria, and procedures to be used for the determination of combined impacts to the Projects due to changes in refilling Lake McClure caused by the water transfer. An example of the application is attached.

COLUMNAR DESCRIPTION1

The following columnar descriptions set forth the format, criteria, and procedures to be used for the determination of combined impacts to the Projects:

Column 1 - Date

- Column 2 <u>Actual Storage</u>: observed end-of-day storage as reported in Corps of Engineers' Water Control Data System (http://www.spk-wc.usace.army.mil/plots/plot_menu_ca.html)
- Column 3 <u>Transfer Account Balance, Beginning of Day</u>: Transfer Account Balance at beginning of current day.

 Column 3_i = Column 3_{i-1} Column 8_{i-1}
- Column 4 <u>Transfer Account Balance, End of Day</u>: Transfer Account Balance at end of current day.

 Column 4_i = Column 4_{i-1} Column 8_i
- Column 5 <u>Theoretical Storage, Without Daily Refill Volume</u>: end of day storage as would have occurred absent the water transfer without accounting for Daily Refill Volume on that day.

Column 5_i = Column 2_i + Column 3_i

Column 6 – <u>Theoretical Storage, With Daily Refill Volume</u>: end of day storage as would have occurred absent the water transfer.

Column 6_i = Column 2_i + Column 4_i

Column 7 – <u>Allowable Storage</u>: end of day top of conservation storage as reported in the Corps of Engineers Water Control Data System.

Where the Current Day's computation is dependent upon the Previous Day's data: i signifies the Current Day and i-1 signifies the Previous Day.

Lake McClure Refill Criteria And Procedures

(http://www.spk-wc.usace.army.mil/plots/plot menu ca.html)

- Column 8 <u>Daily Refill Volume</u>: amount of Transfer Water refilled on the current day.

 Column 8_i = Column 5_i Column 7_i but not less than zero and not greater than Column 3_i
- Column 9 <u>Cumulative Refill Volume</u>: total volume of Transfer Water that has been refilled through end of current day.

Column 9_i = Column 9_{i-1} + Column 8_i

- Column 10 <u>Delta Condition</u>: "B" indicates that the Delta is in Balanced Conditions, "R" indicates that the Delta is in Restricted Conditions, "E" indicates that the Delta is in Excess Conditions. (Source: Reclamation, DWR, http://www.usbr.gov/mp/cvo/vungvari/coanew.pdf, and http://www.water.ca.gov/swp/operationscontrol/docs/delta/DeltaWQ.pdf) Note: this information need only be included in table when refill is occurring.
- Column 11 Restricted Conditions Impact Factor: Percentage of Daily Refill Volume impacted by refill occurring during Delta Restricted Conditions. If refill occurs when the OMR Flow Criteria is limiting Project exports during December through June, enter 50%. If refill occurs when the San Joaquin River I/E Ratio is limiting Project exports during April or May (measured flow in the San Joaquin River at Vernalis between 6,000 cfs and 21,750 cfs), enter the percentage identified in DWR's Compliance Standards report (see data source for Column 10). If Projects' exports are constrained by the Delta E/I Ratio, then enter the percentage identified in DWR's Compliance Standards report.
- Column 12 Vernalis Requirements: "Y" indicates that releases are being made from New Melones Reservoir to comply with San Joaquin River standards as addressed in the SWRCB's D1641 or any other regulatory requirements containing objectives at Vernalis; "N" indicates that the Vernalis Requirements condition is not in effect. (Source: Reclamation)

 Note: this information need only be included in table when refill is occurring.
- Column 13 Daily Refill Impact: the Daily Refill Impact volume when either the Delta is in Balanced Conditions, the Delta is in Restricted Conditions, or when releases are being made from New Melones to meet Vernalis Requirements, as indicated in Column 10 or Column 12.

If Column 10_i = "B" or Column 12_i = "Y" then Column 13_i = Column 8_i If Column 10_i = "R" then Column 13_i = Column 8_i x Column 11_i

Lake McClure Refill Criteria And Procedures

otherwise Column 13_i = 0

Column 14 – <u>Cumulative Refill Impact</u>: the accumulation of Daily Refill Impacts over the Refill Period. Upon completion of refill operations, this amount of water is owed to the Projects and must be released according to a schedule agreed to by the Parties.

Column 14_i = Column 14_{i-1} + Column 13_i