

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

ORDER WR 2003-0010-DWR

**IN THE MATTER OF LICENSE 1718 (APPLICATION 575), ET AL
TEMPORARY CHANGE INVOLVING THE TRANSFER
OF UP TO 57,969 ACRE-FEET OF WATER
FROM SEVEN SACRAMENTO RIVER WATER DIVERTERS
TO THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
WITH THE OPTION TO SERVE THE STATE WATER PROJECT
AND CENTRAL VALLEY PROJECT SERVICE AREAS**

ORDER AUTHORIZING TEMPORARY CHANGE IN PLACE OF USE,
PURPOSE OF USE, AND POINTS OF DIVERSION AND REDIVERSION
BY THE CHIEF OF THE DIVISION OF WATER RIGHTS:

1.0 SUBSTANCE OF PETITION

On January 9, 2003, several parties represented by

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completed the filing with the State Water Resources Control Board (SWRCB) of thirteen Petitions for Temporary Change under nineteen water right licenses, to be considered jointly under Water Code section 1725, et seq. The petitions were submitted by River Garden Farms (RGF), Reclamation District 108 (RD108), Meridian Farms Water Company (MFWC), Natomas Central Mutual Water Company (NCMWC), Sutter Mutual Water Company (SMWC), Pelger Mutual Water Company (PMWC), and seven member landowners of the Pleasant Grove-Verona Mutual Water Company (PGVMWC), herein after collectively referred to as 'Petitioners'. The Joint Petition requests authorization to temporarily transfer a combined total of up to 80,710 acre-feet of water to the Metropolitan Water District of Southern California (MET) or other users within the Central Valley Project (CVP) and the State Water Project (SWP) service areas. The 80,710 acre-feet requested for transfer in the petitions represented the maximum quantity that was originally determined may be transferred. Following submission of the Joint Petition, the Department of Water Resources (DWR) and the United States Bureau of Reclamation (USBR) in conjunction with the Petitioners have determined that no more than 57,969 acre-feet of water may be made available for transfer without potentially harming other legal users of water. Temporary changes

approved pursuant to Water Code section 1725 may be effective for up to one year.

1.1 Description of the Transfer The Petitioners hold nineteen water right licenses cumulatively authorizing the direct diversion of approximately 1,400 cubic feet per second (cfs) of water from the Sacramento River or its tributaries (between the cities of Colusa and Sacramento) for irrigation use. MET has obtained an option to purchase all of the water proposed for transfer from the Petitioners. However, should MET decline any portion of its option, the Petitioners request the flexibility to sell any remaining water to the Department of Water Resources’ (DWR) Environmental Water Account or 2003 Dry-Year Water Purchase Program or other user(s) within the SWP or CVP service areas. This request affects the size of the temporary place of use.

Table 1, below, identifies the Petitioners, the specific license(s) under which the Joint Petition was filed, and the maximum amount of water that may be transferred.

Table 1

Petitioner	Application No.	License No.	Transfer Amount (af) Based on Crop Idling/Shifting	Transfer Amount (af) Based on Groundwater Substitution
RGF	575	1718	0	1,800
RD108	763	3066	5,463	5,000
MFWC	1074B	4676B	3,800	0
NCMWC	1203 & 15572	3109 & 9794	7,923	0
SMWC	9760	2821	18,842	0
PMWC	12470B	8547B	1,314	4,000
River Ranch Partnership*	7641C & 15735	6389C & 5667	99 ^a	450
Jack Scheidel, et. al.*	7641B, 15606, 15734, & 15795	6389B, 11001, 11002, & 5463	222 ^a	1,750
E.D. Wiley, et. al.*	15745	9774	-72 ^a	972
Nicoli Nicholas*	15856A	7064A	0	250
Maria Kelley*	15856B	7064B	1,454 ^a	1,500
Murphy Lake Farms*	15856C & 15858	7064C & 6399	231 ^a	3,219
William L. Spangler*	16182	10848	0	250
Total			38,778	19,191

* indicates a party owning land located within the PGVMWC

In order to make water available for transfer, the Petitioners will reduce their consumptive use (CU) by an equal amount to that transferred. The Petitioners will achieve most of this reduction by

^a The transfer amounts based on crop idling/shifting referenced in Table 1 for member landowners of the PGVMWC represent the maximum quantities which may be transferred by each individual landowner. In addition, the maximum quantity that may be transferred by all member landowners combined is 1,436 af.

fallowing lands which, absent the transfer, they would have planted (crop idling) and by varying the types of crops they plant to reduce water demand (crop shifting). The remaining CU reduction will be achieved by increasing groundwater pumping to make surface water available for transfer (groundwater substitution). The Joint Petition indicates that a maximum of 19,191 acre-feet are proposed to be made available for transfer pursuant to groundwater substitution by RGF, RD108, PMWC and PGVMWC.

In accordance with the draft paper titled *Water Transfers Based on Crop Shifting and Idling* (Crop Shifting/Idling Paper) prepared by DWR, the Petitioners would use the differences in rates of evapotranspiration of applied surface water (ETAW) to calculate the CU reduction of the crop idling or shifting to determine the amount of water that may be temporarily transferred. ETAW values are obtained from DWR's *Bulletin 160* and *The California Water Plan*, as recommended in the Crop Shifting/Idling Paper. In accordance with DWR specifications, if a water district's previous year's cropping pattern, for its highest water using crops, is within 5 percent of the prior 5 years' cropping history, the water district may base its water transfer proposal on the previous year's cropping record and the corresponding amount of ETAW given as acre-feet per acre (afa) for these crops. All of the Petitioners except RD108 and SMWC qualify under the 5 percent criteria. Since RD108 and SMWC do not qualify to participate in the transfer under the 5 percent criteria, the Petitioners developed a participant-only proposal. Under the participant-only criteria, field data is provided for all lands under the control of each potential water transfer participant and not for the water district as a whole. Under this methodology, the Petitioners determined the baseline crop acreage by evaluating the cropping patterns for each field under the participant's control and calculating 5 year crop averages. The Petitioners then used the baseline crop acreage to calculate water made available for transfer by comparing the baseline with the 2003 crop plan submitted by each grower.

