# STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

#### **ORDER WR 2010-0002**

In the Matter of Cease and Desist Order WR 2006-0006 against the Department of Water Resources and the United States Bureau of Reclamation in Connection with Water Right Permits and License for the State Water Project and Central Valley Project<sup>1</sup>

SOURCES: Sacramento and San Joaquin Rivers and their tributaries, and the

Sacramento-San Joaquin Delta Estuary

COUNTY: San Joaquin

#### ORDER MODIFYING ORDER WR 2006-0006

BY THE BOARD:

#### 1.0 **INTRODUCTION**

By this order, the State Water Resources Control Board (State Water Board or Board) modifies State Water Board Order WR 2006-0006, which is a cease and desist order issued against the Department of Water Resources (DWR) and the United States Bureau of Reclamation (USBR) in response to the threatened violation of DWR's water right permits for the State Water Project (SWP) and USBR's water right license and permits for the Central Valley Project (CVP). In Part A of Order WR 2006-0006, the State Water Board required DWR and USBR to take corrective actions in accordance with a time schedule in order to obviate the threatened violation of the requirement to meet a water quality objective for salinity designed to protect agricultural beneficial uses in the southern Sacramento-San Joaquin Delta Estuary (Delta).<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> 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) of the United States Bureau of Reclamation.

<sup>&</sup>lt;sup>2</sup> In Part B of Order WR 2006-0006, the State Water Board amended the July 1, 2005 approval by the Chief of the Division of Water Rights of a Water Quality Response Plan submitted by DWR and USBR for their use of each other's points of diversion in the Delta. This order does not modify Part B of Order WR 2006-0006.

At the outset, it bears emphasis that the purpose of this proceeding is not to determine the responsibility of DWR and USBR to meet the salinity objective, an issue that was addressed in Order WR 2006-0006, or to revisit the issue of whether a threat of violation exists. Instead, the purpose of this proceeding is to determine whether to modify the compliance schedule contained in Order WR 2006-0006, and whether to impose any interim protective measures.

As more fully explained below, we have determined that the July 1, 2009 deadline to obviate the threat of violation should be extended in recognition of the fact that, in a biological opinion issued in June of 2009, the National Marine Fisheries Service (NOAA Fisheries) prohibited DWR from constructing permanent, operable gates in the southern Delta as part of the South Delta Improvements Program (SDIP). Construction of the gates was a central component of DWR and USBR's plan to achieve compliance with the salinity objective as required by Order WR 2006-0006. We will extend the compliance deadline until after we have completed our current review of the salinity objectives and associated program of implementation contained in the 2006 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (2006 Bay-Delta Plan) and any subsequent water right proceeding so that, in developing a revised compliance plan, DWR and USBR can take into account any changes to their responsibility for meeting the objective that may occur as a result of our review. To avoid undue delay in the preparation and implementation of a revised compliance plan, we will require DWR and USBR to provide any technical assistance necessary to support our efforts to complete our review of the 2006 Bay-Delta Plan and any subsequent water right proceeding expeditiously.

In the interim, we will require DWR, with any necessary assistance from USBR, to continue to implement and improve upon the temporary barriers program. The temporary barriers improve salinity in the southern Delta, but they are not sufficient by themselves to ensure compliance with the salinity objective. More information is needed, however, concerning the effectiveness and feasibility of other salinity control measures. Accordingly, we will require DWR and USBR to study the feasibility of alternative salinity control measures, and we will delegate to the Executive Director the authority to require DWR and USBR to implement on an interim basis any additional salinity control measures that the Executive Director determines are reasonable and feasible.

