

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

ORDER WR 2000 – 09 DWR

In the Matter of License 3067 (Application 1589)
RECLAMATION DISTRICT 108, Petitioner

SOURCE: Sacramento River
COUNTY: Colusa and Yolo Counties

ORDER APPROVING IN PART, PETITION FOR TEMPORARY WATER TRANSFER

BY THE CHIEF OF THE DIVISION OF WATER RIGHTS:

1.0 SUBSTANCE OF PETITION

On April 20, 2000,

Reclamation District 108
c/o Luther Hintz, Operations Manager
975 Wilson Bend Road
Grimes, CA 95950

filed with the State Water Resources Control Board (SWRCB), a Petition for Temporary Change involving the transfer of 5,412 acre-feet of water under Water Code section 1725 et seq. The petition asks that the Contra Costa Canal Intake and North Bay Aqueduct (NBA) be temporarily added to the authorized points of diversion and the areas served by Contra Costa Water District and NBA be temporarily added to the place of use under Reclamation District 108's licensed Application 1589. The temporary change would continue for a period beginning from the date of this order and continuing through October 1, 2000 (last day of diversion season under License 3067).

A portion of water diverted under License 3067 (Application 1589) is currently being evapotranspired by terrestrial weed species within the boundaries of Reclamation District 108 (RD108). In order to conserve water and thus operate in a more efficient manner, RD108 is actively preventing weed growth along their supply canals through discing, chaining and herbicide operations. The result of such operations is water conservation of their appropriated rights. Pursuant to Water Code sections 1725 and 1011, RD108 is entitled to transfer appropriated water that would have been consumed in the absence of this water conservation effort.

2.0 BACKGROUND

2.1 Substance of the RD108 License

Licensed Application 1589 was issued to RD108 on February 24, 1950. The license authorizes RD108 to divert up to 255.25 cubic feet per second (cfs) from May 1 to October 1 of each year for irrigation purposes.

3.0 AVAILABILITY OF WATER FOR TRANSFER

The 5412 acre-feet of water proposed for transfer is currently diverted under License 3067. This license allows the direct diversion of 255.25 cfs for the period from May 1 to October 1 for irrigation. In the absence of the proposed transfer, the water would remain available for direct diversion for use by RD108.

4.0 ENVIRONMENTAL CONSIDERATIONS

In accordance with Water Code section 1729, temporary changes involving transfer of water are exempt from the requirements of the California Environmental Quality Act (CEQA - Public Resources Code section 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(a)(2).

To the extent that the water conservation efforts of weed control reduce consumptive use, river flows would increase to the benefit of fishery resources. Terrestrial wildlife could be affected by the weed control efforts as could water quality in the adjacent canals. However, the petitioner claims the weed control program has been in place on a rotating basis for years and no additional efforts will be taken during the year of the transfer. Also, all existing regulations will be followed with

regard to herbicide use. Therefore, this transfer will not cause any additional impacts to fish and wildlife. Additional pumping in the Delta will result from this transfer. Delta pumping at the proposed points of diversion is regulated under Water Right Decision 1641 and the biological opinions issued by the federal fishery agencies under the Endangered Species Act. The transfer will be conditioned upon compliance with these existing regulations.

5.0 COMMENTS RECEIVED ON THE PROPOSED TRANSFER/EXCHANGE

The SWRCB received comments from the Department of Water Resources (DWR) and the U.S. Bureau of Reclamation (USBR).

5.1 Department Of Water Resources Comments

DWR expressed concern over the following issues from their June 12, 2000 letter:

1. RD108 has not demonstrated historical savings of the water subject to transfer and has no proof of a linkage between the canal water and the water absorbed by the weeds.
2. RD108 is using an evapotranspiration rate (ET) of 3 acre-feet/acre while published estimates of ET for native vegetation identify rates of less than 2 acre-feet/acre.
3. If an order is approved, the SWRCB should implement a monitoring program, which identifies acceptable methods of control and reporting requirements.
4. RD108 must transfer the water within the limits of their licenses.
5. RD108 must address the use of herbicides as it relates to fish and wildlife.

5.2 United States Bureau of Reclamation Comments

1. USBR questions the ET of 3 acre-feet/acre and recommends a value of 1.4 acre-feet/acre.
2. USBR questions the linkage of canal water to the root system of the weeds.

3. The proposed transfer could injure legal users of water.
4. USBR is concerned about riparian habitat loss as a result of the weed abatement.
5. USBR requests to identify the end user of the transferred water.

5.3 SWRCB Response to DWR Comments

1. RD108 has not demonstrated historical savings of the water subject to transfer and has no proof of a linkage between the canal water and the water absorbed by the weeds.