Though each Petitioner plants a wide variation of crop types within its service area, rice represents the crop type planted on the most acreage within the Petitioners' aggregate service area, and the Petitioners anticipate that most of the cropland fallowed as part of this transfer would have been planted with rice absent the transfer. Thus, the Petitioners will use the natural seasonal variation of rice's ETAW during the peak irrigation period of May through September to determine monthly values of each Petitioner's transfer amount. The Petitioners, in conjunction with DWR and USBR, have determined that of the 61,519 acre-feet they originally requested to transfer based on crop substitution or idling in the Joint Petition, only 38,778 acre-feet of water is available for transfer.

Due to the location of the Petitioners' points of diversion and the USBR's current control of flows within the Sacramento River, any reduction in the Petitioners' CU should result in a corresponding increase in flow within the River below their points of diversion to the Delta. DWR has agreed to coordinate the diversion of the increased flow at either the Tracy Pumping Plant or the Banks Pumping Plant (Plants) for delivery to MET via the California Aqueduct. The timing and amounts of water available for diversion at the Plants will correspond with the calculated CU reduction and will be reduced to account for transmission losses.

Because diversion of water at the Plants can be periodically limited by environmental and capacity considerations, any water that is foregone by the Petitioners when Delta diversions are limited will become Delta outflow, reducing reservoir releases that must be made by the DWR and USBR.

Therefore, the Petitioners are seeking to lease storage capacity within Shasta Reservoir from USBR. Additionally, the Joint Petition requests the addition of the Shasta Dam as a point of diversion and the Plants as points of diversion/rediversion. Thus, if direct diversion of water at the Plants is not possible, the transfer water may instead be diverted to storage within Shasta Reservoir for later delivery or use. The timing and magnitude of any diversion to storage under this scenario must be equivalent to the calculated timing and magnitude of the CU reduction to avoid injury to other legal users of water from this temporary change of water rights.

2.0 BACKGROUND

2.1 Substance of the Petitioners’ Licenses Relevant information from the nineteen water right licenses under which the Joint Petition was submitted is summarized in Table 2.

Table 2

Licensee	App. No.	License No.	Auth DD (cfs)	Season		Source	Purpose(s) of Use
				Start	End		
RGF	575	1718	32.00	3/1	10/31	Sacramento River	I
RD108	763	3066	500.00	2/1	10/31	Sacramento River	I
MFWC	1074B	4676B	138.00	3/1	11/1	Sacramento River	I
NCMWC	1203	3109	160.00	5/1	10/31	Sacramento River	D,I,M,J
NCMWC	15572	9794	131.00	4/1	6/30	Natomas Cross Canal	I
Jack Scheidel, et. al.	7641B	6389B	9.60	4/1	9/30	Sacramento River	I
Jack Scheidel, et. al.	15606	11001	14.54	4/1	9/30	Natomas Cross Canal	I
Jack Scheidel, et. al.	15734	11002	8.23	4/1	9/30	Natomas Cross Canal	I
Jack Scheidel, et. al.	15795	5463	7.34	4/1	10/15	Natomas Cross Canal	I
River Ranch Partnership	7641C	6389C	7.70	4/1	9/30	Sacramento River	I,S
River Ranch Partnership	15735	5667	2.00	4/1	10/15	Natomas Cross Canal	I
SMWC	9760	2821	250.00	1/1	12/31	Sacramento River	I
PMWC	12470B	8547B	53.50	4/1	11/1	Sacramento River	I
E.D. Wiley, et. al.	15745	9774	18.60	4/1	10/31	Natomas Cross Canal	I
Nicoli Nicholas	15856A	7064A	11.77	3/15	11/15	Cross Canal	I,S
Maria Kelly	15856B	7064B	11.77	3/15	11/15	Cross Canal	I,S
Murphy Lake Farms	15856C	7064C	11.77	3/15	11/15	Cross Canal	I
Murphy Lake Farms	15858	6399	2.00	3/15	10/1	Natomas Cross Canal	I
William L. Spangler	16182	10848	5.76	4/1	6/30	RD108 Main Drain Canal	I

Legend

D = Domestic Use M = Municipal Use
 I = Irrigation Use S = Stockwatering Use
 J = Industrial Use
 Auth DD = Maximum authorized rate of direct diversion
 Season Start, End = Indicates the authorized season of diversion

2.2 Place of Use and Purposes of Use under the Proposed Transfer The service areas of the SWP (as shown on maps 1878-1, 2, 3, & 4 on file with Application 5629) and CVP (as shown on map 214-208-12581 on file with Application 5626) would be temporarily added to the place of use under the subject licenses. Domestic, power, municipal, industrial, salinity control, fish and wildlife enhancement, water quality control, and stockwatering (as needed) would be temporarily added as additional purposes of use under the subject licenses.

2.3 Points of Diversion/Rediversion under the Proposed Transfer The proposed temporary change would add Tracy Pumping Plant and the Banks Pumping Plant as points of diversion/rediversion and add the Shasta Dam as a point of diversion under the subject licenses.

