

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

ORDER WR 2006-

In the Matter of Draft Cease and Desist Order Nos. 262.31-16 and 262.31-17
Against the
Department of Water Resources
and the
United States Bureau of Reclamation
Under their Water Right Permits and License¹
and
In the Matter of Petitions for Reconsideration of the Approval of a Water Quality
Response Plan Submitted by the
Department of Water Resources
and the
United States Bureau of Reclamation
for their Use of Joint Points of Diversion in the Sacramento-San Joaquin Delta

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

COUNTY: San Joaquin

**ORDER ADOPTING CEASE AND DESIST ORDER AND GRANTING
PETITIONS FOR RECONSIDERATION**

BY THE BOARD:

1.0 INTRODUCTION

In this order, the State Water Resources Control Board (State Water Board or Board) orders the Department of Water Resources (DWR) and the United States Bureau of Reclamation (USBR) to take corrective actions under a time schedule to correct threatened violations of their permits and license. Their permits and license require DWR and USBR to meet the 0.7 millimhos per centimeter (mmhos/cm) electrical

¹ Permits 16478, 16479, 16481, 16482, and 16483 (Applications 5630, 14443, 14445A, 17512, and 17514A, respectively), of the Department of Water Resources and License 1986 (Application 23) and Permits 11315, 11316, 11885, 11886, 11887, 11967, 11968, 11969, 11970, 11971, 11972, 11973, 12364, 12721, 12722, 12723, 12725, 12726, 12727, 12860, 15735, 16597, 16600, and 20245 (Applications 13370, 13371, 234, 1465, 5638, 5628, 15374, 15375, 15376, 16767, 16768, 17374, 17376, 5626, 9363, 9364, 9366, 9367, 9368, 15764, 22316, 14858A, 19304, and 14858B, respectively).

conductivity (EC)² objective for southern Delta agriculture at specified southern Delta compliance locations between April 1 and August 31 of each year.

In this order, the State Water Board also revises the July 1, 2005, conditional approval by the Chief of the Division of Water Rights (Division) of the Water Quality Response Plan (WQRP) submitted by DWR and USBR for their use of each other's points of diversion (also known as joint points of diversion or JPOD)³ in the southern Sacramento-San Joaquin Delta (Delta).

On October 24 and 25, 2005, and on November 7, 17, 18, and 21, 2005, the State Water Board conducted a hearing on draft Cease and Desist Order (CDO) Nos. 262.31-16 and 262.31-17, issued by the Division Chief to DWR and USBR on May 3, 2005 and on petitions for reconsideration of the July 1, 2005, conditional approval of the WQRP.⁴ The hearing was an adjudicative hearing governed by certain provisions regarding administrative adjudication in the Administrative Procedure Act (Gov. Code, §§ 11400, et seq.), as specified in the State Water Board's regulations at California Code of Regulations, title 23, section 648. The State Water Board issued a Notice of Public Hearing for this proceeding on August 4, 2005, and a Revised Notice of Public Hearing on September 23, 2005.

In this hearing, a staff Prosecution Team (PT) presented the case for adopting the draft CDOs. The parties to the proceeding on the draft CDOs are DWR, USBR, and PT. The parties to the proceeding on the petitions for reconsideration are USBR and DWR and the

² Electrical conductivity or "EC" is a measurement commonly used to quantify the salt content or "salinity" of water. (DWR 22 rev., p. 1)

³ In 1995, DWR and USBR filed a petition requesting, among other things, that their water right permits authorizing diversion or rediversion of water in the southern Delta be amended to add the State Water Project's Harvey O. Banks Pumping Plant as a point of diversion and rediversion in USBR's water rights and to add the Central Valley Project's Tracy Pumping Plant as a point of diversion and rediversion in DWR's water rights. The use of one project's diversion facility by the other project is referred to as the Joint Points of Diversion or JPOD. (PT 5, p. 89.)

⁴ The State Water Board held a combined hearing because both the draft cease and desist orders and the petitions for reconsideration address the implementation of the 0.7 EC objective.

petitioners Contra Costa Water District (CCWD), South Delta Water Agency (SDWA), Central Delta Water Agency (CDWA), and Westside Irrigation District (WID). As discussed below, ~~n~~Not all of the ~~actual~~ parties participated fully. However, ~~s~~Several additional persons and entities participated in the hearing ~~;~~ ~~however,~~ ~~t~~The State Water Board has considered all of the evidence and arguments in the hearing record, and the findings and conclusions herein are based on the evidence in the hearing record.

2.0 BACKGROUND

2.1 Authority to Issue a CDO

The State Water Board is authorized to issue a CDO when it determines that any person⁵ is violating or threatening to violate any requirement described in Water Code section 1831, subdivision (d). Under subdivision (d), the State Water Board may issue a CDO in response to a violation or threatened violation of any of the following:

“(1) The prohibition set forth in Section 1052 against the unauthorized diversion or use of water subject to this division.

“(2) Any term or condition of a permit, license, certification, or registration issued under this division.

“(3) Any decision or order of the board issued under this part, Section 275, or Article 7 (commencing with Section 13550) of Chapter 7 of Division 7, in which decision or order the person to whom the cease and desist order will be issued, or a predecessor in interest to that person, was named as a party directly affected by the decision or order.” (Wat. Code, § 1831(d).)

The State Water Board may issue a CDO only after notice and an opportunity for hearing. Such notice shall be by personal notice or certified mail, and shall inform the person allegedly engaged in the violation (respondent) that he or she may request a hearing within 20 days after the date of receiving the notice. The notice shall contain a statement of facts and information showing the violation. On May 3, 2005, in accordance with Water Code section 1834(a), the Division Chief issued Draft CDO No. 262.31-16 to

⁵ A “person” includes any city, county, district, the state, or any department or agency thereof, and the United States to the extent authorized by law. (Wat. Code, § 1835.)

USBR regarding alleged threatened violation of its license and permits. Also on May 3, 2005, in accordance with Water Code section 1834(a), the Division Chief issued Draft CDO No. 262.31-17 to DWR regarding alleged threatened violation of its permits.

By letter dated May 20, 2005, USBR requested a hearing. By memorandum dated May 23, 2005, DWR requested a hearing. As explained above, the State Water Board conducted the requested hearing on October 24 and 25, 2005 and on November 7, 17, 18, and 21, 2005.

If USBR or DWR violates this CDO, the State Water Board may proceed pursuant to Water Code section 1845(a). Under section 1845, the penalties for a violation of a CDO are injunctive relief issued by a superior court and liability for a sum not to exceed \$1,000 for each day in which the violation occurs. Either the court or the State Water Board may impose civil liability against a violator of a CDO.

2.2 Physical Setting

The Bay-Delta Estuary includes the Sacramento-San Joaquin Delta (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 environmental purposes. The watershed is a source of drinking water for two-thirds of the state's population. The State Water Project (SWP), operated by DWR, and the Central Valley Project (CVP), operated by 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. (PT 5, p. 6.)

The southern Delta generally encompasses lands and channels of the Delta southwest of Stockton. The bulk of the lands in the southern Delta are included within the SDWA.

Salinity levels ~~Water conditions~~ in the southern Delta are influenced by San Joaquin River inflow; tidal action; SWP and CVP water export facilities (primarily water levels and circulation), local pump diversions; agricultural and municipal return flows; channel capacity; and upstream development. (PT 5, pp. 87-89; DWR 21, p. 1.) The area is irrigated primarily with surface water through numerous local agricultural diversions. A small percentage of SDWA agricultural land is irrigated with groundwater. (DWR 21, p. 1.)

The southern Delta salinity objectives for agricultural beneficial uses referenced in this order are measured at four compliance stations: the San Joaquin River at the Brandt Bridge site (Station C-6), Old River near Middle River (Station C-8), Old River at Tracy Road Bridge (Station P-12), and the San Joaquin River at Airport Way Bridge, Vernalis (Station C-10). (See Figure 1.) Stations C-6, C-8, and P-12 also are referred to herein as the interior southern Delta stations and station C-10 as the Vernalis station.