# 2.0 LEGAL, FACTUAL, AND PROCEDURAL BACKGROUND

#### 2.1 State Water Board Decision 1641

In State Water Board <u>Decision 1641</u> (Revised March 15, 2000, in accordance with State Water Board <u>Order WR 2000-02</u>), the State Water Board determined the responsibility of specified water right holders, including DWR and USBR, to meet water quality objectives set forth in the 1995 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (1995 Bay-Delta Plan). As part of that decision, the Board imposed a number of requirements on DWR and USBR, including the requirement to meet salinity objectives designed to protect agricultural beneficial uses in the interior southern Delta. Specifically, the SWP and CVP water rights are conditioned on implementation of 0.7 millimhos per centimeter (mmhos/cm) electrical conductivity (EC) from April 1 through August 31 each year and 1.0 mmhos/cm EC from September 1 through March 31 each year at the following three locations in the interior southern Delta: (1) Station C-6 (San Joaquin River at Brandt Bridge), (2) Station C-8 (Old River near Middle River), and (3) Station P-12 (Old River at Tracy Road Bridge).<sup>3</sup> (Revised Decision 1641 at pp. 159-161, 182.) These objectives are referred to in this order as the interior southern Delta salinity objectives.

# 2.2 Cease and Desist Authority for Water Right Violations

The State Water Board may issue a cease and desist order (CDO) in response to a violation or threatened violation of (1) the prohibition against the unauthorized diversion of water, (2) a term or condition of a water right permit, license, certification, or registration, or (3) a State Water Board order or decision issued pursuant to specified provisions of the Water Code. (Wat. Code, § 1831, subds. (a) & (d)(1-3).) The State Water Board may require compliance immediately or the State Water Board may set a time schedule for compliance. (Wat. Code, § 1831, subd. (b).) The State Water Board may, after notice and opportunity for hearing, modify, revoke, or stay a CDO, either on its own motion or upon application by any aggrieved person. (Wat. Code, § 1832.)

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<sup>&</sup>lt;sup>3</sup> In addition, the CVP is required to meet the same salinity objectives in the San Joaquin River at Vernalis, but the requirement to meet the objectives at Vernalis is not an issue in this proceeding.

Water Code section 1845, subdivision (b) provides that any person who does not comply with a CDO may be liable for an amount not to exceed one thousand dollars for each day in which the violation occurred. In addition to imposing administrative civil liability pursuant to this provision, the State Water Board may request the Attorney General to petition the superior court for injunctive relief. (*Id.*, § 1845, subd. (a).)

#### 2.3 State Water Board Order WR 2006-0006

On February 15, 2006, the State Water Board issued a CDO against DWR and USBR for the threatened violation of the requirement to meet the 0.7 mmhos/cm interior southern Delta salinity objective. (State Water Board Order WR 2006-0006 or 2006 CDO.) The State Water Board ordered USBR and DWR to implement measures to obviate the threat of violation by July 1, 2009. (*Id.* at pp. 17, 26.) The State Water Board established the July 1, 2009 compliance deadline in order to accommodate DWR and USBR's plan to meet the salinity objective by constructing permanent, operable gates (then called permanent barriers) in the Delta. (*Id.* at pp. 17, 21-22.) The gates were expected to decrease salinity levels by improving water circulation in interior southern Delta channels. At the time, DWR and USBR estimated that construction of the permanent gates would be completed by early 2009. (*Id.* at p. 27.)

Although the State Water Board established the July 1, 2009 deadline in order to accommodate DWR and USBR's plan to construct the permanent gates, the Board did not require DWR and USBR to construct the gates. Instead, the Board required DWR and USBR to develop and implement a plan to obviate the threat of violation by either constructing the permanent gates or implementing equivalent salinity control measures. (*Id.* at pp. 23, 29-30.) The Board required DWR and USBR to submit the compliance plan to the Board's Executive Director for approval within 60 days of the effective date of the order.

In the 2006 CDO, the State Water Board also imposed several reporting requirements. The Board ordered DWR and USBR to submit quarterly status reports on progress towards compliance with the 0.7 mmhos/cm interior southern Delta salinity objective, including an updated projection of the final compliance date. (*Id.* at p. 31.) In addition, the Board required DWR and USBR to report any projected future exceedances of the objective, as well as any actual exceedances. (*Id.* at p. 30.) A report of any potential or actual exceedance was to include a description of any corrective actions DWR or USBR had taken to avoid or curtail the exceedance. The Board specified that corrective actions could include additional releases from

upstream CVP facilities or south of the Delta SWP or CVP facilities, a change in timing of releases from SWP or CVP facilities, a reduction in exports, recirculation of water through the San Joaquin River, purchases or exchanges of water with other entities, modified operations of temporary barriers in the Delta, reductions in saline drainage from upstream sources, or the provision of alternative supplies to Delta farmers, including overland supplies. (*Ibid.*)