3.0 AVAILABILITY OF WATER FOR TRANSFER

The water proposed for temporary transfer is currently diverted under the licenses referenced in Table 2 above. In the absence of this temporary transfer, up to the entire 57,969 acre-feet of the subject water would remain available for direct diversion use by the Joint Petitioners. To the extent that groundwater pumping is increased to make available surface water for transfer, up to 19,191 acre-feet of groundwater would remain in the Sacramento Groundwater Basin. The maximum amount of water authorized for temporary transfer under this order is 57,969 acre-feet. This order includes terms and conditions to ensure that no legal users of water are injured by the proposed temporary change due to the following factors:

- a. Potential lowering of water levels in southern Delta channels associated with the addition of the Clifton Court Forebay and the Tracy Pumping Plant as points of diversion/rediversion to the Joint Petitioners' licenses;
- b. Impacts resulting from increased groundwater pumping due to the temporary change.

In light of the above, I find in accordance with Water Code section 1727(b)(1) that the proposed change would not injure any legal user of water and that the proposed temporary transfer involves only the amount of water that would have been consumptively used in the absence of the temporary change. I also find that the transfer of surface water that is replaced with groundwater pursuant to this order meets the requirement of Water Code section 1745.10(b). That section requires that the groundwater use has been approved by the water supplier from whose service area the water is to be transferred and the water supplier has determined that the transfer will not create or contribute to conditions of long-term overdraft in the affected groundwater basin.

4.0 ENVIRONMENTAL CONSIDERATIONS

In accordance with Water Code section 1729, temporary changes involving the transfer of water are exempt from the requirements of the California Environmental Quality Act (CEQA) (Pub. Resources Code § 21000, et seq.). However, the SWRCB must consider potential impacts on fish, wildlife and other instream beneficial uses in accordance with Water Code section 1727(b)(2).

USBR's Mid-Pacific Regional Environmental Office, the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NOAA Fisheries) have determined that the proposed transfer as conditioned is not likely to impact the environment. USBR, working with the Petitioners, informally consulted with NOAA Fisheries and USFWS regarding species listed on the Federal Endangered Species Act. NOAA Fisheries indicated in its letter of January 6, 2003 to USBR, that the proposed temporary transfer is not likely to adversely affect listed salmonids. USFWS concluded in its memorandum to USBR of March 19, 2003, that the proposed project is not likely to adversely affect listed species, including the giant garter snake, the Sacramento splittail and the Delta smelt. However, the determinations made by NOAA Fisheries and the USFWS are based on the temporary transfer of 50,000 acre-feet, rather than the 57,969 acre-feet authorized herein for transfer. The Petitioners have indicated that they likely will not be able to temporarily transfer more than 50,000 acre-feet and would be agreeable to a condition which requires that additional approval be obtained from USFWS and NOAA Fisheries for transfers beyond 50,000 acre-feet. Accordingly, this order requires the Petitioners to obtain written concurrence from the USFWS and NOAA Fisheries for the transfer of more than 50,000 acre-feet.

To insure that there will be no increase in the consumptive use of water and no other impacts to fish, wildlife and other beneficial uses of water, this order requires the Petitioners to conduct this transfer in accordance with the guidelines established by DWR in the Crop Shifting/Idling Paper and "Groundwater Substitution Transfers: How to Make Them Work in the Sacramento Valley in 2002" (Groundwater Paper). The guidelines include monitoring, mitigation and reporting measures which should avoid potential impacts to fish, wildlife and other beneficial uses. In addition, the Petitioners have agreed to implement conservation, monitoring and reporting measures agreed to by the USFWS and DFG. To prevent impacts on the giant garter snake and other species, the Petitioners have agreed to reduce their consumptive use by no more than 20 percent of the consumptive use during the 2002 season and to disperse following activities throughout their service areas. Additionally, the Petitioners have agreed to maintain water levels within ditches and canals at approximately the same levels as would have occurred absent the temporary change to avoid potential impacts.

This order also specifies that water may only be transferred in compliance with all applicable biological opinions. The USBR and the DWR are responsible, under their water right permits and pursuant to SWRCB Order WRO 2001-05 to ensure the implementation of the water quality objectives set forth in SWRCB Decision 1641 (D-1641), Tables 1, 2, and 3. (See pages 181 to 187 of SWRCB Decision 1641.) This will ensure that no unreasonable effects on fish, wildlife or other instream beneficial uses are caused by the addition of the Clifton Court Forebay and the Tracy Pumping plant as points of diversion/rediversion.

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

5.0 COMMENTS RECEIVED ON THE PROPOSED TEMPORARY CHANGE

The SWRCB received timely comments regarding the proposed temporary change from the California Department of Fish and Game (DFG); the California Sportfishing Protection Alliance (CSPA); collectively from South Delta Water Agency, Central Delta Water Agency, William

Salmon, Augusta Bixler Farms, Lafayette Ranch Inc., R. D. 2058, R. C. Farms, Inc., and Rudy Mussi (SDWA et. al.); the County of Tuolumne; Sacramento Groundwater Authority (SGA); San Luis & Delta Mendota Water Authority (Authority); the County of Yolo; USBR Resource Management Division and DWR. The SWRCB also received written responses to these comments from the Petitioners' agent on February 18, 2003 and February 26, 2003. The comments and the SWRCB's responses are summarized below:

California Department of Fish and Game

Comments: DFG asserts that the proposed temporary change may have adverse site-specific impacts on threatened and endangered species listed under the California State and/or Federal Endangered Acts occurring in the participating Districts (including the greater sandhill crane, Swainson's hawk, western yellow-billed cuckoo and the giant garter snake). DFG contends that disking of fallowed fields may unnecessarily destroy valuable habitat for listed species. Specifically, DFG expresses concern over potential impacts to the giant garter snake caused by fallowing large contiguous tracts of land. DFG also voices concern over potential impacts to listed fish species (Chinook salmon, Sacramento splittail and steelhead) due to the potential for the temporary change to result in reduced surface water levels from groundwater substitution and a reduction and change in the timing of return flows as a result of fallowing activities.