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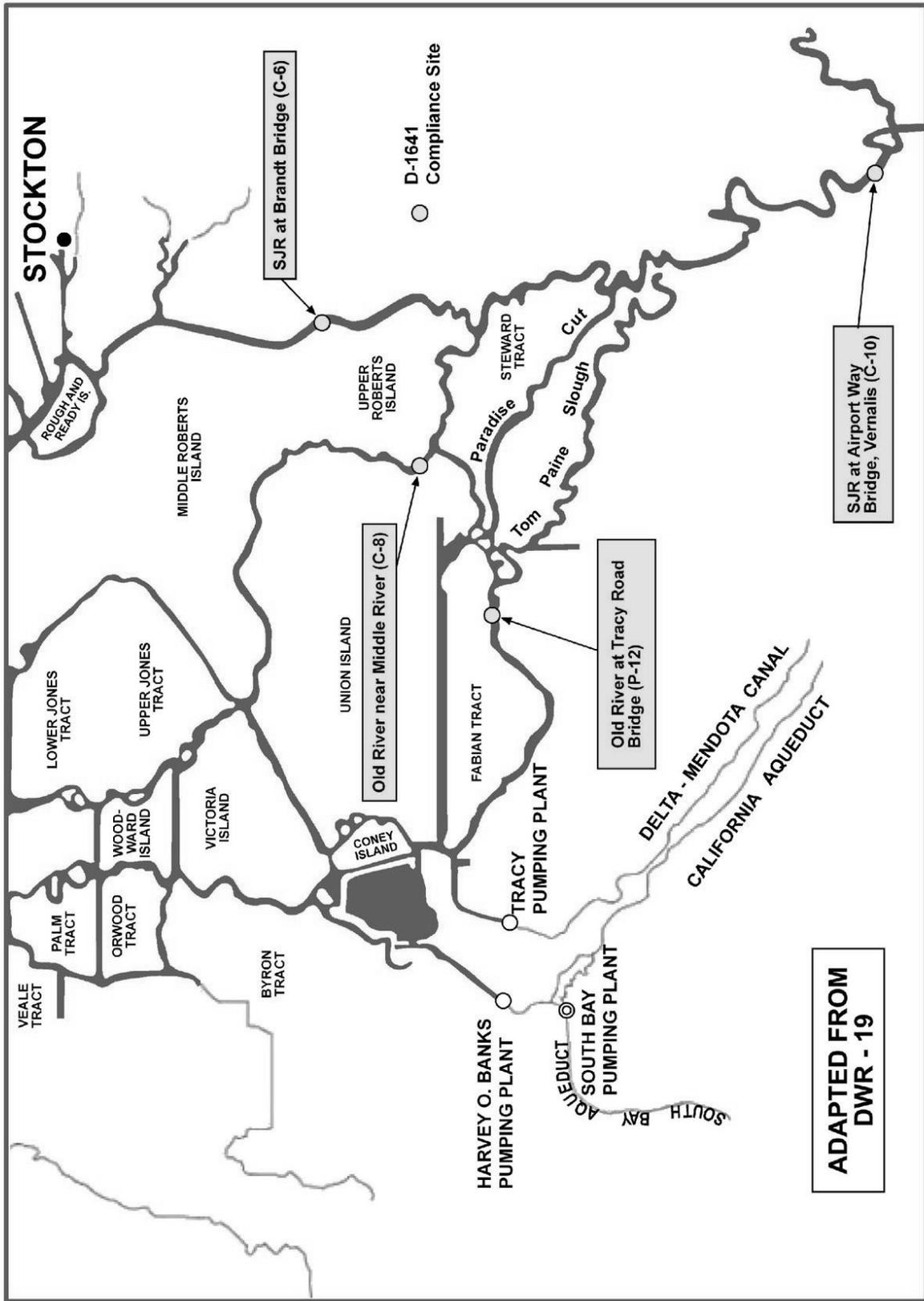


Figure 1

**ADAPTED FROM
DWR - 19**

2.3 Conditions of Permits and License Requiring 0.7 EC

DWR's permits and USBR's license and permits listed above in ~~Footnote~~footnote 1 are subject to conditions imposed by Water Right Decision 1641, revised March 15, 2000, in accordance with Order WR 2000-02, (hereinafter D-1641). USBR and DWR are ~~jointly~~ each fully and severally responsible for meeting certain water quality objectives, including the interior southern Delta ~~EC~~salinity objectives, as described in Table 2 of D-1641. Only USBR is responsible for meeting the salinity objectives on the San Joaquin River at Vernalis.

The southern Delta salinity objectives have a long history, which is illustrated in the following text box. (See Figure 2.) When it approved the water right permits for the SWP and the federal CVP, the State Water Board found that Delta salinity control requirements would be needed. The last salinity objectives to be implemented is the 0.7 EC objective during the April through August period at Stations C-6, C-8, and P-12.

Figure 2

HISTORY OF SOUTHERN DELTA SALINITY ISSUES

1958-1970-State Water Board Adopts Decisions Approving Permits for the CVP: During a twelve-year period the State Water Board adopted six difference decisions (Decisions 893, 990, 1020, 1250, 1308, and 1356) approving permits for various components of the federal CVP operated by USBR. The permits issued as a result of the decisions included a term by which the Water Board reserved jurisdiction to revisit salinity control requirements. (Decision 893, p. 71, Condition 12; Decision 990, p. 86, Condition 25; Decision 1020, p. 21, Condition 9; Order Extending Time in Which to Formulate Terms and Conditions Relative to Salinity Control Pursuant to Decision 990 and Decision 1020, p. 2; Decision 1250, p. 5, Condition 9; Decision 1308, p. 11-12, Condition 8; Decision 1356, p. 17, Condition 21.)

1967-State Water Board Adopts Decision 1275: In Decision 1275, the State Water Board approved permits for DWR's SWP and conditioned the permits on meeting water quality criteria at several Delta locations. The State Water Board included permit conditions reserving the State Water Board's jurisdiction to address salinity control in the Delta. (Decision 1275, p. 40-42, Conditions 15, 16a, and 19.)

1973-State Water Board Adopts Decision 1422: Decision 1422 approved the permits for USBR's New Melones Reservoir on the Stanislaus River and conditioned the permits on meeting total dissolved solids of 500 parts per million (~833 mmhos/cm EC) on the San Joaquin River at Vernalis. (Decision 1275, p. 31, Condition 5.)

1976-University of California Conducts Study on Effects of Salinity on Delta Crops: The University of California calculated the maximum salinity of applied water which sustains 100 percent yields of two important salt sensitive crops grown in the southern Delta (beans during the summer irrigation season and alfalfa during the winter irrigation season), in conditions typical of the southern Delta. (1978 Water Quality Control Plan for the Sacramento-San Joaquin Delta and Suisun Marsh (1978 Plan), p. VI-19.)

1978-State Water Board Adopts 1978 Plan and Decision 1485: Based on the conclusions of the University of California crop study, the State Water Board, in the 1978 Plan, established the salinity objectives in effect today. Specifically, it found that to protect southern Delta agriculture it was necessary to maintain a 30-day running average salinity objective of 0.7 mmhos/cm EC from April through August and 1.0 mmhos/cm EC from September through March at four locations in the southern Delta: (1) the San Joaquin River at Vernalis, (2) San Joaquin River at Brandt Bridge, (3) Old River near Middle River, and (4) Old River at Tracy Road. (1978 Plan, p. VI-29.) The State Water Board believed that the most practical solution for long-term protection of southern Delta agriculture was the construction of physical facilities to provide adequate circulation and substitute supplies, but negotiations concerning these facilities were underway at the time Decision 1485 was under consideration. (1978 Plan, p. VI-23; Decision 1485 p. 11.) Therefore, the State Water Board did not allocate responsibility for the 1978 Plan southern Delta EC objectives in Decision 1485. The 1978 Plan and Decision 1485 state that if contracts to ensure the water supplies and facilities mentioned above are not executed by January 1, 1980, the State Water Board will take appropriate enforcement actions to prevent encroachment on riparian rights in the southern Delta. (1978 Plan, p. VI-6; Decision 1485, p.28, Condition 8.) Contracts were not negotiated, but SDWA asked the State Water Board to delay taking action.

Figure 2 Continued

1991-State Water Board Adopts 1991 Water Quality Control Plan for Salinity for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (1991 Plan): The State Water Board did not change the southern Delta EC objectives in the 1991 Plan from the objectives in the 1978 Plan. However, because of on-going negotiations among DWR, USBR, and SDWA, the State Water Board established a staged implementation plan for the objectives with two interim stages and a final stage. The final stage, to be implemented no later than 1996, required implementation of a 30-day running average EC at all four southern Delta locations (Vernalis, Brandt Bridge, Old River near Middle River, and Old River at Tracy Road) of 0.7 between April and August and 1.0 between September and March for all year-types. The 1991 Plan also stated that if a three-party contract has been implemented among DWR, USBR, and SDWA, that contract will be reviewed prior to implementation of the southern Delta EC objectives and, after also considering the needs of other beneficial uses, revisions will be made to the objectives and compliance/monitoring locations noted, as appropriate. (1995 Plan, Table 1-1, p. 4 and 8.)

1995-State Water Board Adopts the 1995 Water Quality Control Plan for the San Francisco Bay/ Sacramento-San Joaquin Delta Estuary (1995 Plan): The State Water Board did not change the southern Delta EC objectives in the 1995 Plan from the objectives in the 1991 Plan except that the effective date of the objectives at the Old River sites was extended from January 1, 1996 to December 31, 1997. The 1995 Plan includes the same condition as the 1991 Plan regarding review of the objectives upon execution of a three-party agreement. (1995 Plan, p. 17.)

1995-State Water Board Adopts Order 95-6: The State Water Board temporarily amended DWR's and USBR's water rights for the SWP and the CVP to be consistent with the 1995 Plan. This order allowed DWR and USBR to operate the SWP and CVP in accordance with the 1995 Plan while the State Water Board prepared a long-term water right decision to implement the plan. Among other requirements, the order required USBR to release conserved water from New Melones Reservoir to comply with the 1995 Plan Vernalis EC objectives. The order was to expire on December 31, 1998 or upon adoption by the State Water Board of a long-term water right decision implementing the 1995 Plan. (Order 95-6, p. 51-52.)

1998-State Water Board Adopts Order 98-9: The State Water Board continued the temporary terms and conditions set forth in Order 95-6. The order was to expire on December 31, 1999 or upon adoption by the State Water Board of a long-term water right decision implementing the 1995 Plan. (Order 98-9, p. 23-24.)