While RD108 has not demonstrated historical savings of the water subject to transfer, in the past weeds have been removed from the subject areas along the canals in order to prevent weed migration into the neighboring farmland. These weeds are removed irrespective of whether the transfer is approved and will continue to be removed in the future. Staff from the SWRCB did visit the areas outlined for weed abatement on an unannounced field investigation and while staff could not verify the linkage of canal water to the root system of every weed, staff did find a textbook reference, which supports RD108's claim. The reference from *Groundwater*¹ indicates that capillary fringe, or the ability of water to oppose gravity and rise six or more feet through silty and clay soils, is a well documented phenomena. Soil compositions from Sutter and Colusa County could not be located quickly, however, a soil survey of neighboring Glenn County by the U.S. Department of Agriculture indicates the subsoil of a number of regions to be composed of gravelly clay loams and silty clays. Based on this reference and the absence of an actual soil analysis, the SWRCB has no reason to doubt the ability of canal water to seep and rise via capillary fringe to the root system of the weeds.

2. RD108 is using an evapotranspiration rate of 3 acre-feet/acre while published estimates of ET for native vegetation identify rates of 2 acre-feet/acre. USBR recommends a rate of 1.4 acre-feet/acre.

The predominant weed species present in the subject areas outlined for weed abatement include Johnson Grass, Mustard, Elephant Ear, Morning Glory and Yellow Starthistle. SWRCB staff obtained a study from the Journal of the Weed Society of America², which listed ten different weed species and their soil moisture absorption rates. Although the actual weed species studied

were not those subject to abatement, the moisture absorbed by the studied species likely represents the spectrum of weed species, including the weeds referenced in this petition. The data from this study generally support the three acre-foot/acre ET estimate.

3. If an order is approved, the SWRCB should implement a monitoring program which identifies acceptable methods of control and reporting requirements.

Pursuant to Water Code section 1011, the SWRCB requires the permittee or licensee to report the details of their water use and conservation efforts. This information will be submitted at the end of the transfer period and should also continue to be shown on their report of Licensee. In addition to requiring these forms, following issuance of the order, SWRCB staff may conduct unannounced field investigations of the areas outlined for weed abatement to determine regrowth factors and percent coverage for untreated areas. Photographic evidence will be procured from these visits. The SWRCB will retain continuing authority of this temporary change. If the evidence indicates terms of this order are not being met, the Chief of the Division of Water Rights may modify or revoke this order or take appropriate enforcement action.

4. RD108 must transfer the water within the limits of their licenses.

Unless a separate arrangement can be made with DWR and USBR, RD108 must transfer the water between the date of this order and October 1, 2000 at a rate that is consistent with the rate at which RD108's savings due to weed control accrue. This transfer rate, together with any other direct diversion occurring simultaneously under the License 3067, shall not exceed 255.25 cubic feet per second.

The water exchange contemplated by this proposed transfer could be completed under the water rights of the Central Valley Project (CVP) and the State Water Project (SWP) and would not need approval from the SWRCB if agreements can be obtained from DWR and USBR. Since any water not used by the petitioner due to weed control efforts will accrue in the Delta in very small quantities relative to other flows, this water could be appropriated by DWR and USBR, under their existing water rights. To the extent these small extra flows benefit the CVP and SWP, these projects could release less water to meet Delta Standards and other inbasin uses. This benefit could accrue as extra storage. This additional stored water could then be released

later in the year and used to meet CVP or SWP demands in the service areas set forth in this petition. Therefore, if written agreements are obtained from the DWR and the USBR, RD108 could transfer the water, subject to this petition, at a rate or time that deviates from the rate and time at which the savings accrued, provided the transfer is completed within one year of the date of this order.

5. RD108 must address the use of herbicides as it relates to fish and wildlife.

If RD108 chooses to use herbicides, it must do so in a manner which minimizes the effects to fish, wildlife and downstream water quality resulting from the use of such chemicals, consistent with the label directions and regulations of the Department of Pesticide Regulation, Food and Agriculture and the Department of Fish & Game.

6. The proposed transfer could injure legal users of water.

USBR refers to a Settlement Contract held by RD108 that must have written consent from USBR before any water can be transferred. As this is not a water right related issue, the SWRCB does not regard this reference as having any impact to prevent us from issuing an order. Since this is a contractual issue between USBR and RD108, we will leave it to them to work out an arrangement.

7. USBR is concerned about riparian habitat loss as a result of the weed abatement.

In the absence of the transfer, RD108 will continue its weed abatement operations to prevent weed migration into the neighboring farmland. This abatement has occurred in the past and will continue to do so in the future. Whether the transfer is approved or not, concerns about the loss of riparian habitat due to weed abatement should be evaluated at the time the weed abatement program is developed.

8. USBR requests to identify the end user of the transferred water.

The end user needs to be identified sufficiently to allow the analysis of possible effects on legal users of water and fish and wildlife due to the proposed transfer. The alternative users in the proposed transfer were sufficient to allow this analysis.

6.0 TRANSFER ALLOCATION

The petitioner requested that an evapotranspiration rate of 3 acre-feet/acre be applied to 1804 abated acres for a total amount of transferable water equaling 5,412 acre-feet. Since the transfer is only valid from the order issuance date forward, the SWRCB has prorated the amount requested.

The amount authorized for transfer under the submitted petition was calculated to be 2,392 acre-feet. This amount was determined by adding up the conserved water amounts specified by the petitioner in Attachment 1, Page 6 of the submitted petition for the time period beginning July 10, 2000 and ending October 1, 2000. This calculation was obtained using an irrigation season evapotranspiration rate of 3 acre-feet/acre and the entire 1,804 abated acres.