# 2.4 DWR and USBR's Compliance Plan

As required by the 2006 CDO, DWR and USBR submitted a compliance plan dated April 14, 2006. (State Water Board Staff Exhibit 10.) The plan proposed to obviate the threat of violation at Station C-8 (Old River near Middle River) and Station P-12 (Old River at Tracy Road Bridge) by constructing the permanent, operable gates component of the SDIP. The plan stated that additional actions to control local salinity discharges might be needed, but the gates were a necessary first step. The plan proposed to obviate the threat of violation at Station C-6 (San Joaquin River at Brandt Bridge) by continuing and expanding ongoing San Joaquin River salinity management activities. The State Water Board Executive Director approved the compliance plan by letter dated May 12, 2006. (State Water Board Staff Exhibit 9.)

### 2.5 Environmental Review Process for the SDIP

In order to implement the SDIP, including the permanent gates, DWR and USBR needed to comply with numerous regulatory requirements, including the federal Endangered Species Act (ESA), the California Endangered Species Act (CESA), sections 401 and 404 of the Clean Water Act (33 U.S.C. §§ 1341, 1344), section 10 of the Rivers and Harbors Act (33 U.S.C. § 403), and sections 1600 through 1616 of the Fish and Game Code. (See DWR Exhibit DWR-14.)<sup>4</sup> In addition, USBR and DWR needed to prepare environmental documentation pursuant to the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), respectively.

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<sup>&</sup>lt;sup>4</sup> DWR Exhibit DWR-14 is a quarterly status report that DWR submitted to the State Water Board in accordance with the 2006 CDO. DWR requests the State Water Board to take official notice of this report, along with a number of other reports that DWR submitted to the Board in accordance with the 2006 CDO, all of which are labeled for identification Exhibits DWR-13 through DWR-32. We take official notice of these reports pursuant to California Code of Regulations, title 23, section 648.2 (authorizing the State Water Board to take official notice of matters that may be judicially noticed), and pursuant to Evidence Code section 452, subdivision (c) (authorizing judicial notice of the official acts of administrative agencies).

On June 6, 2006, USBR initiated formal consultation with NOAA Fisheries and the U.S. Fish and Wildlife Service (USFWS) pursuant to section 7 of the ESA (16 U.S.C. § 1536). (DWR Exhibit DWR-14.) In DWR's August 31, 2006 status report, DWR estimated that the consultation process would be complete, and NOAA Fisheries and USFWS would issue biological opinions concerning the SDIP, by November 2, 2006. (*Ibid.*) DWR estimated that most of the other regulatory approvals necessary to implement the SDIP would be obtained by November 2006, as well. (*Ibid.*) To comply with NEPA and CEQA, USBR and DWR had prepared a draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the SDIP in November 2005. (DWR Exhibit DWR-13.) By December 2006, USBR and DWR had finalized the EIS/EIR. (DWR Exhibit DWR-04, p. 2; DWR Exhibit DWR-16.)

In a quarterly status report dated February 28, 2007, DWR informed the State Water Board that consultation with NOAA Fisheries and USFWS had been delayed due to the fishery agencies' concerns about the interrelatedness of the SDIP and the long-term operation of the CVP and SWP under the Operations, Criteria, and Plan (OCAP), which was the subject of a separate consultation process. (DWR Exhibit DWR-16.) In a quarterly status report dated May 31, 2007, DWR reported that DWR and USBR had agreed to include operation of the permanent gates as part of the OCAP consultation, which meant that the consultation process for the gates would be delayed until April 2008. (DWR Exhibit DWR-17.) As a result, DWR estimated that the permanent gates would not be constructed and operable until April 2011. (*Ibid.*) Accordingly, DWR requested the State Water Board to modify Order WR 2006-0006 by extending the July 1, 2009 compliance deadline to July 1, 2011. (*Ibid.*)

Although the State Water Board resolved to take action on DWR's request (State Water Board Resolution 2007-0079 at p. 7), the Board did not schedule a hearing to consider the request until June of 2009. In the interim, DWR continued to submit quarterly status reports. In a quarterly status report dated February 29, 2008, DWR informed the Board that the NOAA Fisheries' biological opinion would not be completed until sometime between March and May of 2009, and therefore the permanent gates would not be operable until April 2012. (DWR Exhibit DWR-20.)