1998 to 1999-State Water Board Conducts Hearings to Implement 1995 Plan: The State Water Board held over 80 days of hearing on how to best implement the objectives in the 1995 Plan. Before and during the hearing, DWR and USBR negotiated with other parties regarding implementation. USBR's witnesses testified in the hearing that it would be difficult to meet some of the objectives, in particular the southern Delta salinity objectives, assuming then-current operations of the facilities. Nevertheless, DWR and USBR agreed during the hearing to "backstop" the agreements, guaranteeing implementation of the objectives (except the April-May pulse flow objective on the San Joaquin River for protection of fish). The State Water Board received evidence that permanent operable barriers to be constructed in the southern Delta by 2005 would significantly improve southern Delta salinity. (Decision 1641, p. 88.)

December 1999 and March 2000-State Water Board Adopts Decision 1641 and Revises it in Response to Petitions for Reconsideration: The State Water Board assigned sole responsibility to USBR for meeting the Vernalis EC objectives and DWR and USBR for meeting the EC objectives at Brandt Bridge, Old River near Middle River, and Old River at Tracy Road. Decision 1641 immediately implemented the Vernalis objectives and implemented a year round objective of 1.0 EC at the interior southern Delta stations until April of 2005. After April of 2005, Decision 1641 requires implementation of 0.7 EC during April through August unless permanent barriers or equivalent measures are completed and a plan to protect agriculture is approved, in which case the required objective is 1.0 EC. (Decision 1641, p. 159-160 and Table 2, p. 182.) Decision 1641 also approved use by DWR and USBR of each other's points of diversion (JPOD) subject to completion by DWR and USBR and approval by the Division Chief of mitigation requirements including a WQRP. (Decision 1641, p. 150-153; 155-158.)

~~[The State Water Board first established the current southern Delta EC objectives for the protection of agricultural beneficial uses in the 1978 Water Quality Control Plan for the Sacramento-San Joaquin Delta and Suisun Marsh (1978 Delta Plan). The State Water Board based the southern Delta EC objectives on the calculated maximum salinity of applied water which sustains 100 percent yields of two important salt sensitive crops grown in the southern Delta (beans and alfalfa) in conditions typical of the southern Delta (surface irrigation of mineral soils) per the University of California Guidelines and Irrigation and Drainage Paper 29 of the Food and Agriculture Organization of the United Nations, (pages VI-16—VI-19, 1978 Delta Plan). The State Water Board set a maximum 30-day running average of mean daily EC objective of 0.7 mmhos/cm during the summer irrigation season (April 1 through August 31) based on the salt sensitivity and growing season of beans and a maximum 30-day running average of mean daily EC objective of 1.0 mmhos/cm during the winter irrigation season (September 1 through March 31) based on the growing season and salt sensitivity of alfalfa during the seedling stage.~~

~~The State Water Board delayed assigning responsibility for implementation of the objectives pending negotiations by DWR, USBR, and SDWA concerning construction of physical facilities to protect agriculture in the southern Delta. Because the negotiations were never completed, the State Water Board delayed the effective date of the objectives in the 1991 Water Quality Control Plan for Salinity for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (1991 Plan). The 1991 Plan called for implementation of the Vernalis and Brandt Bridge objectives by 1994 and the Old River objectives by 1996 unless a three-party agreement was reached between DWR, USBR, and SDWA. (1991 Plan, p. 7-4.) In the 1995 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (1995 Plan), the State Water Board further delayed the effective date of the EC objectives for the two Old River sites until December 31, 1997. (1995 Plan, p. 17.)~~

In D-1641, the State Water Board required DWR and USBR to implement the interior southern Delta EC objectives on a time schedule pursuant to Condition 6 on page 159

(concerning DWR's permits), Condition 1 on pages 159-160 (concerning USBR's permits and license except New Melones), and Condition 1 on pages 160-161 (concerning USBR's permits for New Melones). D-1641 requires DWR and USBR jointly to implement the interior southern Delta EC objectives included in Table 2 (page 182).⁶ Footnote 5 on page 182 of D-1641 provides:

“[5] The 0.7 EC objective becomes effective on April 1, 2005. The DWR and the USBR shall meet 1.0 EC at these stations year round until April 1, 2005. The 0.7 EC objective is replaced by the 1.0 EC objective from April through August after April 1, 2005 if permanent barriers are constructed, or equivalent measures are implemented, in the southern Delta and an operations plan that reasonably protects southern Delta agriculture is prepared by the DWR and the USBR and approved by the Executive Director of the SWRCB. The SWRCB will review the salinity objectives for the southern Delta in the next review of the Bay-Delta objectives following construction of the barriers.” (PT 5, p. 182.)

2.3.1 Related Proceedings

As described above, when the State Water Board adopted D-1641, USBR became responsible for meeting the salinity requirements in Table 2 at the Vernalis station (C-10) and DWR and USBR became responsible for meeting the salinity requirements at the interior southern Delta stations (C-6, C-8, and P-12). In the hearing leading to D-1641, DWR representatives advised the Board that the barriers⁷ described in D-1641, Table 2, Footnote 5, would be completed by 2005.

On February 18, 2005, USBR and DWR jointly filed a petition for temporary urgency change with the State Water Board. In the petition, USBR and DWR requested temporary relief from the requirement of their water right permits and license that USBR and DWR meet the 0.7 EC objective in the interior southern Delta at stations C-6, C-8, and P-12, from April through August of 2005. The State Water Board issued Order WRO 2005-0009 on February 24, 2005, denying the Petition for Temporary Urgency Change.

⁶ D-1641 requires only USBR to meet the Vernalis EC objectives.

⁷ Currently DWR and USBR refer to the permanent barriers as permanent operable gates.

In addition to the petition for a temporary urgency change, on February 18, 2005, DWR and USBR submitted a long-term petition to the State Water Board requesting to change the effective date of the 0.7 EC objective for the interior southern Delta stations from April 1, 2005 to December 31, 2008 to coincide with the then anticipated date for completion of the southern Delta barriers project. The State Water Board issued notice of the petition to the public and received three protests from SDWA, CDWA, and CCWD. The State Water Board cannot continue processing the petition until DWR completes its California Environmental Quality Act compliance. DWR issued an Initial Study and Proposed Negative Declaration for the petition in November of 2005. The comment period for the environmental document closed on December 5, 2005.

USBR and DWR filed the above petitions during the same time period the State Water Board held a workshop to consider potential changes to the 1995 Plan and the Program of Implementation for the Plan. The Board held the public workshop over several days, from October 2004 through March 2005, and received evidence on potential changes to the southern Delta salinity objectives from several parties. The State Water Board anticipates issuing a decision on this matter in 2006. At this time, the State Water Board is considering what, if any, changes to make to the southern Delta EC objectives and other Delta objectives, based on information submitted during the workshop and other information. Any changes in the 1995 Plan would not have a direct effect on the conditions of DWR's and USBR's water right permits and license. However, that information could serve as a basis for the Board to consider future changes in DWR's and USBR's water right permits and license.

2.4 The Water Quality Response Plan Approval and Order WR 2005-0024

In D-1641, the State Water Board authorized DWR and USBR to use JPOD. The JPOD authorization includes three stages, which correspond to export rates and the purposes for

which DWR and USBR are authorized to divert or redivert water under JPOD.⁸ Each stage of the authorization is subject to special terms and conditions to mitigate the effects of using JPOD. All three stages are subject to five terms and conditions, one of which is the requirement for a WQRP. (D-1641, pages 150-151 and 155-156; Order WRO 2004-0043-EXEC.)

Specifically, condition 1.a.(5) on pages 150 and 151 and Condition 2.a.(5) on page 156 of D-1641 requires DWR and USBR to prepare a WQRP prior to use of JPOD. The purpose of the WQRP is to ensure that water quality in the southern and central Delta will not be significantly degraded through operations of JPOD to the injury of water users in the southern and central Delta. D-1641 requires that the plan be prepared with input from a designated representative of CCWD. In addition, pursuant to direction from the Division Chief, DWR and USBR were required to consult with SDWA. On July 1, 2005, the Division Chief conditionally approved the April 25, 2005 WQRP submitted by DWR and USBR.

The State Water Board's regulation at California Code of Regulations, title 23, section 768, authorizes reconsideration based upon any of the following causes:

- a. Irregularity in the proceedings, or any ruling, or abuse of discretion, by which the person was prevented from having a fair hearing;
- b. The decision or order is not supported by the evidence;
- c. There is relevant evidence which, in the exercise of reasonable diligence, could not have been produced;
- d. Error in law.

The State Water Board received four timely Petitions for Reconsideration of the Division Chief's July 1, 2005 approval of the WQRP from CCWD, SDWA, CDWA, and WID.

⁸ USBR is the primary user of JPOD due to limitations on the capacity of its facilities at the Tracy Pumping Plant. Under Stage 1, USBR can use DWR's point of diversion at Banks Pumping Plant to serve the Cross Valley Canal contractors and Musco Olive, to support a recirculation study, and to recover export reductions taken to benefit fish. Under Stage 2, USBR can use the Banks Pumping Plant for any purpose authorized under its permits, except that the total pumping at Banks cannot exceed the limits of the U.S. Army Corps of Engineers permit. Under Stage 3, USBR can use the Banks Pumping Plant up to the physical capacity of the pumping plants, subject to the completion of certain mitigation measures.

All of the petitioners requested reconsideration of Condition 1 of the Division Chief's approval and each petitioner alleged causes for reconsideration under each of the available causes listed above. Condition 1 requires USBR and DWR to meet all of the conditions of their water right permits and licenses in order to use JPOD with one exception. Instead of meeting the required 0.7 mmhos/cm EC objective at the interior southern Delta compliance locations, prior to January 1, 2009, Condition 1 states that USBR and DWR may conduct JPOD diversions if they meet an EC objective of 1.0 mmhos/cm as long as they are in compliance with the time schedule established in Draft CDO Nos. 262.31-16 and 262.31-17 or any subsequent final order of the State Water Board on this matter.

