

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

ORDER WR 98 - 09

In the Matter of Extension of Order WR 95-6
or Equivalent Temporary Compliance With
the 1995 Water Quality Control Plan for
the San Francisco Bay/Sacramento-San Joaquin Delta Estuary
CALIFORNIA DEPARTMENT OF WATER RESOURCES
and
UNITED STATES BUREAU OF RECLAMATION
Permittees and Licensees

SOURCES: Sacramento and San Joaquin Rivers and their tributaries, and the Sacramento-San Joaquin Delta Estuary

ORDER EXTENDING THE EFFECTIVE TERM OF SWRCB ORDER WR 95-6
REGARDING DIVERSION OF WATERS FROM
THE SAN FRANCISCO BAY/SACRAMENTO-SAN JOAQUIN DELTA ESTUARY

BY THE BOARD:

1.0 INTRODUCTION

On May 22, 1995, the State Water Resources Control Board (SWRCB) adopted the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (1995 Bay-Delta Plan). On June 8, 1995, the SWRCB adopted SWRCB Order WR 95-6 (Order WR 95-6), temporarily amending certain terms and conditions of the water rights of the State Water Project (SWP) and Central Valley Project (CVP). Order WR 95-6 substituted certain objectives adopted in the 1995 Bay-Delta Plan for corresponding water quality objectives required to be met under the water rights of the SWP and the CVP. In effect, Order WR 95-6 temporarily made the SWP's and the CVP's water rights consistent with their voluntary compliance with the objectives in the 1995 Bay-Delta Plan. The terms and conditions amended by Order WR 95-6 were adopted in SWRCB Decision 1485 (D-1485) in 1978.

The requirements in Order WR 95-6 address striped bass spawning, Suisun Marsh. export limits, and Delta Cross Channel gate operations. Order WR 95-6 also temporarily authorizes the SWP and the CVP to jointly use each other's points of diversion in the southern Delta. for the purpose of making up reductions in exports implemented to improve fish protection. Such make-up pumping is allowed only when several conditions are met. Finally, Order WR 95-6 temporarily changed the Vernalis salinity standard under SWRCB Decision 1422 (D-1422) to the corresponding Vernalis salinity objective in the 1995 Bay-Delta Plan. Unless extended, Order 95-6 will expire on December 31, 1998.

On September 6, 1995, the SWRCB adopted SWRCB Order WR 95-14 (Order WR 95-14), denying petitions for reconsideration of Order WR 95-6.

On December 2, 1997, the SWRCB gave notice of a public hearing to commence on March 9, 1998, to consider, among other issues, alternatives to implement the 1995 Bay-Delta Plan. A Revised Notice of Public Hearing was issued on May 6, 1998. The revised notice divided the hearing into phases with Phase 1 covering the issue of whether the SWRCB should extend the effective period of Order WR 95-6 or allow equivalent temporary compliance with the 1995 Bay-Delta Plan. The notice asks whether the order should be extended, and if so, how long the order should be extended and under what terms and conditions. On July 1, 2, and 14, 1998, the SWRCB conducted Phase 1 of the hearing and received evidence from the interested parties on Key Hearing Issue 1 in the Revised Notice. The hearing officer set August 14, 1998, as the date for parties to submit written closing statements. These statements were to be submitted by mail and postmarked by August 14, 1998. The SWRCB has considered all of the evidence and arguments in the hearing record for Phase 1. The SWRCB finds as follows:

2.0 BACKGROUND

The Bay-Delta Estuary includes the Sacramento-San Joaquin Delta, Suisun Marsh and the embayments upstream of the Golden Gate. The Delta and Suisun Marsh are located where California's two major river systems, the Sacramento and San Joaquin rivers, converge to flow westward through San Francisco Bay. The watershed of the Bay-Delta Estuary is a source of water supplies for much of the state. The water is used for municipal, industrial, agricultural, and

aquatic environment purposes. The watershed is a source of drinking water for two-thirds of the state's population. The SWP, operated by the Department of Water Resources (DWR), and the CVP, operated by the U.S. Bureau of Reclamation (USBR), release previously-stored water into the Delta where they redivert the stored water and also divert natural flow. The water diverted by the two projects in the Delta is exported to areas south and west of the Delta through a system of water conveyance facilities.

2.1 Existing Water Rights

The DWR and the USBR have permits and licenses to appropriate water. The SWRCB issued the USBR permits for much of the CVP pursuant to SWRCB Decision 990 (D-990), adopted in February 1961. The USBR was issued permits to divert water from the Trinity River pursuant to Permit Order 124. The SWRCB issued the DWR permits for the SWP pursuant to SWRCB Decision 1275 (D-1275), which was revised in SWRCB Decision 1291 (D-1291). In August 1978, the SWRCB adopted the Water Quality Control Plan for the Sacramento-San Joaquin Delta and Suisun Marsh (1978 Plan), which established revised water quality objectives for flow and salinity in the Delta and Suisun Marsh. In D-1485, also adopted in August 1978, the SWRCB required the DWR and the USBR to operate the CVP and the SWP to meet all the 1978 Plan objectives except some of the salinity objectives in the southern Delta. In 1991, the SWRCB adopted a water quality control plan (1991 Plan) which superseded parts of the 1978 Plan, but the SWRCB did not revise the water rights of the DWR and the USBR to reflect the objectives in the 1991 Plan.

2.2 Events Leading to Order 95-6

In March 1994, the SWRCB commenced a proceeding to revise the water quality objectives for the Bay-Delta Estuary. The SWRCB urged interested parties to negotiate with other parties and to develop alternatives for revising the previous water quality objectives for the Bay-Delta Estuary. After negotiations, a number of parties agreed upon a recommendation to the SWRCB for changes in the Bay-Delta water quality objectives. This agreement is called the Principles for Agreement on Bay-Delta Standards Between the State of California and the Federal Government (Principles for Agreement). The Principles for Agreement was signed on

behalf of numerous urban, agricultural and environmental interest groups and governmental agencies on December 15, 1994.

The draft 1995 Bay-Delta Plan was released on December 15, 1994. The SWRCB used several elements of the Principles for Agreement (with some modifications) and the other recommendations from interested parties in preparing the draft plan. The DWR and the USBR decided shortly after December 15, 1994 to meet immediately the standards in the Principles for Agreement and in the draft 1995 Bay-Delta Plan. On May 22, 1995, after holding a hearing and receiving comments, the SWRCB adopted the 1995 Bay-Delta Plan. The 1995 Bay-Delta Plan supersedes both the 1978 Plan and the 1991 Plan. As noted above, the SWRCB adopted Order WR 95-6 on June 8, 1995. The SWRCB is conducting a comprehensive water right hearing to determine the responsibilities of water right holders within the watersheds of the Bay-Delta Estuary to meet the objectives in the 1995 Bay-Delta Plan. The hearing includes the rights of numerous water right holders in addition to the DWR and the USBR. The SWRCB expects to make a decision before the end of 1999 based on the record of the comprehensive hearing.

3.0 POSITIONS OF THE PARTIES

A number of parties to the water right hearing presented opening statements regarding extension of Order WR 95-6 but did not present evidence in Phase 1. San Joaquin County, Central Delta Water Agency (CDWA), Westlands Water District (WWD), San Luis and Delta Mendota Water Authority (SLDMWA), and South Delta Water Agency (SDWA) presented cases-in-chief in Phase 1.

3.1 Positions of the Parties not Presenting Evidence

DWR supported an extension of Order WR 95-6 as written until the current Bay-Delta hearing is completed and the SWRCB issues a decision on implementing the 1995 Bay-Delta Plan. The State Water Contractors (SWC) and the Department of Fish and Game (DFG) each supported a one-year extension. Regional Council of Rural Counties (RCRC) and Contra Costa Water District (CCWD) expressed qualified support for an extension.