In a quarterly status report dated February 27, 2009, DWR informed the State Water Board that USFWS had issued a biological opinion on December 15, 2008, which allowed operation of the gates, subject to USFWS approval to protect Delta smelt. NOAA Fisheries, on the other hand,

had released a draft biological opinion in December 2008, which concluded that the permanent gates would degrade critical habitat for Central Valley steelhead. (DWR Exhibit DWR-24.) In addition, staff from NOAA Fisheries had indicated that additional studies were needed to address the potential impact of the gates on salmonid predation. (*Ibid.*) According to DWR, NOAA Fisheries proposed to estimate the predation impacts of the permanent gates based on a two-year study of the predation impacts of temporary barriers in the Delta that the United States Army Corps of Engineers had required as a condition of the Clean Water Act section 404 permit for the temporary barriers. (*Ibid.*) DWR estimated that the two-year predation study would not be complete until early 2011, and therefore the schedule for completion of the permanent gates would be further delayed. (*Ibid.*)

# 2.6 Application for Modification of Order WR 2006-0006

By letter dated May 29, 2009, DWR and USBR again applied for a modification to Order WR 2006-0006 in light of the fact that the permanent gates would not be installed by July 1, 2009. (State Water Board Staff Exhibit 5.) In the letter, DWR stated that its upcoming quarterly status report would provide information on changes to the schedule. In the subsequent status report, dated June 1, 2009, DWR explained that a three-year predation study was needed, rather than a two-year study, and therefore installation of the permanent gates would be delayed by another four years. (State Water Board Staff Exhibit 4.) Contrary to DWR's previous estimate that the gates would be operable by April 2012, DWR estimated that the gates could be completed in time for the 2016 agricultural season. (*Ibid.*)

#### 2.7 NOAA Fisheries' 2009 Biological Opinion for CVP and SWP Operations

On June 4, 2009, NOAA Fisheries issued a final biological opinion for the operation of the CVP and SWP under the OCAP. In the biological opinion, NOAA Fisheries found that the replacement of temporary barriers in the Delta with permanent operable gates would adversely modify critical habitat, and directed DWR not to implement the SDIP. (Staff Exhibit 3, p. 659.) Under the ESA, NOAA Fisheries was required to identify any reasonable and prudent alternatives that would allow the gates to be operated in compliance with the ESA. (16 U.S.C. § 1536(b)(3)(A).) In this case, however, NOAA Fisheries did not identify any reasonable and prudent alternative to the permanent gates that would meet ESA requirements. (Staff Exhibit 3, p. 659.) NOAA Fisheries stated that USBR could reinitiate consultation, or DWR could apply for

a permit under section 10 of the ESA, after analyses of the operation of temporary barriers in the Delta had been completed. (*Ibid.*)

#### 2.8 Exceedances of Interior Southern Delta Salinity Objective

Since the State Water Board issued the 2006 CDO against DWR and USBR in February 2006, salinity levels at Station P-12 (Old River at Tracy Road Bridge) have exceeded the 0.7 mmhos/cm salinity objective on numerous occasions. According to the exceedance reports that USBR and DWR submitted to the State Water Board as part of this proceeding,<sup>5</sup> the salinity objective was exceeded at Station P-12 during the following periods: (1) April 2007 (USBR Exhibit 8);<sup>6</sup> (2) June 16 through July 13, 2008 (DWR Exhibit DWR-27); (3) April 1 through April 20, 2009 (DWR Exhibit DWR 30); and (4) June 24 through July 3, 2009 (DWR Exhibit DWR-32). In addition, the exceedance reports that were submitted indicate that the salinity objective was exceeded at Station C-6 (San Joaquin River at Brandt Bridge) from June 25 through July 13, 2008, and at Station C-8 (Old River near Middle River) from June 22 through July 13, 2008. (DWR Exhibit DWR-27.)<sup>7</sup>