By Order 2005-0024 dated September 22, 2005, the State Water Board provisionally granted the petitions for reconsideration. The State Water Board ordered that a public hearing be conducted to receive additional information before the State Water Board takes final action on the petitions for reconsideration. The State Water Board held the hearing on this matter to receive evidence on what, if any, action it should take with respect to the Division Chief's July 1, 2005 conditional approval. The hearing notice specifically asked, if the State Water Board modifies the conditional approval of the WQRP or takes other appropriate action, what actions or modifications are recommended, and what is the basis for such actions or modifications.

2.5 Positions of Hearing Participants

Several parties submitted Notices of Intent to Appear (NOI) at the hearing. DWR, PT, CDWA, SDWA, San Joaquin County (SJC), the California Sportfishing Protection Alliance (CSPA), and the San Joaquin River Group Authority (SJRG) submitted NOIs to present cases in chief and to participate in cross-examination and rebuttal. However, the SJRG did not present a case in chief during the hearing. USBR, the Bay Institute, CCWD, Northern California Water Association (NCWA), and Stockton East Water District (SEWD) submitted NOIs to present policy statements and participate in cross-examination and rebuttal. However, USBR participated only in cross-examination during the hearing and the Bay Institute, CCWD, and NCWA did not participate in cross-

examination or rebuttal. The California Department of Fish and Game (DFG), Merced Irrigation District and San Luis Canal Company (MID), San Joaquin River Exchange Contractors Water Authority (SJRECWA), San Luis and Delta Mendota Water Authority and Westlands Water District (SLDMWA), and the State Water Contractors (SWC) submitted NOIs to participate in cross-examination and rebuttal. Patrick Porgans and Associates submitted a NOI to present only a policy statement. In addition, PT, CDWA, SDWA, SJC, CSPA, SEWD, DWR, USBR, SJRECWA, and SWC submitted closing briefs.

PT, CDWA, SDWA, SJC, and CSPA all support issuance of the CDOs. PT supports the following modifications to the CDOs: removal of reference to the San Joaquin River at Vernalis station in DWR's CDO; addition of a requirement in both of the CDOs for an annual Water Quality and Baseline Monitoring report by December 1 of each year pursuant to Condition 11.c. on page 149 of D-1641; addition of a requirement in DWR's CDO that if the ability to collect EC data at stations C-6 or P-12 is interrupted for more than 7 days in a row DWR must submit a report to the Executive Director of the State Water Board explaining why the outage occurred, a plan for restoring collection, and the anticipated date data collection will resume; and addition of the above requirement in USBR's CDO for stations C-8 and C-10. (R.T. (Oct. 24, 2005) p. 51.)

CDWA, SDWA, SJC, and CSPA all argue that the CDOs should be modified to focus on attainment of the water quality objectives instead of construction of permanent barriers or the method of compliance with the objective. CDWA advocates that in the event the objectives are violated, the CDOs should curtail water deliveries to the west side of the San Joaquin Valley to prevent saline drainage to the San Joaquin River from those lands. SDWA and SJC argue that DWR and USBR should be required to meet the objectives through options including water purchases, releases from various reservoirs, water exchanges, recirculation, modifying operations of the temporary barriers, control of drainage to the San Joaquin River, and export reductions. SJC and SEWD argue that while the EC objectives should be met, they should not be met through increased releases from New Melones Reservoir on the Stanislaus River.

DWR, USBR, SLDMWA⁹, and SWC ~~believe~~ argue that the CDOs should not be issued. Additionally, DWR states that if the State Water Board issues DWR a CDO, the San Joaquin River at Vernalis station should not be included in DWR's CDO because DWR is not responsible for meeting the water quality objectives at this location.

3.0 ALLEGED THREATENED VIOLATIONS

The draft CDOs allege that there is a threat that DWR and USBR will violate the conditions imposed on their water rights in D-1641 which require DWR and USBR to implement the 0.7 EC objective from April 1 through August 31 of each year at the following southern Delta compliance locations: the San Joaquin River at Brandt Bridge (Station C-6); Old River near Middle River (Station C-8); Old River at Tracy Road Bridge (P-12), and the San Joaquin River at Vernalis (C-10). PT argues that Water Code section 1831 allows the State Water Board to issue CDOs for the alleged threatened

⁹ SLDMWA asserted, in a January 24, 2006 comment on the draft order, that if any of the prosecutorial team members, particularly Andrew Sawyer or Erin Mahaney, simultaneously was an adviser to the State Water Board in another matter, that service would give the appearance of unfairness and would suggest the probability of unfair influence by the prosecuting attorneys. Ms. Mahaney is the prosecuting attorney in this matter, and Mr. Sawyer is her supervisor. SLDMWA's comment is based on *Quintero v. City of Santa Ana* (2003) 114 Cal.App.4th 810 and on a superior court ruling in *Morongo Band of Mission Indians v. State Water Resources Control Board*, Case No. 04CS00535. SLDMWA asserts that the State Water Board must now withdraw this order and hold a new hearing before deciding either the issues in the CDO or the issues regarding the WQRP. SLDMWA's comment, to the extent that it may be construed as a request for action by the State Water Board, is rejected for the following reasons: First, it is not in the form of a procedural motion and it is not clear that it requests any action. Second, SLDMWA is not a party to either the CDO or the reconsideration of the WQRP, and therefore is not in a position to claim that this proceeding violates its due process rights. Since the hearing officers were under no duty to allow SLDMWA to participate, they likewise have no duty to recommence the hearing at SLDMWA's request. Third, this request, if it is a request, is untimely, as it should have been made no later than the commencement of the hearing on October 24, 2005, instead of waiting for three months while the State Water Board conducted a full six days of hearing and then prepared and published a draft order. Fourth, the ruling in the *Morongo* case is not a citable precedent. Fifth, the *Quintero* case is based on evidence and is distinguishable, since there is no evidence, and no attempt to present evidence, in this case to establish the same type of close attorney-client relationship between Ms. Mahaney, the prosecutor in this case, and the members of the Board that was evident in *Quintero*. Nor is there any evidence that Ms. Mahaney was advising the members of the Board in another proceeding during the pendency of this proceeding. Sixth, Mr. Sawyer did not speak on the record during the hearing in this matter. Seventh, even if it could be argued that Ms. Mahaney should not have prosecuted the CDO, Ms. Mahaney made it undeniably clear that she and the other prosecutorial team members were not addressing the WQRP issue, and they provided no evidence on that issue. Accordingly, SLDMWA's comment is inapplicable to the proposed action on the WQRP.

violation of DWR's and USBR's permit/license conditions and to set a time schedule for compliance. (PT 1, p. 2.)

The draft CDOs allege that DWR and USBR are responsible for either meeting the 0.7 EC objective as of April 1, 2005, at Stations C-6, C-8, and P-12 or for constructing permanent operable barriers or other equivalent measures along with an operations plan that reasonably protects southern Delta agriculture. The draft CDOs allege that neither permanent barriers nor equivalent measures have yet been completed. In addition, the draft CDOs allege that DWR and USBR have not prepared an operations plan for approval by the Executive Director to protect agriculture. (PT 3 and 4, p. 2.)

The draft CDOs include a time schedule for compliance and various corrective actions. The proposed time schedule would require DWR and USBR to ensure that permanent barriers or equivalent measures are installed by January 1, 2009. The draft CDO's also would require that DWR and USBR submit a detailed schedule with milestones to the Division Chief for completion of permanent barriers or equivalent measures for approval by the Executive Director. In addition, the draft CDOs would require DWR and USBR to submit a status report to the State Water Board every three months on construction of the barriers and an update on the projected final completion date. The draft CDOs also include a requirement that if DWR and USBR project an violation/exceedance of the 0.7 EC objective at the interior southern Delta EC stations prior to construction of the barriers that DWR and USBR inform the State Water Board and describe the corrective actions they will take to avoid the violation/exceedance. If an violation/exceedance occurs, the draft CDOs would require DWR and USBR to report regarding the violation/exceedance, including any corrective actions and the amount of project supplies remaining for beneficial uses. (PT 3 and 4, p. 3.)

4.0 ACTION ON CDO

The State Water Board finds that there is a threat that DWR and USBR will violate their permit/license conditions requiring them to implement the 0.7 interior southern Delta EC objective at the following stations: the San Joaquin River at Brandt Bridge (Station C-6);

Old River near Middle River (Station C-8); and Old River at Tracy Road Bridge (P-12). The State Water Board finds that there is no current threat, however, of a violation of the objective on the San Joaquin River at Vernalis (C-10). The State Water Board further finds that issuance of a CDO is appropriate for the threatened violation. Water Code section 1831 allows the State Water Board to issue a CDO for the threatened violation of any of the terms or conditions of a permit or license. The Water Code does not require that an actual violation occur prior to taking an enforcement action, only that a threat be demonstrated. The purpose and effect of this CDO is to require DWR and USBR to implement measures to obviate the threat of violation that is caused by their failure to carry out measures that would improve salinity levels in the southern Delta.