DFG states that inclusion of certain conditions in any order approving the Joint Petition will resolve its concerns. DFG's first condition requires the Petitioners to comply with DWR's Crop Shifting/Idling Paper. The second condition limits the maximum block size of contiguous lands authorized to be fallowed by an individual landowner to 160 acres and by two separate landowners to 320 acres. The third condition requires the Petitioners to avoid disking of fallowed land until July 1. The fourth condition requires the Petitioners to comply with DWR's Groundwater Substitution Paper. The fifth condition requires the Petitioners to release water into their transmission and drainage canals to mimic the timing and volume of water that would have been released during the normal practice of draining flooded rice fields had the fields not been fallowed. The sixth condition specifies that releases from Shasta Dam shall be in compliance with all NOAA Fisheries biological opinions.

In addition to DFG, CSPA, the County of Tuolumne and the County of Yolo raise similar concerns. The terms and conditions of this order that respond to DFG's comments adequately address the comments of the other parties.

SWRCB Response: The Petitioners did not object to DFG's conditions 1, 2, 4 and 6. This order is conditioned accordingly. The Petitioners objected to condition 3, which would require that disking of fallowed land be delayed until July 1. Disking is a normal agricultural practice regularly performed by the Petitioners. Further, the amount of land proposed to be fallowed is within historic amounts fallowed over the past decade and therefore would not add significantly to the amount of disked land. Accordingly, DFG's third condition is not included in the terms and conditions of the temporary transfer.

In addition, the SWRCB will not include DFG condition 5, which would require additional water to be released into drainage and transmission canals for no other beneficial purpose than to mimic

the pattern of normal drainage from fallowed lands. The Petitioners will be required to maintain water levels in their ditches and canals at approximately the same levels as would have occurred without the temporary transfer by limiting the reduction in CU to no more than 20 percent of 2002 CU and by prohibiting fallowing of large contiguous tracts of land. Accordingly, it does not appear reasonable to require that additional water be released when substantially equivalent protection may be achieved without the release of supplemental water.

California Sportfishing Protection Alliance

Comment: CSPA raises substantially the same concerns as DFG. In addition, CSPA requests copies of all documentation submitted and any determination made pursuant to Water Code Section 1745.10(b) concerning potential groundwater substitution activities. CSPA, SDWA and the County of Tuolumne also question whether compliance is required with the National Environmental Policy (NEPA) and/or CEQA.

SWRCB Response: See the SWRCB's response to DFG comments above. Regarding requests for groundwater substitution information, this order contains the SWRCB's determination regarding Water Code section 1745.10(b). A copy of this order will be forwarded to CSPA. The documentation submitted by the Petitioners in compliance with Water Code section 1745.10 is included in the SWRCB's public files for the water rights involved in this temporary change. CSPA may view the files at the SWRCB's offices in Sacramento.

The proposed transfer is for a period of one year and is the first temporary transfer to MET requested by the Petitioners. In accordance with Water Code section 1729, temporary changes involving the transfer of water are exempt from the requirements of CEQA. Instead of complying with CEQA, the SWRCB must consider potential impacts on fish, wildlife and other instream beneficial uses in accordance with Water Code section 1727(b)(2). For a discussion of environmental considerations associated with this transfer, see section 4 above. This order by the SWRCB is not subject to the requirements of NEPA. The USBR, however, has determined in the Draft Finding of No Significant Impact and Environmental Assessment for this project that there are no significant cumulative impacts associated with the transfers.

South Delta Water Agency

Comment: SDWA submitted comments on behalf of itself, as well as the Central Delta Water Agency, William Salmon, Augusta Bixler Farms, Lafayette Ranch Inc., Reclamation District 2058, R.C. Farms, and Rudy Mussi. SDWA's comments contain numerous points, which are separately summarized and responded to below.

- (a.) SDWA asserts that the Petitioners fail to show that return flows from the proposed temporary transfer will be available to downstream diverters in the same fashion as they would have been absent the transfer.

SWRCB Response: The proposed temporary transfer involves water produced by groundwater substitution or water which would have been consumptively used absent the transfer as determined by calculating the ETAW associated with the lands idled or changes in the crops grown.

Consequently, the portion of water that would have entered the surrounding waterways as return flow will remain in the stream system in much the same fashion as it would have without the temporary transfer, even if the transferred water is held back in storage for release at a later time than would have occurred if the water was consumptively used by the Petitioners. Additionally, since the total amount of potentially fallowed acreage is within historic amounts and will be dispersed throughout the participating Districts, any effects on return flow should be insignificant. The use of groundwater in lieu of surface water should not have any effect on the amount or timing of return flows.

- (b.) SDWA questions whether this temporary transfer involves “paper water” or water that would not have been consumptively used absent the water transfer.

SWRCB Response: DWR and USBR have determined the amounts of “real water” (water which would have been consumptively used absent the transfer) which may be transferred. This determination is based on recent cropping records and substantiation that groundwater wells authorized for use in groundwater substitution activities are not hydrologically connected to surface water channels. Based on the information provided by DWR and USBR, the water to be transferred would have been consumptively used in the absence of the transfer.

- (c.) SDWA questions whether the Petitioners have met the requirements of Water Code sections 1745.10 and 1745.11 concerning the use of groundwater substitution.

SWRCB Response: Water Code section 1745.10 provides that a water user that transfers surface water may only replace that water with groundwater if the groundwater use is either of the following:

- (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.