7.0 SWRCB'S DELEGATION OF AUTHORITY

On April 29, 1999, the SWRCB adopted Resolution 99-031, continuing the delegation of authority to approve petitions for temporary changes to the Chief of the Division of Water Rights, provided the necessary statutory findings can be made.

8.0 CONCLUSIONS

There is adequate information in the Division's files to make the evaluation required by Water Code section 1727; and therefore I find as follows:

I conclude that, based on the available evidence:

1. The proposed temporary change will not injure any legal user of the water.
2. 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.

9.0 REFERENCES

¹ R. Allen Freeze/John A. Cherry *Groundwater* Prentice-Hall, Inc. 1979

² Davis et al. "Root Moisture Extraction Profiles of Various Weeds," *Journal of the Weed Society of America*. Volume 13, April 1965, Number 2

ORDER

NOW, THEREFORE, IT IS ORDERED that the petition for temporary change in the point of diversion and place of use under Reclamation District 108's Licensed Application 1589 is approved.

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

1. Reclamation District 108's petition is approved for the transfer of not to exceed 2,392 acre-feet of water under License 3067 (Application 1589).
2. The transfer shall be carried out between the issuance date of this order and October 1, 2000. The transfer shall be completed within the time frame and diversion rates specified in License 3067. The rate of diversion shall be consistent with the rate at which Reclamation District 108's savings due to weed control accrue. The rate of diversion for water transferred under this order, when taken together with any other simultaneous direct diversions under License 3067, shall not exceed a direct diversion rate of 255.25 cfs. With the written consent of DWR and the USBR, RD108 may transfer the savings at a time and rate that deviate from the time when and the rate at which the savings accrue, provided that the transfer is completed within one year of the date of this order.
3. For the purposes of this transfer, the place of use shall be temporarily changed as follows:

The authorized place of use is temporarily expanded to include the Contra Costa Water District service area as referenced on maps on file with the SWRCB from Applications 5626, 5628, 9363, 9364, 9366, 9367, 13370, 15374, 15375, 16767, 17374, 17376, 18721 and 21637. In addition, the authorized place of use is also temporarily expanded to include the State Water Project place of use associated with the North Bay Aqueduct service area as shown on maps on file with the SWRCB from Applications 17514A and 17515A.

4. For the purposes of this transfer, Licensed Application 1589 is temporarily amended to include the following additional points of diversion:

A point of diversion on the North Bay Aqueduct, located at N 216,400 E 2,064,900 California Coordinated System Zone 2; being within the NE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of projected section 20, T5N, R2E, MDB&M; and

Points of Diversion within the Contra Costa Water District defined as:

- A. Rock Slough – Within the SE $\frac{1}{4}$ of NE $\frac{1}{4}$ of projected section 33, T1N, R3E, MDB&M and/or
 - B. Old River – Within NW $\frac{1}{4}$ of SW $\frac{1}{4}$ of projected section 23, T1N, R3E, MDB&M
5. The right to transfer water in accordance with this order is subject to Reclamation District 108's continued implementation of its weed control program, as that program is described in the temporary change petition. Compliance with the conditions set forth in this order will be determined from information provided by the petitioner and unannounced field investigations by SWRCB staff.
 6. Within 90 days of the completion of the transfer/exchange, the licensee shall provide the Chief of the Division of Water Rights a report describing the use of the water transferred pursuant to this Order. The report shall include a summary showing the monthly amounts of water actually transferred under this Order.

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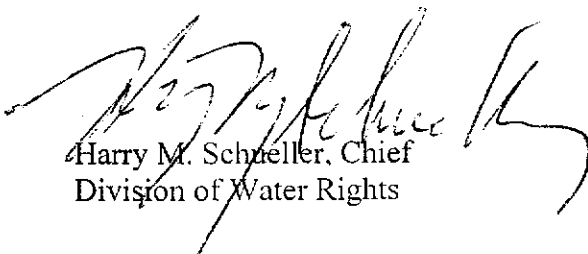
The report should include the following information:

- Detailed description of the weed control efforts including areas treated, regrowth treatments and representative photographs.
 - Estimated water savings due to the weed control efforts.
 - General locations where the transferred water was used;
 - The monthly amounts of water each location received; and
 - The average application rate of water in the locations.
7. Weed control efforts related to this transfer shall be done in a manner consistent with the label directions and guidance from the Department of Pesticide Regulation for any herbicide use and best management practices to reduce chemical and sediment runoff into adjacent waterways as may be established by the Regional Water Quality Control Board.
8. Licensee shall comply with all existing operation standards at the point of diversion including those contained in Water Right Decision 1641, other applicable water right permits, licenses or orders, applicable conditions set forth in biological opinions established under the State or Federal Endangered Species Acts.
9. 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.

10. 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 permittee shall obtain authorization for an incidental take permit prior to construction or operation. Permittee shall be responsible for meeting all requirements of the applicable Endangered Species Act for the temporary transfer authorized under this order.

11. 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.



Harry M. Schneller, Chief
Division of Water Rights

Dated:

JUL 11 2000