DWR's and USBR's own statements substantiate the threat of violation. First, DWR and USBR acknowledged in the cover letter to their February 14, 2005 Joint Petition for Change and Petition for a Temporary Urgency Change, in which they sought to delay implementation of the 0.7 interior southern Delta EC objective, that there is a potential that they might violate their permit/license conditions in the absence of the permanent operable barriers that they are planning to construct. (PT 6, pp. 2 and 8.) While DWR's and USBR's permit/license conditions also allow them to meet the 0.7 EC objective or employ alternative measures, it is clear from PT Exhibit 7 (p. 1-2) that DWR and USBR consider the barriers to be the only feasible method for compliance, and that the barriers are the only method DWR and USBR are currently pursuing. Further, DWR and USBR do not anticipate installing permanent barriers for several years and DWR and USBR are unlikely to consistently meet the objectives without installing permanent barriers. DWR and USBR state;

“imposition of the more stringent 0.7 EC agricultural salinity objective could force DWR and [USBR] to release large quantities of water from upstream reservoirs in an attempt to meet the 0.7 EC objective in the southern Delta. It is unlikely that that increased flows alone will result in compliance with the objective.” (PT 6, p. 2.)

In addition, DWR and USBR knew that they would be subject to enforcement action if they violate the 0.7 interior southern Delta EC objective as demonstrated by the following statement: “Without an extension in the effective date, DWR and [USBR] could be found in violation of [] D-1641 if they exceed the 0.7 EC objective....” (PT 6, p. 8.) Further, DWR admits in its letter to the State Water Board dated March 25, 2005¹⁰ that water quality at the southern interior Delta stations often exceeds 0.7 EC in July and August in average to dry years and that even in wet years water quality may exceed 0.7 EC in late summer. (PT 7.) The exceedance of 0.7 EC in the past was not a violation of DWR’s and USBR’s water right permits, but the fact that exceedances have occurred in the past demonstrates that if nothing is done to prevent exceedances, the requirements in the permit/license conditions to meet the 0.7 EC objective are likely to be violated.

Additional evidence also demonstrates that there is a continued threat of violation of DWR’s and USBR’s permit/license conditions until such time as the permanent barriers are installed. Although DWR and USBR did meet the interior southern Delta EC objective from April through August of 2005, their meeting the water quality objective this year apparently was due to unusually wet hydrologic conditions. (PT 5, p. 1.) Historic EC data from 1996 through 2005 shows that 0.7 EC historically was exceeded between April and August at various times at all three interior southern Delta stations, including at least one wet year for each station and in 2001 following a five-year period of wet and above normal years. (PT 11; 12; 13; and 18.) In addition, DWR and USBR actually violated the required 1.0 EC objective at stations P-12 and C-6 during 2003 and did not report this exceedance to the State Water Board until very recently. (PT 15; DWR 26.) Further, there appear to be at least some gaps in required data collection for the interior southern Delta sites. (PT 19.)

Statements by DWR and USBR, historic data, gaps in required data reporting, and the unreported ~~violation~~ exceedances of the 1.0 EC objective in 2003 immediately before the effective period of the more restrictive 0.7 EC effective period support a conclusion that

¹⁰ The purpose of the letter was to advise the State Water Board that DWR was not petitioning for
Continued

DWR and USBR are likely to violate the 0.7 EC objective in the future. As the barriers appear to be the only method for achieving compliance with the objective currently under consideration and DWR now states that it does not anticipate that the barriers will be installed until mid-2009 (DWR 23, p. 4.), a threat of violation is likely to exist until at the earliest 2009.

DWR argues that the proposed CDO's are inconsistent with its and USBR's permit/license conditions¹¹, which state that,

“If (Licensee/)Permittee exceeds the objectives at stations C-6, C-8, or P-12, Permittee shall prepare a report for the Executive Director. The Executive Director will evaluate the report and make a recommendation to the [State Water Board] as to whether enforcement action is appropriate or the noncompliance is the result of actions beyond the control of Permittee.”

DWR is in effect arguing that the State Water Board cannot initiate an enforcement action until DWR and USBR submit a report to the Executive Director. ~~Under this reasoning, if they routinely violate the requirements to meet the objectives at the three stations and never file a report, the State Water Board can never take enforcement action against them. This reasoning is unsupportable. This provision addresses actual exceedances of the objectives, however, not the threatened violations that are the subject of this proceeding. Because no actual violation is alleged in the draft CDOs, the above provision is not applicable in the current proceeding.~~ The meaning of the condition DWR references is that if DWR and USBR are in violation of the condition, one of the matters to be considered by the Executive Director in recommending whether to prosecute is the extent to which the noncompliance results from actions that are beyond the control of DWR and USBR. It does not mean there is no violation if other factors are affecting salinity levels; it means simply that the Executive Director may exercise prosecutorial discretion.

reconsideration of the order denying the Temporary Urgency Change Petition.

¹¹ Condition 6 on page 159, Condition 1 on pages 159-160, and Condition 1 on pages 160-161 of D-1641.

DWR and USBR did not take adequate measures to ensure future compliance with their permit/license conditions by the April 1, 2005, effective date of the interior southern Delta EC objectives, as evidenced above. The current enforcement action is a separate matter from any future violation of the 0.7 interior southern Delta EC objective. If DWR and USBR actually exceed the objective in the future, DWR and USBR will still have the opportunity to submit a report to the Executive Director before the State Water Board determines what if any enforcement action to take.

4.1 DWR's Arguments Opposing Enforcement

DWR makes several arguments intended to attack the requirement in its permits that it meet the salinity objectives at the interior southern Delta compliance stations. These arguments are relevant only to the extent that they are presented for the purpose of arguing that the State Water Board should not issue a CDO against DWR despite DWR's ~~violation of its permit conditions~~ failure to take steps that would minimize the risk that the objectives at stations C-6, C-8, and P-12 will be exceeded in the future. DWR's arguments generally are more relevant to a consideration of whether the State Water Board should amend DWR's permits to relieve it of the responsibility for meeting the objectives or reduce its responsibility, or to an argument that the water quality objectives themselves are unnecessarily protective of southern Delta agriculture and should be amended. DWR's and USBR's permits and license, however, currently require them to meet the objectives at stations C-6, C-8, and P-12. The matter addressed herein is whether they are threatening to violate their permits and license through their inaction, not whether they are currently in violation or whether their permits and license should be amended. Nevertheless, the State Water Board discusses DWR's arguments below, and explains why each argument should not change the decision to issue a CDO.

DWR argues presented evidence that as the operator of the SWP, DWR has little control over compliance with the interior southern Delta EC objectives is largely outside of DWR's control as the operator of the SWP and that DWR's primary control over improving salinity in the southern Delta lies in its water management and planning authority. (R.T. (November 17, 2006), p. 155-158; DWR 20.) During the hearing for D-

~~1641, however, DWR and USBR both agreed to backstop the interior southern Delta salinity objectives in lieu of the Board assigning responsibility to other parties for meeting the objectives. DWR did not specify which authority it intended to rely on to backstop the objectives. (R.T. (November 17, 2006), p. 158.) As a result, the State Water Board made both DWR and USBR responsible under their permits and license for meeting the objectives. Neither DWR nor USBR petitioned for reconsideration regarding this responsibility. Accordingly, the requirement stands unless DWR or USBR successfully petition to change this requirement. DWR submitted evidence that water quality in the southern Delta is primarily affected by San Joaquin River water quality and local discharges and that since DWR does not operate facilities on the San Joaquin River it does not have control over these conditions. (DWR 20.) Further, modeling by DWR shows that the southern Delta does not receive significant flows from the Sacramento River except when San Joaquin River flows are below 1000 cubic feet per second (cfs) or when temporary barriers (the temporary barriers do not affect water quality at Brandt Bridge) are installed. (DWR 20, pp. 1 and 8.) In addition, DWR asserts, based on modeling, that changes in SWP exports do not effectively control water quality in the interior southern Delta¹². (DWR 20, pp. 8-13.)~~

~~DWR did not, however, provide any evidence regarding the effects of CVP operations on meeting the interior southern Delta EC objectives and did not fully explain what impacts its operations have when San Joaquin River flows are below 1000 cfs or the temporary barriers are installed. In addition, DWR did not provide any estimates regarding water costs to meet the objectives. If DWR fails to provide this information in connection with actual future violations, the Executive Director will not have the information necessary to determine whether and to what extent noncompliance with the objectives is the result of actions outside of the control of DWR and USBR. While DWR may not have complete control over compliance with the interior southern Delta salinity objectives, DWR and USBR are jointly and severally responsible for meeting the objective. (PT 5, pp. 159 and 163.) In addition, to the extent that DWR and USBR operate their projects in a~~

¹² ~~DWR states, however, that additional investigation is needed to determine the factors affecting water~~
Continued

~~coordinated fashion, DWR has some control over operations by USBR, particularly when USBR wishes to use JPOD.~~

DWR argues that the CDOs inappropriately rely upon information that was submitted in support of petitions to change DWR's and USBR's water rights and historic data. (DWR 18, pp. 11-12.) DWR and USBR, however, are the operators of the SWP and the CVP and therefore are the best source for determining likely future operations of the projects. DWR did not refute evidence that DWR and USBR will not complete actions to comply with DWR's and USBR's permit/license condition before 2009 or that the objective will likely be exceeded in the future. DWR also did not refute that the permanent barriers are the only alternative ~~currently under~~ DWR and USBR currently are considering for meeting DWR's and USBR's permit obligations. DWR is correct that PT failed to consider future hydrology, reservoir conditions, and DWR's ability to control these conditions when issuing the draft CDOs. (DWR 18; R.T. (Oct. 24, 2005) pp.111, 138-145.) Nevertheless, it is reasonable for the State Water Board to rely upon historic EC data to determine the potential for a future violation of the EC objective. DWR's speculation that conditions on the San Joaquin River and modeling of those conditions may change in the future is not grounds for disregarding the current generally accepted modeling information. (DWR 18, pp. 10-12.) Further, it is not clear when or if future modeling will be validated and found to be acceptable for predictive assessments; nor is it clear that salinity conditions will continue to improve on the San Joaquin River.