The United States Department of the Interior (DOI) supported extending Order WR 95-6 through September 30, 1999. This extension would allow the SWP and the CVP to plan water allocations for the 1999 irrigation season. The DOI asked in its closing brief that, in adopting an extension, the SWRCB approve the San Joaquin River Agreement.

The SWRCB is not in a position to approve the San Joaquin River Agreement at this time, since the hearing record is not complete on the agreement. Additionally, a temporary approval of the agreement is unnecessary, since the DOI should be able to obtain the water it needs in 1999 for voluntary compliance with the objectives or to conduct the experiments under the Vernalis Adaptive Management Plan by buying water pursuant to temporary water transfers.¹

Accordingly, this Order does not include any action regarding the San Joaquin River Agreement.

Stockton East Water District (SEWD) requested that any order of the SWRCB regarding an extension of Order WR 95-6 clarify that Order WR 95-6 does not impose any obligation upon any party to meet the flow objectives in the 1995 Bay-Delta Plan. That order made changes to the water right permits of the SWP and CVP that facilitate those projects' voluntary compliance with the flow objectives. More specifically, SEWD would like this order to make clear that the USBR is not required to make releases from New Melones Reservoir to meet the Vernalis flow objective.²

The San Joaquin River Group Authority (SJRGA) supported the extension of Order WR 95-6 and the Bay-Delta Accord for the duration of the SWRCB's hearing, but reserved the right to challenge Order WR 95-6 if SJRGA's "waters are adversely affected."

Area 1 of Westlands Water District (Area 1) resubmitted its 1995 brief regarding the claims of its landowners to CVP irrigation water and its request that the order that became Order WR 95-6 be a temporary order.

¹ The sellers of such water may need to seek and obtain temporary changes in their water rights.

² The Vernalis flow objective is not included in this order.

A group of water users who obtain water from areas north of the Delta (Richvale Parties³) argued that no extension is needed because the CVP and SWP currently are required, pursuant to SWRCB Decisions 990 and 1275, to meet the Bay-Delta flow requirements.

3.2 Positions of the Parties Presenting Evidence

San Joaquin County opposed any extension of Order WR 95-6. San Joaquin County argued that it is protected by the Watershed Protection Act (Wat. Code §§ 11460 et seq.), the Delta Protection Act (Wat. Code §§ 12200 et seq.), the San Joaquin River Protection Act (Wat. Code §§ 12230 et seq.), and California Constitution, article X, section 2. San Joaquin County argues that meeting the Vernalis flow objectives by releasing fresh water from New Melones Reservoir is unfair to San Joaquin County and violates the above authorities. San Joaquin County's witness testified that fresh water from New Melones Reservoir is desperately needed in San Joaquin County as an alternative to pumping groundwater from the critically overdrafted eastern San Joaquin County groundwater basin. The DWR estimates the overdraft at 70,000 acre-feet per year. (SWRCB 65.) Overdraft in this basin is impairing water quality by causing the migration of saline water from Delta sediment into the fresh groundwater basin.

Although several water purveyors in San Joaquin County have contracts with the USBR for water from New Melones Reservoir, they have not received all the water they request under their contracts. San Joaquin County attributes the shortage in water deliveries to the releases the USBR is making from New Melones Reservoir to meet the Vernalis flow objectives. To the extent that Order WR 95-6 facilitates the use of New Melones water to meet the Vernalis objectives, San Joaquin County argues that extension of Order WR 95-6 will harm the County's ability to meet its long term water supply needs and will contribute to the overdraft and destruction of water quality in the Eastern San Joaquin County groundwater basin.

³ The "Richvale Parties" include Richvale Irrigation District, Biggs West Gridley Water District, Sutter Extension Water District, Nevada Irrigation District, Butte Water District, Byron Bethany Irrigation District, Western Canal Water District, Oroville-Wyandotte Irrigation District, M&T Ranch, Tudor Mutual Water District, Garden Highway Mutual Water District, Plumas Mutual Water District, Reclamation District No. 1004, Orland Unit Water Users Association, Solano Irrigation District, and Cordua Irrigation District.

Central Delta Water Agency (CDWA) asserted the protection of Water Code sections 11460 and 11462, and asked for eight changes if Order WR 95-6 is extended:

1. Reduce CVP export pumping by the quantity of water delivered to areas outside the permitted place of use for the CVP;
2. Prohibit delivery of CVP exports pumped using joint points of diversion in the southern Delta to areas outside of the authorized place of use for the CVP;
3. Prohibit joint use of points of diversion for make-up pumping for delivery to areas on the west side of the San Joaquin Valley which directly or indirectly add salts to the San Joaquin River;
4. Provide water to meet the San Joaquin River and Delta fishery objectives using exported water to the extent necessary to maximize the amount of water available from New Melones Reservoir for delivery to meet the contracts of the Stockton East Water District and Central San Joaquin Water Conservation District and assure that there is no detriment to Delta water users from the use of water from other San Joaquin River tributary sources;
5. Maintain the Vernalis salinity objective with export water and/or actions in the export water service areas, and make supplemental releases from New Melones Reservoir to assure full compliance;
6. Maintain daily a positive net downstream flow at all times in the stretch of the San Joaquin River between the Merced River and Turner Cut;
7. Include March and September in the irrigation season protection provided by the Vernalis salinity objective; and
8. Curtail export pumping when necessary to avoid loss of operating water levels at irrigation siphons and pumps in the south and central Delta areas.

WWD and SLDMWA supported extension of Order WR 95-6 if it is conditioned on an extension of the Principles for Agreement by the DWR and DOI. (RT p. 211.) This order is not so conditioned, and DWR and DOI have extended their commitments under the Principles for Agreement.

South Delta Water Agency (SDWA) opposed the extension of Order WR 95-6. SDWA argues that its members' downstream riparian and pre-1914 appropriative rights are being harmed due to operations allowed under Order WR 95-6. SDWA provided evidence that the USBR operations

plan anticipates violation of the Vernalis salinity objective in 40 percent of the years.
(SDWA 27.)

SDWA's evidence also indicates that the yield of New Melones Reservoir is insufficient to meet the demand on it for fish flows, dilution flows and water supply. SDWA argued that the USBR is exercising discretion to meet or forego its different obligations in the San Joaquin Valley and it is not taking any action to reduce the demand on New Melones Reservoir for dilution flows. SDWA's witness testified that the demand for dilution flows could be lessened by controlling or reducing the discharge to the San Joaquin River of agricultural drainage water or by reducing exports to the San Joaquin Valley to control the production of agricultural drainage water. SDWA argued that a system of monitoring and forecasting water levels and channel water quality is needed to protect south Delta farmers from impacts due to operation of the CVP.
(SDWA 27.)

SDWA's witness also testified that the Vernalis salinity standard does not protect agricultural beneficial uses of water in March of dry years and in September for purposes of irrigating orchard crops. (RT p. 284.)

SDWA argued that if Order WR 95-6 is extended, the SWRCB should include a limit on exports by the CVP and should warn the USBR that it must strive to meet the salinity requirements through any means available.

3.3 Issues Raised in Opposition to Extension

As listed above, parties opposing extension of Order WR 95-6 made numerous legal arguments. Parties in San Joaquin County, the central Delta, and the southern Delta invoked the protection of several statutes that apply to exports of water by the DWR and the USBR and to actions affecting the Delta and the San Joaquin River. These include the watershed of origin statutes at Water Code sections 11460 et seq., the Delta protections at Water Code sections 12200 et seq., the San Joaquin River protections at Water Code sections 12300 et seq., and California Constitution, article X, section 2. Area 1 of Westlands Water District (Area 1) resubmitted its 1995 brief regarding the claims of its landowners. The discussions of Area 1's claims set forth in

Order WR 95-6 (pp. 25-26) and in Order WR 95-14 (pp. 4-5) are incorporated herein by reference to address the issues set forth in the 1995 brief. CEQA compliance is discussed in section 5.1 below. The other issues are discussed in this section.