The Petitioners have submitted the necessary documentation to determine that any groundwater substitution will be in compliance with condition (b.) above. In addition, all proposed groundwater substitution activities are subject to approval by DWR and USBR and will be conducted in compliance with DWR’s Groundwater Paper.

Water Code section 1745.11 allows for the replacement of transferred surface water with groundwater previously recharged into an overdrafted groundwater basin if the recharge was part of a groundwater banking operation carried out by direct recharge, by delivery of surface water in lieu of groundwater pumping, or by other means, for storage and extraction. The Petitioners do

not propose to utilize water from an overdrafted groundwater basin in lieu of transferred surface water, so this section is inapplicable to the proposed transfer.

- (d.) SDWA asserts that the Central Valley Project Improvement Act (CVPIA) prohibits the substitution of groundwater for transferred surface water.

SWRCB Response: The Petitioners propose to temporarily transfer a portion of their appropriative water rights (also referred to as base supply). Such temporary transfers are not subject to the provisions of the CVPIA.

- (e.) SDWA states that pumping under Joint Points of Diversion (JPOD) and transfers involving CVP and SWP pumping facilities are subject to a Water Level Response Plan to mitigate the impacts of increased pumping on southern Delta channels. SDWA asserts that these plans have failed to protect diverters in the southern Delta from salinity and low water level impacts.

SWRCB Response: The Water Level Response Plan is intended only to protect against low water levels associated with SWP/CVP JPOD or transfer activities. If SDWA experiences low water levels during the term of this temporary transfer, SDWA should immediately notify DWR, USBR and the SWRCB. If the low water levels are shown to be the result of this transfer, appropriate mitigation measures, such as portable pumps, should be provided by DWR and/or USBR in accordance with the provisions of the Water Level Response Plan. The current Water Level Response Plan expires June 1, 2003. In order to ensure continuous protection for diverters in the South Delta, this order prohibits the Petitioners from exporting water under the changes approved by this order unless the requirements of the current Water Level Response Plan (as amended by SWRCB Order 2002-0003) or an equally protective or more protective revised Response Plan are being met at the time of export.

The salinity issues SDWA refers to appear to be local issues related to mixing, return flows and soil conditions. It is unclear to what extent if any pumping at the Plants is associated with the referenced salinity problems. Since the amount of low salinity Sacramento River water entering the Delta will actually increase, due to a reduction in consumptive use upstream, the proposed temporary transfer likely will not contribute to increased salinity in the Delta. In fact, the transfer may temporarily reduce salinity in the Delta by increasing the mixing of Sacramento River water with higher salinity water from the San Joaquin River.

- (f.) SDWA claims that it did not receive modeling data in 2001 prior to the commencement of JPOD as required by the Response Plan.

SWRCB Response: This issue is unrelated to the proposed transfer. Nevertheless, I note that the issue was resolved in 2002. I expect the DWR and USBR to fully comply with the Response Plan during the term of the proposed temporary transfer. However, if SDWA does not receive timely modeling data, it should immediately contact DWR and the SWRCB to address the deficiency.

- (g.) SDWA asserts that delivery of CVP water to the San Joaquin Valley service areas of the CVP results in elevated salinity concentrations in the San Joaquin River.

SWRCB Response: Given the relatively small increment of water this potential temporary transfer involves in relation to the average amount of water supplied to CVP contractors in the San Joaquin Valley, it is unlikely this transfer would have any noticeable impact on salinity due to increased return flows to the San Joaquin River. In addition, the primary purpose of this transfer is not to transfer water to the San Joaquin Valley for irrigation purposes.

- (h.) SDWA claims that the proposed temporary transfer may trigger Term 91 curtailments earlier than would occur absent the temporary transfer.

SWRCB Response: The proposed temporary transfer is based on direct diversion rights. As such, the transfer will not result in a change in CVP/SWP reservoir operations that would result in greater reservoir releases at an earlier date than would occur absent the transfer. Consequently, Term 91 will not be triggered earlier in the year. In fact, it may be triggered later if the transferred water is stored behind Shasta Dam for release later in the season than would occur absent the transfer.

- (i.) SDWA claims that the proposed temporary transfer may have impacts on fish and wildlife caused by low water levels in South Delta channels that have not been addressed in Decision 1641 and the various biological opinions which govern operations of the SWP and CVP.

SWRCB Response: The proposed temporary transfer will not result in impacts on fish and wildlife due to lowered water levels in South Delta channels. The Water Level Response Plan specifies actions that are intended to prevent any significant lowering in channel water levels as a result of this action. Further, the fishery agencies have not raised this concern, and SDWA has not presented any evidence concerning potential impacts to fish and wildlife in South Delta channels.

- (j.) SDWA asserts that an inappropriate baseline was used for determining the environmental impacts of the proposed temporary change. SDWA contends that the appropriate baseline is a scenario of reduced supplies to MET, rather than supplies prior to the reduction in Colorado River deliveries.

SWRCB Response: Regardless of whether the baseline includes Colorado River supplies or not, there is no difference in the amount of water available for use by MET during the term of the proposed temporary change. Absent the temporary transfer, MET holds adequate water in storage to replace any reduction in its Colorado River supplies for several years.

- (k.) SDWA asserts that Water Code sections 1392 and 1629 prohibit the sale of any license or portion thereof for profit.

SWRCB Response: SDWA made a similar argument with respect to a previous proposed temporary change. These sections do not prohibit the temporary transfer approved by this order. See SWRCB Order WR 2000-16.

County of Tuolumne

The County of Tuolumne raises several questions related to the proposed temporary change. Those questions which are not addressed above are separately summarized and responded to below.