~~DWR also argues that the State Water Board should not take enforcement action because agricultural uses will not be significantly impacted if salinity at the interior southern Delta stations and at Vernalis remains at or below 1.0 EC. The evidence does not adequately support this assertion. DWR submitted a report from Dr. John Letty that 1.0 EC irrigation water quality is adequate to maintain 100 percent crop yields, but the information was not based on the circumstances existing within the southern Delta and the report is still undergoing peer review. (DWR 22 revised, pp. 8-9 and DWR 18, p. 9.)~~

~~quality in Old River at Tracy Road Bridge. (DWR 20, pp. 11-12).~~

~~In addition, while DWR asserts that information submitted to the State Water Board during a recent Periodic Review of the 1995 Plan (a quasi legislative proceeding) indicates that salinity values of 1.0 or 1.1 EC will reasonably protect agricultural uses in the southern Delta, DWR did not submit any of the referenced information in evidence for the record in the adjudicative hearing that is the basis for this order. Other evidence in the record shows that there is a potential for harm to southern Delta agriculture if the 0.7 EC objective is exceeded. (CDWA 8, p. 4; CDWA 9a, pp. 1-2; CDWA 14, pp. 2-3; SDWA 2, p. 7; SDWA 3, pp. 1-2; SDWA 4, p. 1; SDWA 6, pp. 12-20; R.T. 177-178; SJC 5, p. 3.)~~

~~While the State Water Board cannot conclude based on the evidence submitted during the hearing that irrigation water salinity above 0.7 EC is the only causative factor for crop yield reductions in the southern Delta, the State Water Board has previously determined that salinity levels above 0.7 EC are an important factor impacting southern Delta crop production. (1978 Delta Plan, pp. VI-16—VI-19.) While this determination was based on a 1976 study, there is no recent evidence in the record specific to the southern Delta that refutes the 1978 findings. The State Water Board has not yet determined what, if any, changes to make to the interior southern Delta EC objectives based on information submitted during the State Water Board's Periodic Review of the 1995 Plan objectives.~~

The State Water Board agrees with DWR's request for a meaningful time schedule for implementation of the permanent barriers. Given the anticipated completion date for the barriers in mid-2009 (DWR 23, figure 18), a final completion date of July of 2009 should provide adequate time for DWR and USBR to complete construction and begin operation of the permanent barriers.

4.2 Conclusions Regarding the CDO

The State Water Board will not defer consideration of the CDOs until after it has considered DWR's and USBR's Petition to Change and has decided whether to make any changes to the interior southern Delta EC objectives in the 1995 Plan, as DWR requests. (DWR 18, pp. 15-16.). The existence of recently pending actions does not excuse DWR

and USBR from having failed to take adequate steps to comply with their permit/license conditions by the required date of April 1, 2005. In addition, even if the State Water Board were to modify the EC objectives in the 1995 Plan, subsequent changes would have to be made to DWR's and USBR's water rights in order to change the water right permits and license.

Based on the foregoing, the State Water Board issues a CDO jointly to DWR and USBR for threatened violation of their permit/license conditions requiring implementation of the 0.7 interior southern Delta EC objective. The CDO has conditions that allow the Board to actively monitor compliance with the salinity objectives and ensure compliance. Because DWR and USBR are ~~jointly and severally~~ each fully responsible for meeting the interior southern Delta EC objectives, the State Water Board is issuing one joint CDO to both parties. In order to prevent further delays in DWR's and USBR's plans for complying with their permit/license conditions (PT 6, p. 2; DWR 23, Figure 18), the State Water Board requires a compliance schedule and regular progress reports with State Water Board oversight. Considering that DWR and USBR failed to report ~~violation~~ exceedances in the past of the 1.0 EC objective at interior southern Delta compliance stations in 2003 until recently (PT 15; 26), the CDO reiterates the requirement in D-1641 that DWR and USBR file an annual water quality monitoring report by December 1 of each year pursuant to Condition 11.c. on page 149. In addition, based on evidence that DWR and USBR have failed to maintain consistent EC records at the interior southern Delta compliance stations (PT 19), the CDO includes a requirement that if the ability to collect EC data at any of the interior southern Delta EC stations is interrupted for more than seven (7) days in a row DWR and USBR shall submit a report to the Executive Director of the State Water Board explaining why the outage occurred, a plan for restoring collection, and the anticipated date data collection will resume.

CDWA, SDWA, SJC, and CSPA argued that the State Water Board should include conditions in the CDO to require DWR and USBR to take various actions to meet the 0.7 EC objective and punitive actions if the objective is violated. The State Water Board will not impose such penalties at this time. This CDO addresses the threatened violation of

DWR's and USBR's permit/license conditions requiring implementation of the 0.7 interior southern Delta EC objective. This order takes into consideration the failure of DWR and USBR to have measures in place to meet their permit/license requirements by the April 1, 2005 required time frame. Pursuant to D-1641, if DWR and USBR violate the 0.7 interior southern Delta EC objective in the future, DWR and USBR can submit a report to the Executive Director of the Board and the Executive Director will make a recommendation to the State Water Board as to whether the violation should be prosecuted. (Condition 6 on page 159, Condition 1 on pages 159-160, and Condition 1 on pages 160-161 of D-1641.) At that time, the State Water Board can determine what, if any actions, DWR and USBR should take.

It should be emphasized that DWR's and USBR's permit/license conditions do not require construction of permanent barriers as the exclusive method of compliance. Accordingly, this order requires DWR and USBR to develop a plan and a time schedule to comply with their water right permit/license conditions requiring them to meet the 0.7 interior southern Delta EC objective. They should consider all potential means of compliance. As stated in footnote 5 on page 182 of D-1641, the 0.7 EC objective will be replaced by the 1.0 EC objective at compliance locations C-6, C-8, and P-12 if (1) DWR and USBR construct permanent barriers or implement equivalent measures in the southern Delta and (2) DWR and USBR prepare and receive the approval of the State Water Board's Executive Director of an operations plan that reasonably protects southern Delta agriculture. The State Water Board expects the issues raised by CSPA regarding potential water quality and fisheries impacts associated with the barriers to be addressed by DWR and USBR in their environmental documentation prepared in support of the permanent barriers if that is the alternative that DWR and USBR select. (CSPA 1 and 3.)

5.0 ACTION ON THE WATER QUALITY RESPONSE PLAN

DWR and USBR submitted the WQRP to the Division Chief on April 25, 2005, and the Division Chief conditionally approved it on July 1, 2005. As explained above, the approved WQRP is a condition on DWR and USBR using JPOD. The purpose of the WQRP is to ensure that operation of JPOD does not significantly degrade water quality in

the southern and central Delta to the injury of water users in the southern and central Delta.

All of the petitioners for reconsideration of the approval object to Condition 1 of the approval, which provides:

1. DWR and USBR shall meet the requirements included in the WQRP dated April 25, 2005, and shall meet the further conditions in this approval. JPOD diversions are authorized pursuant to this WQRP if DWR and USBR are in compliance with the time schedule established in Draft Cease and Desist Orders 262.31-16 and 262.31-17 or any subsequent final order of the State Water Board on this matter and meet the following requirements:
 - a. DWR and USBR may conduct JPOD diversions if DWR and USBR are in compliance with all of the then-current conditions on their water right permits and licenses with the following exceptions:
 - i. Prior to January 1, 2009, DWR and USBR may conduct JPOD diversions if they meet an EC objective of 1.0 mmhos/cm at the compliance locations C-6, C-8, and P-12 (San Joaquin River at Brandt Bridge, Old River near Middle river, and Old River at Tracy Road Bridge).
 - ii. After January 1, 2009, DWR and USBR may conduct JPOD diversions only if they meet all of the requirements of their water right permits and licenses, including, if it is still a condition of their permits, meeting the 0.7 mmhos/cm electrical conductivity (EC) objective for the protection of agricultural beneficial uses in the interior southern Delta at compliance locations C-6, C-8, and P-12 (San Joaquin River at Brandt Bridge, Old River near Middle River, and Old River at Tracy Road Bridge).
 - b. If any permit or license condition implementing the water quality objectives (with the exception of the 0.7 mmhos/cm agricultural EC objective for the interior southern Delta prior to January 1, 2009) is violated, JPOD diversions shall cease until such time as the water quality objectives are met.

In Order WR 2005-0024, the State Water Board provisionally granted reconsideration of the July 1, 2005 approval, subject to further action in this order. Order WR 2005-0024 suspended all of Condition 1 except the first sentence, which requires DWR and USBR to

meet the requirements of the April 25, 2005 water quality response plan and to meet the further conditions of the July 1, 2005 approval.

In their petitions for reconsideration, the petitioners asserted that the Division Chief has no authority to change the terms and conditions of D-1641 by changing the requirements that DWR and USBR meet the salinity objectives at compliance locations C-6, C-8, and P-12.¹³ In effect, they argue that DWR and USBR should not be allowed to operate JPOD when the 0.7 EC objective is not met.