3.3.1 Compliance With Water Code Section 1702

This order extends the effective period of Order WR 95-6, which temporarily granted a joint petition filed by the DWR and the USBR to add points of diversion for the SWP and the CVP. Accordingly, this order is an extension of a limited term change in the water rights of the DWR and the USBR, and is subject to the provisions of Water Code sections 1700 et seq.

Additionally, the SWRCB follows, to the extent applicable, the procedures set forth in sections 1700 et seq. when it considers changes in permit terms and conditions other than points of diversion, place of use, and purpose of use. (Cal. Code Regs., tit. 23, § 791(e).) The discussions of compliance with Water Code sections 1700 et seq. that are set forth in Orders WR 95-6 and WR 95-14, are incorporated herein by reference as if fully set forth. (See Order WR 95-6, pp. 12-13, 18-31; Order WR 95-14, pp. 19-26.)

South Delta Water Agency claims injury and that it will continue to be injured by the changes approved in Order WR 95-6 and temporarily continued in this order. There will be no injury to agricultural water users in the southern Delta because, as pointed out in section 3.3.3 below, the USBR will meet the Vernalis salinity objective in 1999.

The landowners in Area I refiled their brief regarding injury to their interests from the proceeding leading to Order WR 95-6. The discussion in Orders WR 95-6 and WR 95-14 adequately responds to Area I's argument. Additionally, the USBR's water right permits and licenses, while they authorize the USBR to divert water for beneficial uses, do not require the USBR to appropriate the water as authorized. When the USBR decides to take less water than it is allowed and supplies less water to a contract holder than the contract holder claims as an entitlement, the contract holder's dispute is with the USBR.

3.3.2 Watershed Preferences and Place of Use Limitations

Some parties in the hearing contend that operation of the projects pursuant to Order WR 95-6 contributes to water supply problems in San Joaquin County, has resulted in frequent violations of the Vernalis salinity standard, and has impaired water diversions in the central and south Delta through low water levels in channels.

Some San Joaquin County interests stated that they had requested more water from New Melones Reservoir under contracts with the USBR than they were being supplied. More water is needed in San Joaquin County to meet long-term water supply needs and reverse the critical overdraft of the eastern San Joaquin County groundwater basin. The place of use for consumptive uses of water appropriated pursuant to USBR's New Melones permits is limited to a four county area that includes San Joaquin County. The limitation of consumptive uses to the four county area prevents the USBR from selling New Melones water for consumptive uses outside these counties, but it does not preclude the USBR from releasing the water for fish flow and water quality purposes downstream at Vernalis. Further, nothing in the USBR's water right permits requires the USBR to contract with Stockton East Water District or Central San Joaquin Water Conservation District.

Some San Joaquin County parties claim various bases for assuring them a preference to a water supply. One basis asserted is the watershed of origin law, at Water Code sections 11460-11463. Together with Water Code section 11128, this law prohibits both the DWR and the USBR from depriving the watershed or area of origin, or an area immediately adjacent to it, of the prior right to all of the water reasonably required to adequately supply the beneficial needs of the watershed or area, or its inhabitants and property owners. These two statutes prohibit delivery of water for uses outside the protected areas to the extent that water needs within the protected areas meet the statutory tests. To obtain the benefit of these statutes, a water user in a protected area may file a water right application and receive a permit with seniority over the rights of the DWR or the USBR to export water from the area. Alternatively, the water user could seek to contract for water supplies from the DWR or the USBR.

One party, Central Delta Water Agency, argues that under Water Code section 11462, the USBR can be ordered to deliver water, for adequate compensation, without a contract. We need not decide whether section 11462 should be interpreted to require delivery of water without a contract, however, because section 11462 does not apply to the USBR. Water Code sections 11460-11463 all apply, by their terms, only to the "department." The "department" is the DWR. (Wat. Code § 22.) Water Code section 11128 applies the limitations imposed by Water Code sections 11460 and 11463 to "any agency of the State or Federal Government which shall undertake the construction or operation of the project. . . ." It does not apply the limitations in Water Code sections 11461 and 11462 to the USBR or any other agency that is not the DWR. Consequently, the SWRCB cannot, under Water Code section 11462, require the USBR to deliver water to these specific parties. The limitation on the USBR's rights under sections 11460 and 11463 has been incorporated into the New Melones permits by authorizing consumptive use of water appropriated pursuant to the permits only within the four county place of use.

Order WR 95-6 does not authorize the USBR to violate its place of use limitations. Further, the circumstances causing the USBR to have inadequate water to deliver to its existing contractors within the place of use would exist in the absence of Order WR 95-6. These circumstances involve compliance with the federal Endangered Species Act, meeting instream flows on the Stanislaus River, satisfying prior water rights, and complying with water quality requirements and requirements under the Central Valley Project Improvement Act of 1992 (CVPIA) (Pub. L. No. 102-575, title 34). Moreover, if a party believes a water right violation is occurring, the appropriate remedy is to file a complaint with the SWRCB against the USBR, seeking to enforce the terms of the USBR's water right permits. Further, the evidence does not show that the USBR is delivering water appropriated at New Melones Reservoir in violation of the place of use term to places of use outside the four counties. The USBR releases water from New Melones Reservoir pursuant to its obligations under the federal Endangered Species Act to ensure that there are adequate flows for fish protection at Vernalis, but the released water is abandoned when it reaches Vernalis. The SWRCB recognizes that the same water may again be appropriated in the Delta by water right holders that include the USBR, but such appropriation would be made under other water rights that do not include the place of use limitations in the New Melones

permits, and the USBR does not have a priority adequate to export the entire amount for its own uses.

3.3.3 Salinity Control in the Southern Delta for Agriculture

SDWA and San Joaquin County asserted protection of their water supplies under Water Code sections 12200 et seq. Section 12202 provides that the DWR and the USBR shall provide salinity control and an adequate water supply for the users of water in the Delta. Section 12203 provides that it is state policy that no person, corporation or public or private agency or the State or the United States should divert water from the channels of the Delta to which the users within the Delta are entitled. Section 12204 provides that no water shall be exported from the Delta which is necessary to meet the requirements of sections 12202 and 12203. The Vernalis salinity objective and the requirement in Order WR 95-6 that it be implemented are consistent with these requirements. By adopting water quality objectives to protect Delta agriculture, the SWRCB has determined that meeting the salinity objectives will protect the agricultural beneficial uses in the Delta. The DWR and the USBR currently are required by Order WR 95-6 and D-1485 to meet the salinity objectives in the Delta.

Past releases from New Melones Reservoir sometimes have not been adequate to meet the Vernalis salinity objective adopted in Order WR 95-6, although there is no evidence that the objective has been violated in the past three years, which were classified "wet" according to the San Joaquin River Index. The SDWA presented evidence that, under the interim operation plan for New Melones Reservoir, the USBR predicts that the objective will be violated in approximately 40 percent of the years of operation under the plan. If releases from New Melones Reservoir were insufficient to meet the Vernalis salinity objective, the USBR could find water from other sources, such as willing sellers, to comply with the standard. If the salinity objective were not met, the USBR could be subject to enforcement action under the Water Code. For 1999, however, the USBR has projected that it will meet the Vernalis salinity objective because it has a high water storage level in New Melones Reservoir that will carry over into 1999.