- (a.) The County of Tuolumne remarked that the comment period for the proposed temporary change should have been at least 60 days.

SWRCB Response: Water Code section 1726(2)(f) requires that all written comments be filed not later than 30 days after the date that the notice of the Petition is published.

- (b.) The County of Tuolumne questions whether this transfer constitutes a new water supply for MET to support new growth.

SWRCB Response: The proposed transfer is structured as an option to purchase agreement between the petitioners and MET. The purpose of the option agreement is to ensure that MET has the means to maintain current demands as well as adequate reserve supplies. In the event MET exercises its option to purchase the water, the transferred water will be used to meet current demands or will be stored to replace withdrawals required to meet current demand due to the reduction in supplies from the Colorado River. Absent the transfer, MET would likely pursue other supplies or would draw on its stored supplies.

- (c.) The County of Tuolumne inquires as to whether the proposed temporary transfer will result in increased pumping at SWP facilities and/or displacement of other transfers, including the Environmental Water Account.

SWRCB Response: The proposed temporary transfer will be conducted within the confines of current pumping restrictions as defined by the various biological opinions, agreements between DWR and USBR, and other regulatory requirements. The allocation of pumping capacity will be determined by DWR and/or USBR in accordance with applicable regulations and guidelines.

- (d.) The County of Tuolumne asks whether any of the water rights involved in the proposed temporary change have been adjudicated.

SWRCB Response: None of the water rights involved in this temporary change have been part of an adjudication.

- (e.) The County of Tuolumne asks how the SWRCB intends to address potential impacts to third parties caused by this temporary change. The County of Yolo also raises similar issues.

SWRCB Response: The SWRCB does not expect the proposed temporary change to have a significant impact on third parties. Each District will reduce consumptive use within its service area by no more than 20 percent of the total consumptive use in 2002. This reduction in consumptive use is within recent historic use amounts. The crop idling and crop shifting activities are within the normal range of agricultural activities and will be distributed throughout the

Districts. As the proposed change is only temporary, there will be no alterations in land use which could potentially affect third parties.

- (f.) The County of Tuolumne questions whether it may be possible for surplus water on the Sacramento River to be used to relieve pressure on New Melones Reservoir for meeting water quality standards in the Delta.

SWRCB Response: The water proposed to be temporarily transferred will only be made available by crop shifting, crop idling and groundwater substitution activities. Consequently, the water is not surplus to the normal needs of the Districts and is not available to reduce the obligation for releases from New Melones Reservoir.

- (g.) The County of Tuolumne expresses concern over the potential for this and similar transfers of water outside of the San Francisco Bay-Delta Ecosystem to place greater stress on the San Joaquin River Watershed.

SWRCB Response: The proposed transfer will not result in additional strain on the San Joaquin River watershed. The water made available for transfer will be equal to the amount of water that would have been consumptively used by growers in the Sacramento River watershed. Accordingly, the San Joaquin River watershed will experience the same effects with or without the transfers.

Sacramento Groundwater Authority (SGA)

Comment: SGA's comments on the Joint Petition only pertain to potential groundwater substitution activities by NCMWC. SGA requests that the SWRCB limit approval of NCMWC's participation in the temporary transfer to water made available from fallowing and crop shifting.

SWRCB Response: NCMWC has not requested to transfer water made available through groundwater substitution. Accordingly, NCMWC is not authorized under the current order to undertake groundwater substitutions to accomplish the proposed temporary transfer.

San Luis & Delta Mendota Water Authority

Comment: The Authority states that it does not oppose the Joint Petition provided the temporary transfer is conditioned to involve only "real" water, thereby having no impact on the water supply available to other legal users of water and other beneficial uses.

SWRCB Response: See SWRCB response to SDWA's comment (b) above.

County of Yolo

Comment: The County of Yolo provided several comments on the Joint Petition. Those issues which were not addressed in previous comments are separately summarized and responded to below.

- (a.) The County of Yolo opposes the use of groundwater substitution and states that it should only be used minimally and as a last resort to compensate for diverted water loss.

SWRCB Response: As mentioned previously, the Petitioners will be required to utilize groundwater resources involved in this transfer only as approved by this order.

- (b.) The County of Yolo requests that the potential for subsidence due to groundwater substitution be addressed.

SWRCB Response: Pursuant to the Petition, the maximum quantity of groundwater proposed to be pumped in lieu of temporarily transferred surface water is 19,191 acre-feet. This amount is less than 1 percent of the total quantity of groundwater estimated in the Sacramento Groundwater Basin. Accordingly, subsidence related to the proposed temporary transfer is unlikely. However, the Petitioners have agreed to monitor for subsidence as necessary.

- (c.) The County of Yolo requests that the Petitioners be required to submit crop plans to determine the proportion of land fallowed in relation to the amount of land left in production.

SWRCB Response: The Petitioners have submitted crop plans to DWR and USBR who have determined the amount of water which they agree may be transferred based on the amount of land proposed to be fallowed in relation to the amount of land proposed to be left in production.

California Department of Water Resources

Comment: DWR raises several issues which it believes should be addressed before the Joint Petition is approved.

SWRCB Response: DWR specified in a memorandum dated April 30, 2003 the conditions that would resolve its concerns. The current order is conditioned accordingly.

United States Bureau of Reclamation – Resource Management Division

Comment: USBR asserts that the proposed temporary transfer may cause injury to the operations and water rights of the CVP. USBR states that its objections to the proposed temporary change may be resolved by inclusion of certain conditions in any approval of the Joint Petitions and arrangement of appropriate contractual agreements with USBR for use of its facilities.