The only corrective action identified in DWR's and USBR's exceedance reports that DWR or USBR took in order to avoid or curtail exceedances of the interior southern Delta salinity objective was the implementation of the temporary barriers program. (See DWR Exhibit DWR-31; DWR Exhibit DWR-32.) The temporary barriers program entails the seasonal construction and operation of three flow control barriers in the southern Delta. (DWR Exhibit

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<sup>&</sup>lt;sup>5</sup> The exceedances only include those that were reported in the exceedance reports that DWR and USBR submitted as part of this proceeding. Additional exceedances that were not documented in the exceedance reports that were submitted as part of this proceeding are not included in this listing.

<sup>&</sup>lt;sup>6</sup> USBR Exhibit 8 is an exceedance report that USBR submitted to the State Water Board in accordance with Decision 1641 and the 2006 CDO. USBR requests the State Water Board to take official notice of this report, along with a number of other reports that USBR submitted to the Board in accordance with the 2006 CDO and some related correspondence, all of which are labeled for identification USBR Exhibits 1 through 8. We take official notice of USBR Exhibit 8 pursuant to California Code of Regulations, title 23, section 648.2 (authorizing the State Water Board to take official notice of matters that may be judicially noticed), and pursuant to Evidence Code section 452, subdivision (c) (authorizing judicial notice of the official acts of administrative agencies). The remaining documents are either the subject of DWR's request for official notice or contain information that is also contained in DWR's exhibits. We also note that USBR labeled two documents as USBR Exhibit 1. The other document, the written testimony of Paul Fujitani, has been admitted into evidence.

<sup>&</sup>lt;sup>7</sup> DWR also has reported exceedances of the 1.0 mmhos/cm salinity objective during the following periods: March 16-22, 2008 (DWR Exhibit DWR 25); December 19, 2008 through March 10, 2009 (DWR Exhibit DWR-30); and March 23-31, 2009 (*ibid*).

DWR-05.) As stated earlier, the temporary barriers improve salinity levels, but they are not sufficient by themselves to ensure that the objective will be met. (*Id.* at p. 5.)

#### 2.9 Water Quality Control Planning Process

The State Water Board is currently reviewing the 2006 Bay-Delta Plan to determine what, if any, changes should be made to the southern Delta salinity objectives or the associated program of implementation for those objectives to ensure the reasonable protection of agricultural beneficial uses in the southern Delta. As part of this effort, the State Water Board issued a Notice of Preparation pursuant to CEQA and held a public scoping meeting in March of 2009. (State Water Board Staff Exhibit 6.) State Water Board staff are currently preparing technical and environmental analyses to inform the State Water Board regarding any modification to the objectives. In July of 2009, the State Water Board released a draft report for public review entitled *Salt Tolerance of Crops in the Southern Sacramento-San Joaquin Delta* (Draft Report) by Dr. Glen Hoffman.<sup>8</sup> The Draft Report suggests that higher salinity water than the current objectives may be fully protective of agricultural beneficial uses in the southern Delta and recommends additional analyses to further review this issue. Once the Draft Report is finalized, the information from it and other relevant information will be used to inform the State Water Board's water quality control planning (basin planning) and environmental review proceedings.

Following completion of environmental analyses, State Water Board staff will prepare any proposed amendments to the southern Delta salinity objectives or the associated program of implementation and will circulate the draft amendments and associated environmental documentation for public comment. The State Water Board will then determine what, if any, changes should be made to the objectives and program of implementation through adoption of any amendments to the Bay-Delta Plan. Following this basin planning phase, the State Water Board will undertake any necessary water rights or other proceeding to assign responsibility for meeting the southern Delta salinity objectives, which could include changes to DWR's and USBR's responsibility for meeting the interior southern Delta salinity objectives. The State

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<sup>&</sup>lt;sup>8</sup> San Luis and Delta-Mendota Water Authority request the State Water Board to take official notice of Dr. Hoffman's report. We take official notice of the report pursuant to California Code of Regulations, title 23, section 648.2 (authorizing the State Water Board to take official notice of matters that may be judicially noticed), and pursuant to Evidence Code section 452, subdivision (c) (authorizing judicial notice of the official acts of administrative agencies). We take official notice of the existence of the report and its conclusions, but do not take official notice of the truth of the matters asserted in the report.