As part of the extension of Order WR 95-6, SDWA and San Joaquin County are asking the SWRCB to require control of saline discharges to the San Joaquin River at their sources on the

west side of the San Joaquin Valley, or require the USBR to provide dilution flows from sources other than New Melones Reservoir if Order WR 95-6 is extended. The requested action is beyond the scope of this order, and is unnecessary to an extension of Order WR 95-6 because compliance with the objective already is a requirement. Further, any violation of this objective would not be prevented by letting Order WR 95-6 expire. The SWRCB is receiving evidence on source control and recirculation alternatives in its comprehensive water rights proceeding, and will consider these alternatives after it completes the hearing record.

The SDWA requested that the irrigation season protection provided by the Vernalis salinity objective include March and September. The SWRCB denied a similar request to require lower salinity protection in September and October in Order WR 95-6 because soil salinity would be lower in those months due to implementation of the new salinity objective in April through August. Thus, protection in September is unnecessary. No evidence in the hearing record justifies extending the protections into March and September. This salinity protection meets the water quality objectives in the 1995 Bay-Delta Plan. Therefore, the period of irrigation season protection will remain unchanged in this order. The SWRCB may review the Vernalis salinity objective when it conducts the next review of the 1995 Bay-Delta Plan.

The SDWA also presented evidence that it was harmed in the last three years when the USBR used the joint point of diversion to recover water foregone in the spring to benefit fisheries. The SDWA stated that the joint point pumping caused low water levels in south Delta channels that interfered with agricultural diversions in the Delta. To prevent any adverse effects to SDWA as a result of the joint point pumping, this order requires the DWR and the USBR to consult with the SDWA and submit a response plan to the SWRCB prior to joint point pumping. The response plan will indicate how the DWR and USBR will avoid causing water level problems that they control in the southern and central Delta when they are conducting make-up pumping. This order also directs the DWR and the USBR to conduct studies to develop a better understanding of how make-up pumping affects operating water levels for agricultural diversions in the central and southern Delta.

3.3.4 San Joaquin River Protections

San Joaquin County argued that Order WR 95-6 should not be extended, because it would unjustly delay remedial actions needed to reduce the salinity reaching the Delta from the San Joaquin River. San Joaquin County invoked the San Joaquin River protections at Water Code sections 12230 et seq. Section 12230 declares that a serious water quality problem exists in the San Joaquin River between the Merced River and Middle River. Section 12232 forbids state agencies, including the SWRCB and the DWR, from taking any action to cause further significant degradation of water quality in the protected reach. Section 12233 provides, however, that this law shall not affect any vested right to the use of water for which an application to appropriate water was filed with the SWRCB prior to June 17, 1961. On the San Joaquin River, Order WR 95-6 affects only the New Melones permits of the USBR. The applications for the permits held by the USBR to appropriate water at New Melones Reservoir on the Stanislaus River were filed on March 11, 1960 and on June 16, 1952. Since these applications preceded the enactment of Water Code sections 12230 et seq., the permits for New Melones Reservoir are not subject to these sections. Accordingly, Water Code sections 12230 et seq. are not a basis for not extending Order WR 95-6. The SWRCB recognizes the importance of improving salinity levels, and is considering the responsibilities for meeting the salinity standards in the southern Delta in its comprehensive water right proceeding.

3.3.5 Reasonable and Beneficial Use Considerations

San Joaquin County argues that using high quality water from New Melones Reservoir to dilute salts that drain into the San Joaquin River is a violation of California Constitution, article X, section 2, because it precludes this water from being placed to its highest beneficial uses. Again, this is a claim of a violation, but the current proceeding was not noticed for the purpose of taking action against alleged violations. Further, any action or inaction regarding Order WR 95-6 would not affect the amount of New Melones water used for dilution. Approximately the same amount of water is needed for dilution under Order WR 95-6 as would be needed under D-1422. In the absence of an extension of the effective period of Order WR 95-6, the New Melones permits would still be subject to meeting salinity standards at Vernalis, because this is required in D-1422. Additionally, while San Joaquin County is correct that there are other beneficial uses

for this water, there is not yet a means of fully controlling the discharges of salts to the San Joaquin River. This will require actions by the Regional Water Quality Control Board for the Central Valley Region.

3.3.6 Effect of USBR Deliveries Outside Its Place of Use

CDWA argues that the SWRCB should in this order forbid the USBR to deliver water to areas outside of the places of use authorized in its water right permits. The USBR has filed a petition to change and consolidate specified places of use and purposes of use in its water right permits to make the permits consistent with the integrated operations of the CVP. Part of the petition includes lands within CVP contractors' service areas that are currently receiving CVP water but are outside of the authorized place of use. The SWRCB will hear evidence on whether or not to grant the change petition during Phase 7 of its comprehensive water right proceeding on the Bay-Delta issues. There is no direct linkage between the deliveries to places of use outside the authorized place of use and the changes authorized by Order WR 95-6, since Order WR 95-6 does not accommodate any increase in exports from the southern Delta to deliver water to these places of use.

3.3.7 Downstream Flows

The CDWA asked that the SWRCB require maintenance of a daily positive net downstream flow at all times in the reach of the San Joaquin River between the Merced River confluence and Turner Cut. This request is beyond the scope of Phase 1. Further, the record of Phase 1 does not explore the effects of implementing this request.

3.3.8 Current Obligations of the DWR and the USBR

The Richvale Parties neither presented an opening statement nor presented evidence, but they filed a brief arguing that no extension of Order WR 95-6 is needed because the USBR and DWR currently are required, pursuant to SWRCB Decisions 990 and 1275 (D-990 and D-1275), to meet the Bay-Delta flow requirements. The Richvale Parties argue that D-990 and D-1275 must be reopened before the rights of the DWR and the USBR can be changed. The Richvale Parties are misconstruing D-990 and D-1275. These decisions, which are in the nature of opinions with orders at the end specifying the actions to be taken, approved or partially approved the water

right applications of the DWR and the USBR. Permits subsequently were issued containing the terms and conditions specified in the decisions. Because the permits, not the decisions, constitute the authorization to appropriate water, the permits may be amended in a subsequent decision without amending the previous decisions. The water right permits issued to the DWR and the USBR pursuant to D-990 and D-1275 were amended pursuant to D-1485. D-1485 added terms and conditions to these permits and other permits of the DWR and USBR, requiring that the two projects meet certain water quality objectives adopted in the 1978 Plan. Order WR 95-6 temporarily amended D-1485, substituting some of the objectives from the 1995 Bay-Delta Plan for the objectives specified in D-1485. The SWRCB gave notice in the Notice of Public Hearing and in the Revised Notice of Public Hearing that the permits of the DWR and the USBR were under consideration. Thus, the products of D-990 and of D-1275, i.e., the permits, have previously been reopened, and are currently under consideration in this order and in the comprehensive water right hearing. To subject the permits of the DWR and the USBR to the substituted water quality objectives, it is necessary to take this action. Without it, the permits of the DWR and the USBR would not be subject to any of the objectives in the 1995 Bay-Delta Plan.

Additionally, the Richvale Parties raise numerous issues regarding the relative priorities of the DWR, USBR, and water right holders within the areas of origin. The relative rights of the parties are not determined in this extension of Order WR 95-6, which affects only the water rights of the DWR and the USBR. Accordingly, the SWRCB believes that this temporary order does not affect any water rights held by the Richvale Parties.

4.0 ENVIRONMENTAL CONSIDERATIONS

4.1 Environmental Documentation

Under CEQA, the SWRCB is the lead agency for preparation of environmental documentation on this action. The Environmental Report (ER) the SWRCB prepared in connection with the 1995 Bay-Delta Plan (SWRCB 7e, Appendix 1) is the environmental documentation for this action. The SWRCB used the ER as the environmental documentation for Order WR 95-6. The ER remains applicable because this order extends the effective period of Order WR 95-6 and

does not add to the significant effects on the environment. The ER analyzes the environmental effects of implementing the 1995 Bay-Delta Plan.