SWRCB Response: In a letter dated May 1, 2003, USBR concurred with the terms and conditions proposed in the April 30, 2003 memorandum from DWR. Accordingly, conditions are included in this order to protect USBR's water rights and the rights of other legal users of water.

6.0 SWRCB'S DELEGATION OF AUTHORITY

On May 16, 2002, the SWRCB adopted Resolution 2002-0106, granting the authority to act on petitions for temporary change to the Chief of the Division of Water Rights, except where the SWRCB conducts a hearing to accept additional evidence. This authority is redelegated to the

ORDER

NOW, THEREFORE, IT IS ORDERED that the Joint Petition filed for temporary change in the place of use, purpose of use, and point of diversion/rediversion under River Garden Farm's (RGF) License 1718 (Application 575), up to 1,800 acre-feet; Reclamation District 108's (RD 108) License 3066 (Application 764), up to 10,463 acre-feet; Meridian Farms Water Company's (MFWC) License 4676B (Application 1074B), up to 3,800 acre-feet; Natomas Central Mutual Water Company's (NCMWC) Licenses 3109 (Application 1203) and 9794 (Application 15572), up to 7,923 acre-feet; Sutter Mutual Water Company's License 2821 (Application 9760), up to 18,842 acre-feet; Pelger Mutual Water Company's License 8547B (Application 12470B), up to 5,314 acre-feet total; (the following seven water right holders are all member landowners of the Pleasant Grove-Verona Mutual Water Company (PGVMWC)) River Ranch Partnership's Licenses 3109 (Application 7641C) and 5667 (Application 15735), up to 549 acre-feet total; Jan Scheidel, et.al.'s Licenses 6389B (Application 7641B), 11001 (Application 15606), 11002 (Application 15734) and 5463 (Application 15795), up to 1,972 acre-feet total; E.D. Wiley et. al.'s License 9774 (Application 15745), up to 900 acre-feet total; Nicoli Nicholas' License 7064A (Application 15856A), up to 250 acre-feet; Maria Kelley's License 7064B (Application 15856B), up to 2,954 acre-feet total; Murphy Lake Farms' Licenses 7064C (Application 15856C) and 6399 (Application 15858), up to 3,450 acre-feet total; and William L. Spangler's License 10848 (Application 16182), up to 250 acre-feet (collectively referred to as the Petitioners) for the maximum collective transfer of up to 57,969 acre-feet of water is approved.

All existing terms and conditions of the subject licenses (or as may be subsequently amended by further order of the SWRCB) 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 continues for a period of one year.
2. The place of use of the Petitioners' licenses is temporarily changed as follows:

The authorized place of use for the water approved for transfer in this Order is expanded to include the service areas of the State Water Project (SWP) (as shown on maps 1878-1, 2, 3, & 4 on file with Application 5629) and Central Valley Project (CVP) (as shown on map 214-208-12581 on file with Application 5626).

3. The Clifton Court Forebay and the Tracy Pumping Plant are temporarily added as points of diversion and rediversion to the licenses subject to this Order. Diversion or rediversion of water at the Clifton Court Forebay and the Tracy Pumping Plant pursuant to this Order is subject to implementation by the Department of Water Resources (DWR) and the US Bureau of Reclamation (USBR) of the objectives set forth in Tables 1, 2, and 3 of Water Right Decision 1641, at pages 181 through 187, as provided in Order WRO 2001-05. Export of water pursuant to this Order is subject to compliance with the current Water Level Response Plan (as modified by SWRCB Order WR 2002-0003) or an equally protective or more protective Water Level Response Plan approved by the Chief of the Division of Water Rights.

Shasta Dam is temporarily added as a point of diversion. Diversion of water at Shasta Dam, the Clifton Court Forebay and the Tracy Pumping Plant pursuant to this Order is subject to compliance by the operators of those facilities with all applicable Department of Fish and Game (DFG), United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NOAA Fisheries) biological opinions.

4. Domestic, power, municipal, industrial, salinity control, fish and wildlife enhancement, water quality and stock watering are temporarily added as purposes of use under the subject licenses for the water approved for transfer pursuant to this Order.
5. Any water temporarily transferred pursuant to this Order is limited to the amounts approved in this Order and is subject to the Petitioners satisfying the following conditions requested by the DWR in its Memorandum dated April 30, 2003:
 - a. The amount of water to be made available for transfer through groundwater substitution shall not exceed 19,191 acre-feet total, and individually shall not exceed 1,800 acre-feet by RGF under License 1718; 5,000 acre-feet by RD108 under License 3066; 4,000 acre-feet by PMWC under License 8547B; 450 acre-feet by River Ranch Partnership under Licenses 6389C and 5667; 1,750 acre-feet by Jack Scheidel, et al., under Licenses 6389B, 11001, 11002, and 5463; 972 acre-feet by E.D. Wiley, et al., under License 9774; 250 acre-feet by Nicoli Nicholas under License 7064A; 1,500 acre-feet by Maria Kelley under License 7064B; up to 3,219 acre-feet by Murphy Lake Farms under Licenses 7064C and 6399; up to 250 acre-feet by William L. Spangler under License 10848.
 - b. Unless approved by the Chief of the Division of Water Rights, only the wells listed in Attachment 1 of the Memorandum may be used for groundwater substitution. The use of the wells listed in Attachment 1 is subject to the implementation of the measures set forth in Attachment 2 of the Memorandum. Such measures shall include a Monitoring and Reporting Plan, Mitigation Plan and a rapid response plan that are consistent with sections 5 and 6 of the March 2002 paper by DWR titled "Groundwater Substitution Transfers: How to Make Them Work in the Sacramento Valley in 2002."
 - c. There shall be no significant unmitigated injury to other groundwater users as a result of groundwater substitution. If either DWR or the transferring entity determines that a water transfer approved under this Order is causing injury to neighboring landowners, that party shall request or make changes to prevent injury, and may if appropriate recommend to the Chief of the Division of Water Rights that other wells be substituted for the wells listed in Attachment 1. The Chief of the Division of Water Rights may approve substitute wells if (i) the DWR and the USBR approve the use of the wells; (ii) the wells can be brought within the scope of the requirements in Attachment 2 of the Memorandum; and (iii) the total quantity of groundwater pumping for substitution does not exceed 19,191 acre-feet.
6. Water may be transferred only if it is made available by means of crop idling, crop shifting or groundwater substitution during periods when the Delta is in balanced conditions, as defined in the Coordinated Operations Agreement between DWR and USBR. Such Delta operations shall be coordinated with DWR and USBR, together with the necessary accounting procedures.