The current hearing record contains little evidence regarding the effect of JPOD diversions on salinity at compliance locations C-6, C-8, and P-12. However, DWR presented evidence to show that meeting the 0.7 EC objective could impact DWR's ability to deliver water to export areas and to wheel transfer water during drier years when water supplies are most critically needed. (DWR 24.) The converse meaning of this evidence is that the ability to meet the 0.7 EC objective during drier years may be adversely impacted by JPOD pumping and by wheeling other water transfers.

In D-1641, the State Water Board found the use of JPOD could cause potential significant impacts on aquatic resources. However, the use of JPOD pumping if appropriately conditioned, could benefit fishery resources by providing greater flexibility to avoid impacts during critical time periods. The State Water Board also found that the use of JPOD could affect the ability of CCWD to divert water at Old River to Los Vaqueros Reservoir because of restrictions under the biological opinion for Los Vaqueros Reservoir. The State Water Board approved the use of JPOD in three stages, subject to extensive terms and conditions. Among the conditions, several response plans are required that are subject to the approval of the Executive Director or the Chief of the Division of Water Rights. In effect, DWR and USBR are privileged to be able to use the JPOD at all. In the absence of the conditions, the State Water Board

¹³ In fact, the Chief of the Division of Water Rights does have conditional delegated authority to amend water right permit terms and conditions in response to change petitions, but the WQRP does not involve a change petition. (State Water Board Resolution 2002-0106.)

was not satisfied that the use of JPOD would not injure other legal users of water or have other adverse impacts. Among the conditions on use of JPOD by DWR and USBR, in addition to the condition requiring a WQRP, is a condition requiring that all provisions of the respective permits and license of the project using JPOD be met during all stages of JPOD. D-1641¹⁴ added to the permits and license of DWR and USBR conditions requiring that they meet the salinity objectives at compliance locations C-6, C-8, and P-12. Since April 1, 2005, those conditions require that DWR and USBR meet the 0.7 EC objective during April through August each year, in addition to meeting the 1.0 EC objective at other times of the year. Accordingly, D-1641 does not authorize JPOD operations when DWR and USBR are not meeting the 0.7 EC objective during April through August. Having held a hearing to reconsider the approval of the WQRP, Under the Revised Notice of Public Hearing, the State Water Board now can change could properly consider changing the responsibilities of DWR and USBR to meet the salinity objectives.¹⁵ However, such a change would require compliance with the California Environmental Quality Act. (Pub. Resources Code, § 21000, et seq.) Since no environmental document that analyzes the effects of Condition 1 of the WQRP approval is in the hearing record, the State Water Board will require that DWR and USBR meet the objectives whenever they conduct JPOD operations.

~~The current hearing record contains little evidence regarding the effect of JPOD diversions on salinity at compliance locations C-6, C-8, and P-12. However, DWR presented evidence to show that meeting the 0.7 EC objective could impact DWR's ability to deliver water to export areas and to wheel transfer water during drier years when water supplies are most critically needed. (DWR 24.) The converse meaning of this evidence is that the ability to meet the 0.7 EC objective during drier years may be adversely impacted by JPOD pumping and by wheeling other water transfers.~~

¹⁴ See D-1641 at pages 159, conditions 6 and 1, and page 160, condition 1. Also see Order WR 2005-0024.

¹⁵ Consideration of such a change is within the scope of Key Issue 3 in the Revised Notice of Public Hearing dated September 23, 2005, and was not excluded from the hearing by the hearing officer's opening statement, which sought to prevent efforts to present evidence that could be used only to support actions in other proceedings.

~~D-1641 (PT 5), which conditioned the use of JPOD by DWR and USBR upon their compliance with an approved WQRP, provides the basis for linking compliance with the interior southern Delta salinity objectives with JPOD pumping. The purpose of this condition is to ensure that increased pumping due to use of the JPOD will not impact water quality at CCWD's diversion points on Rock Slough and Old River. (PT 5, pp. 150 and 156.) In D-1641, the State Water Board required the WQRP as a condition of JPOD diversions. This condition was added in response to CCWD's argument that the use of JPOD could change the location of X2,¹⁶ thereby reducing the availability of water for the Los Vaqueros water right permits of CCWD. (See PT 5, p. 93.) The condition proposed by CCWD and adopted by the State Water Board in 2000, however, protects more than CCWD's diversions. Condition 1.a.(5) on pages 150-151 of D-1641 requires the response plan to ensure that the water quality in the southern and central Delta will not be significantly degraded through use of the JPOD to the injury of water users in that area.~~

~~Historically, DWR and USBR used JPOD for emergency pumping and for USBR to recoup reductions in exports caused by pumping curtailments in May and June to minimize diversions of striped bass. They also delivered water to the Cross Valley Contractors, Musco Olive, and the Veteran's cemetery. The State Water Board approved the make-up pumping for striped bass curtailments in D-1485. In 1995, in Order WR 95-6, the State Water Board temporarily approved the use of JPOD to recover export reductions taken generally to benefit fish, not only striped bass. In Order WR 98-09, the State Water Board extended the term of the approvals in Order WR 95-6 until the end of 1999, when D-1641 went into effect. Stage 1 of JPOD use, as expressed in D-1641, is essentially the same as the approved uses of JPOD under Orders WR 95-6 and WR 98-09. Under Orders WR 95-6 and WR 98-09, Stage 1 JPOD operations were authorized~~

¹⁶ X2 is the location of the 2 parts per thousand salinity contour (isohaline), one meter off the bottom of the estuary, as measured in kilometers upstream from the Golden Gate Bridge. The abundance of several estuarine species has been correlated with X2. In the 1995 Bay-Delta Plan, an electrical conductivity value of 2.64 mmhos/cm at the water surface is used to represent the X2 location. The State Water Board does not expect changes in the location of X2 as a result of the barriers. (WR-5, p.10, footnote 11.)

~~while DWR and USBR did not have any conditions on their permits and license to meet the salinity objectives at compliance locations C-6, C-8, and P-12. Since 2000, DWR and USBR have been required to meet the 1.0 EC objective at the three interior southern Delta compliance locations. It is not desirable to curtail the long-standing historic uses of JPOD as a result of the recent change in salinity requirements, as these uses are within the operations that were assumed to exist when the Board approved JPOD. Accordingly, this order authorizes the minimal, historic, uses of JPOD that are authorized under stage 1, without requiring that DWR and USBR meet the 0.7 EC objective, until July 1, 2009. By historic uses, the State Water Board means uses only by the contractors who have water supply contracts for the delivery of the water and does not mean to include enough water to allow each contractor recipient to transfer water to other water users, including other contractors, or to uses that did not exist prior to the adoption of D-1641. DWR and USBR shall have met the 0.7 EC objective during the previous twelve months whenever either of them uses JPOD under Stages 2 and 3.~~

6.0 CONCLUSIONS

1. ~~DWR and USBR are jointly and severally~~ each fully responsible to meet the objectives in the interior southern Delta, as described in Table 2 of D-1641, at the following stations: the San Joaquin River at Brandt Bridge (Station C-6); Old River near Middle River (Station C-8); and Old River at Tracy Road Bridge (Station P-12).
2. A threat of violation of DWR's and USBR's permit and license conditions for implementing the 0.7 mmhos/cm agricultural EC objective exists at Stations C-6, C-8; and P-12.
3. The State Water Board may issue a CDO for the threatened violation of any of the terms or conditions of a permit or license under Water Code section 1831.
4. This order does not relieve DWR and USBR of the requirement to meet the 0.7 EC interior southern Delta objective that apply at stations C-6, C-8, and P-12 from April through August of each year; however, the State Water Board recognizes that DWR

and USBR ~~may not~~ have not implemented measures that will help them meet the interior southern Delta objectives. Therefore, this order imposes a time schedule that requires that ~~the~~ DWR and USBR obviate the threat of non-compliance with the 0.7 EC interior southern Delta salinity objectives be fully met by July 1, 2009. If there is a violation of the 0.7 EC objective, the Executive Director of the State Water Board will make a recommendation to the State Water Board regarding whether to take enforcement action against DWR and USBR.

5. DWR and USBR estimate they can implement measures ~~to consistently meet~~ that will obviate the threat of non-compliance with the 0.7 interior southern Delta EC objectives by early 2009. In the hearing leading to D-1641, DWR and USBR assured the State Water Board that they would have barriers in place to protect southern Delta agriculture by April 1, 2005. Considering that the objectives were first adopted in the water quality control plan in 1978, and there is evidence that salinity is a factor in limiting crop yields for southern Delta agriculture, the State Water Board will not be ~~inclined to extend the time schedule beyond July 1, 2009 if DWR and USBR have not completed their selected implementation measures by that date~~ extend the date for removing the threat of non-compliance beyond July 1, 2009.
6. If DWR and USBR project a potential ~~violation~~ exceedance of the April through August permit/license conditions for Interagency Stations C-6, C-8, and P-12, prior to July 1, 2009, this order requires DWR and USBR immediately to inform the Executive Director of the potential ~~violation~~ exceedance and to describe the corrective actions that DWR and USBR will use to avoid the ~~violation~~ exceedance.
7. This order requires that DWR and USBR submit a status report to the State Water Board every three months which describes their progress towards compliance with the April through August permit/license conditions for Interagency Stations C-6, C-8, and P-12 and an updated projection of the final compliance date (including the final construction and operations dates if DWR and USBR determine that permanent barriers or alternative measures are the preferred method of compliance).