The 1995 Bay-Delta Plan was prepared in accordance with a program certified under Public Resources Code section 21080.5. Under section 21080.5, the SWRCB's overall action of adopting a water quality control plan and temporarily implementing it is exempt from the requirements for preparing environmental impact reports, negative declarations, and initial studies, because the initial part of the action was taken under a certified program. Because the ER is a substitute for an EIR or negative declaration, it is functionally equivalent to the environmental analysis that otherwise would be required by CEQA.

The use of the ER as the environmental documentation for Order WR 95-6 and, by extension, for this order is explained in detail in Order WR 95-6, sections 5.1, 5.2, and 5.3, and in Order WR 95-14, sections 5.1.1 and 5.1.2. There are no additional effects on the environment as a result of this order. Accordingly, the cited parts of Orders WR 95-6 and 95-14 are incorporated herein by reference as if fully set forth.

4.2 Environmental Effects of This Action

This action temporarily continues the significant effects of Order WR 95-6. A detailed discussion of these effects is contained in the ER at Chapters VII (Water Supply Impacts), Chapter VIII (Environmental Impacts), Chapter XII (Economic Impacts), and Chapter XIII (Effects of Preferred Alternative on Special Status Species). The effects of this action are summarized below.

4.2.1 General Biological and Water Supply Effects

Revising and temporarily implementing the objectives provides an essential component of the comprehensive regulatory package that will protect the estuary's beneficial uses. The overall package includes better salinity protection (from saltwater intrusion and agricultural drainage) and improved protections from water project operations that affect flow and entrain fish. (SWRCB 7e, p. 3.) The effect of extending Order WR 95-6, together with the other regulatory actions, will be to extend full implementation of the new objectives for one more year. Within

the next year, the SWRCB expects to adopt a water right decision that provides long-term protection for the estuary's beneficial uses and determines the responsibility for meeting these objectives among water right holders within the watersheds of the estuary. Meeting the objectives will have the beneficial effect of improving the protections for fish species, especially in dry years, compared with meeting the requirements under D-1485. These protections are necessary because the estuary's fishery resources declined precipitously during the years preceding adoption of Order WR 95-6.

This order will remain in effect only until the comprehensive water right proceeding is completed or through December 31, 1999, whichever comes first. The limited term of this order avoids long-term significant environmental effects. During the effective period of this order, improved protections for the estuary's fisheries will come from increased outflow requirements imposed under the Endangered Species Act (ESA) and decreased exports in dry years. This has caused a decrease in water available for out of stream uses. This loss of water supply could result in temporary environmental effects in the areas of water use during the next year. Any such effects will be short-term effects since this order will extend the effective period of Order WR 95-6 for no more than one year and this order minimizes the effects through terms and conditions. The benefits of continuing the protections for fish and wildlife uses in the estuary during the next year outweigh any short-term significant environmental effect that could occur due to temporarily implementing the 1995 Bay-Delta Plan.

In wet years the revised requirements actually may provide increased water supplies to areas outside the estuary compared with exports available under D-1485. There may be some corresponding decrease in environmental protection for estuarine uses in wet years. While the increase in water supply in wet years helps to offset the water supply impacts in dry years, it does not entirely offset these impacts. Overall, meeting the current objectives is expected to provide better protection to fish and wildlife resources in the Bay-Delta Estuary at the expense of developed water supply.

As explained in Order WR 95-6 and in Order WR 95-14, the ER compares the impacts of implementing the 1995 Bay-Delta Plan with D-1485. It does not compare these specific changes

with actions taken under the ESA. The approach taken in the ER is appropriate, since the ESA actions and Order WR 95-6 are consistent and together change the previous regimen in which only D-1485 controlled protection of the beneficial uses of the Bay-Delta Estuary. Because the effect of this order is to complete the short-term implementation of the 1995 Bay-Delta Plan, the effects of this individual order should be compared with D-1485, not D-1485 plus the ESA requirements.

4.2.2 San Joaquin River Water Supply and Salinity

The ER, on pages VII-9 to VII-11, discusses the effects of these standards on water supply in the San Joaquin River Basin. The ER on pages VIII-10 to VIII-24 discusses the environmental effects on water quality and water levels of implementing the new objectives in the San Joaquin River, the central Delta and the southern Delta. This subject also is discussed in Order WR 95-6, and the discussion therein remains applicable. Accordingly, it is incorporated herein by reference rather than being repeated.

The flow requirements of the USBR under the biological opinion issued by the USFWS for Delta smelt have a large effect on flow, water level, and water supply along the San Joaquin River. The issuance of the biological opinion by the USFWS to protect this endangered species has a profound effect on the San Joaquin River, both in terms of providing better protection to fish and in terms of affecting water supplies upstream that will now be used to meet these higher instream flows. As long as the USBR has the sole responsibility to meet these fishery flows, the USBR may not always be able to meet these flows from New Melones Reservoir, because of the limited water supply capacity of New Melones Reservoir. In this interim period, the USBR is required under its water right permit terms to protect prior rights, fisheries, and water quality in the Stanislaus River Basin downstream to Vernalis.

4.2.3 Water Levels

The ER describes impacts to water levels in the southern and central Delta on page VIII-24 based on modeling results that use the same assumptions described above for the salinity analysis. Generally, water levels should improve compared with D-1485 under comparable physical

conditions. The discussion of water levels in Order WR 95-6 remains applicable and is not repeated herein. It is incorporated by reference.

4.2.4 Central Delta Salinity

The discussion of Central Delta salinity in Order WR 95-6 remains applicable in this order and is not repeated herein. It is incorporated by reference.

4.2.5 Dissolved Oxygen

The discussion of dissolved oxygen in Order WR 95-6 remains applicable in this order and is not repeated herein. It is incorporated by reference.

4.3 Environmental Documentation for Joint Points of Diversion

The discussion of environmental documentation for the joint points of diversion in Order WR 95-6 remains applicable in this order and is not repeated herein. It is incorporated by reference.

As discussed in Order WR 95-6, the SWRCB limited the approval of the joint points of diversion in order to avoid causing significant adverse effects on the environment. Conditions 5.a.(3) and 5.b.(3) of Order WR 95-6 condition the use of the joint points of diversion by requiring that any increase in diversions by either the DWR, above 10,350 cfs, or the USBR, above 4,600 cfs from the Delta or 4,200 to storage in San Luis Reservoir, as a result of using the joint points of diversion must occur within six months of an export reduction below the export limits set forth in Attachment B of Order WR 95-6.

Since the adoption of Order WR 95-6, operations using the joint points of diversion have demonstrated that the six month limit on using the joint points of diversion constrains the flexibility of the USBR and the DWR to select the best time period in which to make up for export reductions while avoiding any potential adverse effect on fish in the Delta. Accordingly, this order changes the six month limit to a twelve month limit.

4.4 Findings Under Public Resources Code Section 21081 and Under Title 14, California Code of Regulations, Section 15091

The findings under Public Resources Code section 21081 and under Title 14, California Code of Regulations, section 15091 set forth in Order WR 95-6 are unchanged, and the discussion therein remains applicable in this order. Therefore, it is not repeated herein. It is incorporated by reference.

5.0 COMPLIANCE WITH TERM 3 OF ORDER WR 95-6 REGARDING REVIEW OF SUISUN MARSH WATER QUALITY OBJECTIVES

Order WR 95-6 amended the water right permits of the CVP and the SWP to temporarily replace the water quality standards for fish and wildlife for Suisun Marsh set forth in D-1485 with the standards in the 1995 Bay-Delta Plan. Order WR 95-6 also required the DWR and the USBR to work with other interested groups to review the standards, the implementation dates of the western stations, and other agencies' responsibilities to help meet these standards. Term 3 of Order WR 95-6 required the DWR and the USBR to report the results of this review to the SWRCB by August 1997. At the recommendation of the SWRCB in the 1995 Bay-Delta Plan, the DWR convened the Suisun Ecological Workgroup (SEW). The SEW consists of representatives from the DWR, DFG, USFWS, National Marine Fisheries Service, USBR, U.S. Environmental Protection Agency, California Native Plant Society, Suisun Resource Conservation District, San Francisco Estuary Institute, The Bay Institute, Metropolitan Water District of Southern California, and others.