Water made available for transfer shall be accrued at the same rate and time as the reduction in consumptive use. Water diverted to storage shall not exceed the amount of water that would have been consumptively used in the absence of the transfer.

7. The Petitioners shall coordinate fallowing and crop shifting activities with DWR and USBR. In conducting these activities, the Petitioners shall proceed in a manner that is as nearly as possible consistent with the March 2002 draft paper by the DWR titled "Water Transfers Based on Crop Shifting and Crop Idling: How to Make them Work in the Sacramento Valley." In the event of a dispute between the Petitioners and the DWR or the USBR, the parties to the dispute shall bring the matter to the attention of the Chief of the Division of Water Rights for a determination as to the required actions.
8. The Petitioners shall conduct a monitoring program to demonstrate compliance with the terms and conditions of this Order and shall make appropriate provisions for record keeping and inspection (including access) by DWR, USBR and the SWRCB as necessary. The Petitioners shall provide the DWR continuous access to the wells and fields involved in the transfer program approved by this Order. Such access shall not, however, be interpreted as allowing substantial interference with normal farming operations:
9. To the extent that Petitioners will be entering into agreements with landowners/tenants in order to make water available for temporary transfer, each of those Petitioners shall include and implement the following conservation measures in those agreements:
 - a. The reduction in consumptive use of water due to the temporary transfer of water by each of the Petitioners (Districts) shall not exceed 20 percent of the consumptive use during the 2002 irrigation season.
 - b. Each of the Petitioners shall maintain water levels within their ditches and canals at approximately the same levels as would have occurred without the transfer.
 - c. In order to disperse acreage participating in the idling program, the maximum block size of contiguous lands under common ownership which may be idled to make water available for this temporary transfer is 160 acres. The maximum block size of contiguous lands under separate ownership is 320 acres. The 160/320 acre maximum block size limitation does not apply to fields that, by themselves, exceed 160 acres. Before idling fields that exceed 160 acres, the Petitioners are required to meet and confer with the USFWS to identify mutually agreeable measures to avoid any adverse effects to giant garter snake populations. The "meet and confer" process is limited to lands making water available through crop idling and will not apply to lands making water available by means of crop shifting or lands that are not involved in the temporary transfer program.
10. Prior to commencing the transfer of more than 50,000 acre-feet of water pursuant to this Order, the Petitioners must obtain written concurrence from the USFWS and NOAA Fisheries. Written concurrence shall be submitted to the Chief of the Division of Water Rights prior to transfer.

11. Prior to commencing groundwater substitution pursuant to this Order, RGF, RD108, PMWC and PGVMWC shall develop and submit to the Chief of the Division of Water Rights, DWR, USBR and DFG an acceptable Groundwater Substitution Program consistent with section 4 of the March 2002 paper by DWR titled "Groundwater Substitution Transfers: How to Make Them Work in the Sacramento Valley in 2002." If, upon implementation, the SWRCB, DWR, USBR or the Petitioner determines that operation of the groundwater substitution program pursuant to this temporary transfer is causing injury to other groundwater users, the Petitioner shall develop and submit to the Chief of the Division of Water Rights for approval conditions to prevent injury to other groundwater users.
12. Prior to transfer RGF, RD108, PMWC and PGVMWC shall provide a map to the Chief of the Division of Water Rights of the recent (circa spring 2003) groundwater levels in the Sacramento Groundwater Basins. An additional map shall be developed and submitted by June 1 of each year following the transfer defining the spring groundwater levels in the Sacramento Groundwater Basins until groundwater levels correspond to the pre-transfer groundwater levels.
13. By June 1, 2004, the Petitioners shall provide the Chief of the Division of Water Rights a report describing the use of the water temporarily transferred pursuant to this Order. The report shall include the following information:
 - a. the amounts and general locations where the transferred water was used or stored;
 - b. the daily release rates of the transferred water from Shasta Reservoir (if applicable); and
 - c. the monthly amounts of groundwater pumped to meet the needs of users within RGF's, SMWC's, PMWD's and PGVMWC's service areas in excess of that which would have been pumped in the absence of this transfer.
14. To the extent that the Joint Petitioners wish to regulate the storage of water in Shasta Reservoir made available by means of the conservation measures, or the Metropolitan Water District of Southern California (MET) wishes to regulate its purchased water, the Petitioners or MET shall enter into an appropriate agreement with USBR.
15. 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 SWRCB 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 SWRCB 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.
16. 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 Licensee shall obtain authorization for an incidental take prior to commencing transfer of water or water rights. The Licensee shall be responsible for meeting all requirements of the applicable Endangered Species Act for the temporary transfer authorized under this Order.

17. 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.

*ORIGINAL SIGNED BY
VICTORIA A. WHITNEY FOR*

Edward C. Anton, Chief
Division of Water Rights

Dated: May 13, 2003