8. This order requires DWR and USBR promptly to report any threat that they will exceed any water quality objectives.
9. This order requires that if DWR and USBR are unable to collect EC data at any of the interior southern Delta EC stations for more than 7 days in a row DWR or USBR shall submit a report to the Executive Director of the State Water Board explaining why the outage occurred, a plan for restoring data collection, and the anticipated date when they will resume collecting the required data.
10. In this order, the State Water Board revises the July 1, 2005, approval by the Division Chief of the WQRP for use by DWR and USBR of JPOD in the southern Delta.
- ~~11. This order authorizes DWR and USBR to conduct the minimal, historic, uses of JPOD under stage 1, without requiring that DWR and USBR meet the 0.7 EC objective, until July 1, 2009.~~
- ~~12.11. This order, in accordance with D-1641, conditions the use of JPOD under Stages 2 and 3 upon DWR and USBR meeting all requirements of their permits, including the objectives for the interior southern Delta, during the previous twelve months.~~

ORDER

- A. The State Water Resources Control Board (State Water Board) ORDERS that, pursuant to Water Code sections 1831 through 1836, the Department of Water Resources (DWR) and the United States Bureau of Reclamation (USBR) shall take the following corrective actions and satisfy the following time schedules:
 1. DWR and USBR shall ~~ensure compliance~~ implement measures to obviate the threat of non-compliance with Condition 5 on page 159, Condition 1 on pages 159 and 160, and Condition 1 on pages 160 and 161 of Revised Decision 1641 (D-1641) regarding the 0.7 mmhos/cm electrical conductivity (EC) objective by July

1, 2009. Beginning April 1, 2005, these conditions require DWR and USBR to meet the 0.7 EC Water Quality Objective for Agricultural Beneficial Uses at the following locations specified in Table 2 of D-1641 at page 182:

- 1) San Joaquin River at Brandt Bridge (Interagency Station No. C-6);
- 2) Old River near Middle River (Interagency Station No. C-8); and
- 3) Old River at Tracey Road Bridge (Interagency Station No. P-12).

Alternatively, DWR and USBR may take advantage of Footnote 5 on page 182 of D-1641 which states that the 0.7 EC objective is replaced by the 1.0 EC objective from April through August after April 1, 2005 if permanent barriers are constructed or equivalent measures are implemented in the southern Delta and an operations plan that reasonably protects southern Delta agriculture is prepared by DWR and USBR and approved by the Executive Director of the State Water Board.

2. Within 60 days from the date of this order, DWR and USBR shall submit a detailed plan and schedule to the Executive Director for compliance with the conditions mentioned above, including planned completion dates for ~~key events leading to full~~ actions that will obviate the current threat of non-compliance with the 0.7 EC objective at stations C-6, C-8, and P-12 by July 1, 2009. If the plan provides for implementation of equivalent measures, DWR and USBR shall submit information establishing that those measures will provide salinity control at the three compliance stations equivalent to the salinity control that would be achieved by permanent barriers. The plan and schedule are subject to approval by the Executive Director of the State Water Board, shall be comprehensive, and shall include significant project milestones. DWR and USBR shall submit any additional information or revisions to the schedule and plan that the Executive Director requests within the period that the Executive Director specifies. DWR and USBR shall implement the plan and schedule as approved by the Executive Director.

3. Within 60 days from the date of this order, if DWR and USBR decide to implement the permanent barriers project or equivalent measures, DWR and USBR shall submit a schedule to the Chief of the Division of Water Rights (Division) for developing an operations plan that will reasonably protect southern Delta agriculture. DWR and USBR shall submit the final plan to the Executive Director for approval no later than January 1, 2009. To ensure that the plan is adequate prior to the required compliance date, DWR and USBR shall submit a draft of the operations plan by January 1, 2008, to the Division Chief for review and comment.

4. In the event that DWR and/or USBR projects a potential ~~violation~~exceedance of the 0.7 EC objective at Interagency Stations C-6, C-8, and P-12, prior to July 1, 2009, DWR and/or USBR shall immediately inform the State Water Board of the potential ~~violation~~exceedance and shall describe the corrective actions they are initiating to avoid the ~~violation~~exceedance. Corrective actions may include but are not limited to additional releases from upstream State Water Project or Central Valley Project (Project)-(CVP) facilities or south of the Delta State Water Project (SWP) or CVP facilities, modification in the timing of releases from Project facilities, reduction in exports, recirculation of water through the San Joaquin River, purchases or exchanges of water under transfers from other entities, modified operations of temporary barriers, reductions in highly saline drainage from upstream sources, or alternative supplies to Delta farmers (including overland supplies).

5. If there is an ~~violation~~exceedance of the 0.7 EC objective for Interagency Stations C-6, C-8, and P-12, within 30 days from the date of the ~~violation~~exceedance, DWR and USBR shall report to the Executive Director (1) the length of time over which the ~~violation~~exceedance occurred and (2) the corrective actions taken to curtail the ~~violation~~exceedance, including the amount of water bypassed or released from upstream Project CVP supplies and south of Delta SWP and CVP

supplies, the net reduction in exports, and the measured quantity of other actions, if any, taken specifically to correct the ~~violation~~exceedance. DWR and USBR also shall identify the amount of their Project supplies remaining for beneficial uses following corrective actions. Upon receipt of the above report, the Executive Director will make a recommendation to the State Water Board regarding whether to take enforcement action. In deciding whether to initiate enforcement action, the Executive Director shall consider the extent to which the noncompliance was beyond DWR's and USBR's control and the actions taken to correct the ~~violation~~exceedance.

6. Every three months, commencing on the last day of the month following the date of this order, DWR and USBR shall submit to the State Water Board a status report on progress towards compliance with the referenced permit/license conditions and an updated projection of the final compliance date (including completion of construction and commencement of operations if DWR and USBR determine that permanent barriers or equivalently protective measures are the preferred method of compliance).
7. If DWR or USBR is unable to collect EC data at Interagency Station Nos. C-6, C-8, or P-12 for more than seven (7) consecutive days for any reason, DWR and USBR shall report the outage in writing to the Executive Director. The report shall include the reason for the loss of data, a plan to restore data collection, and the anticipated date that data collection will resume.
8. DWR and USBR shall submit to the Executive Director by December 1 of each year the annual monitoring report required by Condition 11, paragraph c, on page 149 of D-1641, beginning with the report required by December 1, 2005. DWR and USBR shall make historical results of the monitoring required under paragraph c available to the State Water Board and other interested parties by posting the data on the internet. The posted data shall include a computation of the 30-day running average.

9. DWR and USBR shall serve copies of all reports, plans, and other communications required by the above paragraphs of this order on the Central Delta Water Agency, South Delta Water Agency, San Joaquin County, California Sportfishing Protection Alliance, and Contra Costa Water District, and shall submit a proof of service to the Executive Director or to the Division Chief showing that the copies were served concurrently with their submittal to the Executive Director or the Division Chief.

Upon the failure of any person to comply with a CDO issued by the State Water Board pursuant to chapter 12 of Part 2 of Division 2 of the Water Code (commencing with section 1825), the Attorney General, upon the request of the State Water Board, shall petition the superior court for the issuance of prohibitory or mandatory injunctive relief as appropriate, including a temporary restraining order, preliminary injunction, or permanent injunction. (Wat. Code, § 1845, subd. (a).) Any person or entity who violates a CDO may be liable for a sum not to exceed one thousand dollars (\$1,000) for each day in which the violation occurs. (Wat. Code, § 1845, subd. (b)(1).)

- B. The State Water Board **ORDERS** that the petitions for reconsideration of the approval of the Water Quality Response Plan (WQRP) are granted, and amends the approval of the WQRP as follows:

1. Condition 1 of the Division Chief's July 1, 2005 conditional approval of the WQRP is replaced by the following condition:

1. DWR and USBR shall meet the requirements included in the WQRP dated April 25, 2005, and shall meet the further conditions in this approval as follows. Joint Points of Diversion (JPOD) operations are authorized pursuant to the WQRP dated April 25, 2005, if DWR and USBR are in compliance with the conditions in part A. of this order and if they meet the following requirements:

- a. DWR and USBR may conduct JPOD diversions if DWR and USBR ~~have, for the previous twelve months, been~~ are, at the time of the JPOD diversion, in compliance with all of the conditions on their water right permits and license ~~with the following exceptions:~~

~~Prior to July 1, 2009, DWR and USBR may conduct Stage 1 JPOD diversions pursuant to Condition 1.b. on page 151 and Condition 2.b. on page 156 of D-1641 if they meet an EC objective of 1.0 mmhos/cm at Interagency Station Nos. C-6, C-8, and P-12 (San Joaquin River at Brandt Bridge, Old River near Middle River, and Old River at Tracy Road Bridge) and provided that water deliveries to serve the Cross Valley Canal contractors and Musco Olive are not transferred to other parties for sale. Water may be transferred pursuant to this approval for exchange of supplies later or earlier in the same irrigation season, but not for any other purpose.~~

- ~~ii. After July 1, 2009, DWR and USBR may conduct JPOD diversions only if they meet all of the requirements of their water right permits and license, including, if it is still a condition of their water rights, meeting the 0.7 EC objective for the protection of agricultural beneficial uses in the interior southern Delta at Interagency Station Nos. C-6, C-8, and P-12 during the previous twelve months.~~

- b. If DWR or USBR violate any permit or license condition implementing the water quality objectives ~~(with the exceptions noted above),~~ JPOD diversions shall cease until such time as the water quality objectives are met.

CERTIFICATION

The undersigned, Clerk 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 January 13, 2006.

AYE:

NO:

ABSENT:

ABSTAIN:

DRAFT

Selica Potter
Acting Clerk to the Board