In partial satisfaction of Term 3, the SEW submitted to the SWRCB an interim progress report in September 1997. (SWRCB 153.) The report, however, did not contain conclusions or recommendations on the issues identified in Term 3. The SWRCB finds that substantial progress has been made to date. Accordingly, this order authorizes a time extension until June 1, 1999, for submittal of the final report.

In Order WR 98-6, adopted by the SWRCB on September 17, 1998, the SWRCB authorized the DWR and the USBR to vary the flows for meeting the Suisun Marsh salinity standards at salinity stations C-2, S-64, S-49, S-42, and S-21, pursuant to condition 6 of D-1485, during the period of

October 1998 through May 2001 for the purpose of evaluating salmon passage through the modified flashboards in the Suisun Marsh Salinity Control Gate. Based on Order WR 98-6, exceedances of objectives at these stations during the experiment will not be considered a violation of water right permit conditions.

Also, on August 14, 1998, the Board issued an order allowing a temporary extension of the dates that salinity compliance at S-97 and S-35 would become effective. The order allowed a 180-day extension from October 1, 1998 to April 1, 1999. The extension was requested by DWR and USBR to allow time to execute Amendment Three of the SMPA. The extension does not injure other water users nor have an unreasonable effect on fish or wildlife.

6.0 CONCLUSIONS

Based on the foregoing, the SWRCB concludes as follows:

1. Order WR 95-6 should be extended temporarily.
2. The standards set forth in Attachment B can continue to be substituted for the standards for fish and wildlife set forth in D-1485 without having significant environmental or water supply effects beyond those identified in the 1995 Bay-Delta Plan, Appendix I.
3. Many of the significant environmental and water supply effects of implementing the 1995 Bay-Delta Plan were caused by actions taken under the ESA. This order does not add to the environmental and water supply effects caused by other agencies.
4. The change in the salinity standard from D-1422 for the Vernalis station will be continued. There is no basis for deleting this requirement at this time.
5. As approved in this order, the use of joint points of diversion by the DWR and the USBR will have no significant environmental effect and will facilitate benefits to the Delta fisheries.

6. To ensure that any environmental effects of this order are temporary, this order will remain in effect only until December 31, 1999 and may expire earlier if it is replaced by a new water right decision.

ORDER

IT IS HEREBY ORDERED, based upon the foregoing findings, that the temporary terms and conditions set forth in Order WR 95-6 are continued as modified herein, and that terms and conditions 6 through 8 set forth below also are temporarily added to the water right permits listed in Attachment A.

1. This order is an interim order. In the absence of a further order of the SWRCB, the amendments herein to the terms and conditions in the affected permits shall expire upon adoption of a comprehensive water right decision that allocates final responsibilities for meeting the 1995 Bay-Delta objectives or on December 31, 1999, whichever comes first.
2. The water quality standards for fish and wildlife set forth in Water Right Decision 1485 (D-1485), Table II, for striped bass spawning, Suisun Marsh, and operational constraints (export rates and Delta Cross Channel gate operations) are replaced with those contained in Attachment B below. All other provisions of D-1485, except as specified below, remain in full force and effect.
3. Permittees shall work with other interested groups and agencies to review the Suisun Marsh water quality standards, implementation dates and other agencies' responsibilities to help meet these standards. The review shall focus on issues 1 through 5 raised in the program of implementation at page 41 of the 1995 Bay-Delta Plan. Permittees shall report the results of this review to the SWRCB by June 1, 1999.
4. Condition 5 of water right Decision 1422 (D-1422) is modified to read as follows:

Releases of conserved water from New Melones Reservoir for water quality control purposes shall be scheduled so as to maintain a maximum 30-day running average of mean daily electrical

conductivity in the San Joaquin River at Vernalis of 0.7 mmhos/cm during April through August and 1.0 mmhos/cm during September through March as specified in the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary and a dissolved oxygen concentration in the Stanislaus River as specified in the Water Quality Plan, San Joaquin River Basin 5C.

In the event that either Water Quality Control Plan is amended or superseded, the foregoing water quality objectives shall be modified to conform to then current criteria.

5. a. Condition 3 of D-1485 is revised temporarily to provide in the permits of the DWR:

In addition to all other points of diversion or rediversion authorized by this permit, permittee may divert water at the Clifton Court Forebay, located within the NW1/4 of the SE1/4 of Projected Section 20, T1S, R4E, MDB&M, and (with the approval of the USBR) at the Tracy Pumping Plant, located within the SW1/4 of the SW1/4 of Projected Section 31, T1S, R4E, MDB&M.

Permittee may use the Tracy Pumping Plant only when, to improve fish protections, exports are reduced below the applicable export limits set forth in Attachment B. Under these circumstances, the permittee shall be allowed to make up such reductions during other periods of the year by direct diversion or rediversion of stored water through the CVP export facilities in the southern Delta, if the following conditions are met:

- (1) The coordinated operations shall not result in an increase in annual exports above that which would have been exported in the absence of the coordinated operations,

- (2) The other effective provisions of the permittee's water right permits all are met,
- (3) Any increase in diversions by all DWR diversions at both the Banks and Tracy pumping plants above 10,350 cfs is offset by diversions below 10,350 cfs within a 12-month period.
- (4) The shift in exports does not adversely affect any legal user of water or cause significant environmental effects on fish and wildlife or water quality; and
- (5) The pumping at the Tracy pumping plant shall not at any time exceed 4,600 cfs and the pumping at the Banks pumping plant shall not at any time exceed 10,350 cfs.

This term allows the use of coordinated operations in anticipation of future reductions in exports or to make up for past reductions. Before such changes are made, the permittee shall consult with a committee composed of representatives of all parties who indicate an interest in participating, including but not limited to the Department of Fish and Game, the United States Fish and Wildlife Service, and the National Marine Fisheries Service. The CALFED Operations Group established under the Framework Agreement would satisfy this requirement. If the CALFED Operations Group is used, disputes within the operations group shall be given to the CALFED policy group for resolution. Permittee shall submit agreements on coordinated operations under this authorization to the Executive Director for approval and shall also submit complete documentation showing that no additional water will be exported through use of the Tracy Pumping Plant, including the method used to make this determination. Authority is hereby

delegated to the Executive Director to act on the proposal, provided the conditions set forth above are met.

5. b. Condition 3 of D-1485 is revised temporarily to provide, in the permits of the USBR:

In addition to all other points of diversion or rediversion authorized by this permit, permittee may divert water (with the approval of the DWR) at the Clifton Court Forebay, located within the NW1/4 of the SE1/4 of Projected Section 20, T1S, R4E, MDB&M, and at Italian Slough, located within the NW1/4 of the NE1/4 of Projected Section 24, T1S, R3E, MDB&M.

Permittee may use the Harvey O. Banks Pumping Plant only when, to improve fish protections, exports are reduced below the applicable export limits set forth in Attachment B. Under these circumstances, the permittee shall be allowed to make up such reductions during other periods of the year by direct diversion or rediversion of stored water through the SWP export facilities in the southern Delta, if the following conditions are met:

- (1) The coordinated operations shall not result in an increase in annual exports above that which would have been exported in the absence of the coordinated operations,
- (2) The other effective provisions of the permittee's water right permits all are met,
- (3) Any increase in diversions by all USBR diversions at both the Banks and Tracy pumping plants above 4,600 cfs from the Delta and 4,200 cfs to storage in San Luis Reservoir is offset by diversions below these amounts within a 12-month period.

- (4) The shift in exports does not adversely affect any legal user of water or cause significant environmental effects on fish and wildlife or water quality; and
- (5) the pumping at the Tracy pumping plant shall not at any time exceed 4,600 cfs and the pumping at the Banks pumping plant shall not at any time exceed 10,350 cfs.

This term allows the use of coordinated operations in anticipation of future reductions in exports or to make up for past reductions. Before such changes are made, the permittee shall consult with a committee composed of representatives of all parties who indicate an interest in participating, including but not limited to the Department of Fish and Game, the United States Fish and Wildlife Service, and the National Marine Fisheries Service. The CALFED Operations Group established under the Framework Agreement would satisfy this requirement. If the CALFED Operations Group is used, disputes within the Operations group shall be given to the CALFED policy group for resolution. Permittee shall submit agreements on coordinated operations under this authorization to the Executive Director for approval and shall also submit complete documentation showing that no additional water will be exported through use of the Harvey O. Banks Pumping Plant, including the method used to make this determination. Authority is hereby delegated to the Executive Director to act on the proposal, provided the conditions set forth above are met.

6. Prior to using the Tracy Pumping Plant as a point of diversion pursuant to Term 5.a., the DWR shall consult with the South Delta Water Agency and prepare and submit to the SWRCB a response plan specifying actions the DWR will take to ensure that water levels in southern Delta channels are not lowered to elevations inadequate for diversion of water for agricultural uses because of increased pumping under Term 5.a, insofar as those levels are under the control of the DWR. DWR shall not divert water pursuant to Term 5.a.

until the response plan is approved by the Executive Director of the SWRCB. DWR shall implement the approved response plan.

7. Prior to using the Harvey O. Banks Pumping Plant as a point of diversion pursuant to Term 5.b., the USBR shall consult with the South Delta Water Agency and prepare and submit to the SWRCB a response plan specifying actions the USBR will take to ensure that water levels in central and southern Delta channels are not lowered to elevations inadequate for diversion of water for agricultural uses because of increased pumping under Term 5.b, insofar as those levels are under the control of the USBR. USBR shall not divert water pursuant to Term 5.b. until the response plan is approved by the Executive Director of the SWRCB. USBR shall implement the approved response plan.

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8. Permittees DWR and USBR shall work with the South Delta Water Agency to develop methods to better predict the effects on water levels in the southern Delta due to pumping at Tracy Pumping Plant and Harvey O. Banks Pumping Plant pursuant to Terms 5.a. and 5.b. of this order. Permittees shall report the results of these studies to the SWRCB by December 31, 1999.

CERTIFICATION

The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on December 3, 1998.

AYE: John Caffrey
James M. Stubchaer
Mary Jane Forster
John W. Brown

NO: None

ABSENT: Marc Del Piero

ABSTAIN: None


Maureen Marché
Administrative Assistant to the Board

Attachments

PERMITS OF DEPARTMENT OF WATER RESOURCES Amended in D-1485	
Application Number	Permit Number
5629	16477
5630	16478
14443	16479
14444	16480
14445A	16481
17512	16482
17514A	16483

Attachment A continues next page

**PERMITS OF
UNITED STATES BUREAU OF RECLAMATION
Amended in D-1485**

Application Number	Permit Number
5625	12720
5626	12721
5627	11966
5628	11967
9363	12722
9364	12733
9365	12724
9366	12725
9367	12726
9368	12727
13370	11315
13371	11316
13372	11317
14662	11318
15374	11968
15375	11969
15376	11970
15764	12860
16767	11971
16768	11972
17374	11973
18721	16209
18723	16210
21542	15149
21636	16211
21637	16212
22316	15735

Attachment A continues next page

**PERMITS OF
UNITED STATES BUREAU OF RECLAMATION
Approved in D-1422**

Application Number	Permit Number
14858A	16597
14859	16598
19303	16599
19304	16600

ATTACHMENT B

**WATER QUALITY STANDARDS FOR
THE SACRAMENTO-SAN JOAQUIN DELTA AND SUISUN MARSH**

COMPLIANCE LOCATION	INTERAGENCY STATION NUMBER (RKI [1])	PARAMETER	DESCRIPTION (UNIT) [2]	WATER YEAR TYPE [3]	TIME PERIOD	VALUE		
SAN JOAQUIN RIVER SALINITY								
San Joaquin River at and between Jersey Point and Prisoners Point [4]	D-15 (RSAN018) -and- D-29 (RSAN038)	Electrical Conductivity (EC)	Maximum 14-day running average of mean daily EC (mmhos/cm)	W,AN,BN,D	Apr-May	0.44 [5]		
EASTERN SUISUN MARSH SALINITY								
Sacramento River at Collinsville	C-2 (RSAC081)	Electrical Conductivity (EC)	Maximum monthly average of both daily high tide EC values (mmhos/cm), or demonstrate that equivalent or better protection will be provided at the location.	All	Oct	19.0		
-and- Montezuma Slough at National Steel	S-64 (SLMZU25)					Nov-Dec	15.5	
-and- Montezuma Slough near Beldon Landing	S-49 (SLMZU11)					Jan	12.5	
						Feb-Mar	8.0	
					Apr-May	11.0		
WESTERN SUISUN MARSH SALINITY								
Chadbourne Slough at Sunrise Duck Club	S-21 [6] (SLCBN1)	Electrical Conductivity (EC)	Maximum monthly average of both daily high tide EC values (mmhos/cm), or demonstrate that equivalent or better protection will be provided at the location.	All but deficiency period	Oct	19.0		
-and- Suisun Slough, 300 feet south of Volanti Slough	S-42 [7] (SLSUS12)						Nov	16.5
-and- Cordelia Slough at Ibis Club	S-97 [7] (SLCRD06)						Dec	15.5
-and- Goodyear Slough at Morrow Island Clubhouse	S-35 [7] (SLGYR03)						Jan	12.5
Water supply intakes for waterfowl management areas on Van Sickle and Chipps islands	No locations specified				Feb-Mar	8.0		
					Apr-May	11.0		
				Deficiency period [8]	Oct	19.0		
					Nov	16.5		
					Dec-Mar	15.5		
					Apr	14.0		
					May	12.5		
EXPORT LIMITS								
		Combined export rate [9]	Maximum 3-day running average (cfs)	All	Apr 15- May 15 [10]	[11]		
			Maximum percent of Delta inflow diverted [12] [13]	All	Feb-Jun	35% Delta inflow [14]		
				All	Jul-Jan	65% Delta inflow		
DELTA CROSS CHANNEL GATES CLOSURE								
Delta Cross Channel at Walnut Grove	---	Closure of gates	Close gates	All	Nov-Jan Feb-May 20 May 21- Jun 15	[15] --- [15]		

Attachment B Footnotes

- [1] River Kilometer Index station number.
- [2] Determination of compliance with an objective expressed as a running average begins on the last day of the averaging period. If the objective is not met on the last day of the averaging period, all days in the averaging period are considered out of compliance.
- [3] The Sacramento Valley 40-30-30 Water Year Hydrologic Classification Index (see Footnote 3 for Attachment B) applies unless otherwise specified.
- [4] Compliance will be determined at Jersey Point (station D15) and Prisoners Point (station D29).
- [5] This standard does not apply in May when the best available May estimate of the Sacramento River Index for the water year is less than 8.1 MAF at the 90% exceedence level. [Note: The Sacramento River Index refers to the sum of the unimpaired runoff in the water year as published in the DWR Bulletin 120 for the following locations: Sacramento River above Bend Bridge, near Red Bluff; Feather River, total unimpaired inflow to Oroville Reservoir; Yuba River at Smartville; and American River, total unimpaired inflow to Folsom Reservoir.]
- [6] The effective date for objectives for this station is October 1, 1995.
- [7] The effective date for objectives for this station is October 1, 1997. A Board Order issued August 14, 1998, extended the effective date for S-97 and S-35 from October 1, 1998 to April 1, 1999, and allows for additional 180-day extensions.
- [8] A deficiency period is: (1) the second consecutive dry water year following a critical year; (2) a dry water year following a year in which the Sacramento River Index (described in footnote 5) was less than 11.35; or (3) a critical water year following a dry or critical water year.
- [9] Combined export rate for this objective is defined as the Clifton Court Forebay inflow rate (minus actual Byron-Bethany Irrigation District diversions from Clifton Court Forebay) and the export rate of the Tracy pumping plant.
- [10] This time period may be varied based on real-time monitoring and will coincide with the San Joaquin River pulse flow described in footnote 18. The time period for this 31-day export limit will be determined by the operations group established under the Framework Agreement.
- [11] Maximum export rate is 1,500 cfs or 100% of 3-day running average of San Joaquin River flow at Vernalis, whichever is greater. Variations to this maximum export rate are authorized if agreed to by the operations group established under the Framework Agreement. This flexibility is intended to result in no net water supply cost annually within the limits of the water quality and operational requirements of this plan. Variations may result from recommendations of agencies for protection of fish resources, including actions taken pursuant to the State and federal Endangered Species Act. Disputes within the operations group will be resolved by the CALFED policy group. Any agreement on variations will be effective immediately and will be presented to the Executive Director of the SWRCB. If the Executive Director does not object to the variations within 10 days, the variations will remain in effect.
- [12] Percent of Delta inflow diverted is defined in Footnote 12 for Attachment B. For the calculation of maximum percent Delta inflow diverted, the export rate is a 3-day running average and the Delta inflow is a 14-day running average, except when the CVP or the SWP is making storage withdrawals for export, in which case both the export rate and the Delta inflow are 3-day running averages.

- [13] The percent Delta inflow diverted values can be varied either up or down. Variations are authorized subject to the process described in footnote 11.
- [14] If the best available estimate of the Eight River Index (described in footnote 13) for January is less than or equal to 1.0 MAF, the export limit for February is 45% of Delta inflow. If the best available estimate of the Eight River Index for January is greater than 1.5 MAF, the February export limit is 35% of Delta inflow. If the best available estimate of the Eight River Index for January is between 1.0 MAF and 1.5 MAF, the export limit for February will be set by the operations group established under the Framework Agreement within the range of 35% to 45%. Disputes within the operations group will be resolved by the CALFED policy group.
- [15] For the November-January period, close Delta Cross Channel gates for a total of 45 days. The timing and duration of the gate closure will be determined by the operations group established under the Framework Agreement.
- [16] For the May 21-June 15 period, close Delta Cross Channel gates for a total of 14 days. The timing and duration of the gate closure will be determined by the operations group established under the Framework Agreement. Variations in the number of days of gate closure are authorized if agreed to by the operations group established under the Framework Agreement. Variations shall result from recommendations from agencies for the protection of fish resources, including actions taken pursuant to the State and federal Endangered Species Acts. The process for the approval of variations shall be similar to that described in footnote 11.

FOOTNOTE 3 FOR ATTACHMENT B

Sacramento Valley
Water Year Hydrologic Classification

Year classification shall be determined by computation of the following equation:

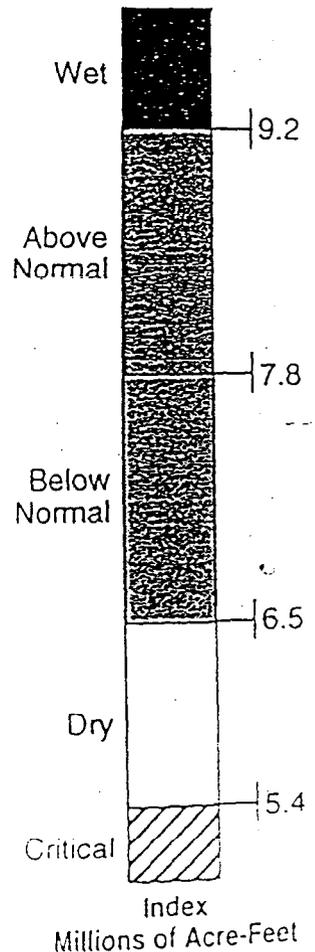
$$\text{INDEX} = 0.4 \cdot X + 0.3 \cdot Y + 0.3 \cdot Z$$

- Where:
- X = Current year's April - July Sacramento Valley unimpaired runoff
 - Y = Current October - March Sacramento Valley unimpaired runoff
 - Z = Previous year's index ¹

The Sacramento Valley unimpaired runoff for the current water year (October 1 of the preceding calendar year through September 30 of the current calendar year), as published in California Department of Water Resources Bulletin 120, is a forecast of the sum of the following locations: Sacramento River above Bend Bridge, near Red Bluff; Feather River, total inflow to Oroville Reservoir; Yuba River at Smartville; American River, total inflow to Folsom Reservoir. Preliminary determinations of year classification shall be made in February, March, and April with final determination in May. These preliminary determinations shall be based on hydrologic conditions to date plus forecasts of future runoff assuming normal precipitation for the remainder of the water year.

Classification	Index Millions of Acre-Feet (MAF)
Wet.....	Equal to or greater than 9.2
Above Normal.....	Greater than 7.8 and less than 9.2
Below Normal.....	Equal to or less than 7.8 and greater than 6.5
Dry.....	Equal to or less than 6.5 and greater than 5.4
Critical.....	Equal to or less than 5.4

YEAR TYPE ²
All Years for All Objectives



¹ A cap of 10.0 MAF is put on the previous year's index (Z) to account for required flood control reservoir releases during wet years

² The year type for the preceding water year will remain in effect until the initial forecast of unimpaired runoff for the current water year is available

FOOTNOTE 12 FOR ATTACHMENT B

PERCENT INFLOW DIVERTED¹

The percent inflow diverted, as described in this footnote, shall be computed daily by the DWR and the USBR using the following formula (all flows are in cubic feet per second):

$$\text{PERCENT INFLOW DIVERTED} = (\text{CCF} + \text{TPP}) \div \text{DELTA INFLOW}$$

where

*CCF*² = Clifton Court Forebay inflow for the current day.

TPP = Tracy Pumping Plant pumping for the current day.

and where *DELTA INFLOW* = *SAC* + *SRTP* + *YOLO* + *EAST* + *MISC* + *SJR*

SAC = Sacramento River at Freeport mean daily flow for the previous day; the 25-hour tidal cycle measurements from 12:00 midnight to 1:00 a.m. may be used instead.

SRTP = Sacramento Regional Treatment Plant average daily discharge for the previous week.

YOLO = Yolo Bypass mean daily flow for the previous day, which is equal to the flows from the Sacramento Weir, Fremont Weir, Cache Creek at Rumsey, and the South Fork of Putah Creek.

EAST = Eastside Streams mean daily flow for the previous day from the Mokelumne River at Woodbridge, Cosumnes River at Michigan Bar, and Calaveras River at Bellota.

MISC = Combined mean daily flow for the previous day of Bear Creek, Dry Creek, Stockton Diverting Canal, French Camp Slough, Marsh Creek, and Morrison Creek.

SJR = San Joaquin River flow at Vernalis, mean daily flow for the previous day.

1 Not all of the Delta tributary streams are gaged and telemetered. When appropriate, other methods of estimating stream flows, such as correlations with precipitation or runoff from nearby streams, may be used instead.

2 Actual Byron-Bethany Irrigation District withdrawals from Clifton Court Forebay shall be subtracted from Clifton Court Forebay inflow.