Water Board plans to complete the basin planning phase followed by the water rights implementation phase by the spring of 2012. (State Water Board Staff Exhibit 7, p. 68.)

# 2.10 Evidentiary Hearing

On June 5, 2009, the State Water Board issued a notice of public hearing on DWR and USBR's application to modify Order WR 2006-0006. The State Water Board held the hearing on June 25, 29, and 30, 2009. The key hearing issues were as follows:

- 1. What modifications, if any, should the State Water Board make to the compliance schedule set forth in Part A of Order WR 2006-0006, and how should any modifications be structured to take into account any potential changes to the southern Delta salinity objectives or the program of implementation that may occur as a result of the State Water Board's current review of the Bay-Delta Plan?
- 2. If the compliance schedule contained in Part A of Order WR 2006-0006 is modified, what interim protective measures, if any, should be imposed?

The following entities participated in the evidentiary portion of the hearing: DWR; USBR; South Delta Water Agency (SDWA) and Lafayette Ranch (hereafter collectively referred to as South Delta); County of San Joaquin and San Joaquin County Flood Control & Water Conservation District (hereafter collectively referred to as San Joaquin County); California Sportfishing Protection Alliance (CSPA); California Water Impact Network (C-WIN); San Luis and Delta-Mendota Water Authority (SLDMWA) and Westlands Water District (Westlands); San Joaquin River Group Authority; San Joaquin River Exchange Contractors Water Authority; Stockton East Water District (Stockton East); Contra Costa Water District; and Central Delta Water Agency.

At the hearing, the following persons and entities presented policy statements, either orally or in writing: SLDMWA and Westlands; the San Joaquin River Group Authority; Stockton East; the State Water Contractors; Delta farmer Mike Robinson; Restore the Delta; and the California Salmon and Steelhead Association.

#### 3.0 **DISCUSSION**

# 3.1 The Compliance Deadline Should Be Extended until the Water Quality Control Planning Process Is Complete

DWR and USBR's application to modify Order WR 2006-0006 did not specify what modifications DWR and USBR would like the State Water Board to make to the 2006 CDO. During the hearing on their application, however, DWR and USBR requested that ordering paragraph A.1 of the 2006 CDO, which requires DWR and USBR to obviate the threat of violation of the 0.7 mmhos/cm interior southern Delta salinity objective by July 1, 2009, be stayed, or that the compliance deadline be extended, until the State Water Board has completed the water quality control planning process described in section 2.9, above. (DWR Closing Brief, p. 2; USBR Closing Brief, p. 3.)

DWR also requested that paragraph A.1 be stayed, or that the compliance deadline be extended, until DWR has obtained the regulatory approvals necessary to install the permanent gates. (DWR Exhibit DWR-04, p. 1; DWR Closing Brief, p. 2.) Finally, DWR requested that ordering paragraph A.3 be modified to provide that a compliance plan is not required until the Board has completed the water quality control planning process and DWR has obtained the approvals necessary to install the gates. (DWR Exhibit DWR-04, p. 2.)

SLDMWA and Westlands support DWR and USBR's request to stay paragraph A.1 or extend the deadline until completion of the water quality control planning process. South Delta, San Joaquin County, CSPA, and C-WIN oppose any modification to the CDO.

DWR and USBR's request to extend the July 1, 2009 compliance deadline until the water quality control planning process has been completed should be granted, but DWR's request to extend the deadline until DWR has obtained the approvals necessary to install the gates should be denied. The July 1, 2009 compliance deadline was based on DWR and USBR's original plan to construct the gates by July 1, 2009. Obviously, that plan is no longer viable. As discussed above, construction and operation of the gates has been delayed until at least 2016, and ultimately may prove to be infeasible due to concerns about impacts to endangered species.

At this juncture, DWR and USBR should begin to evaluate the feasibility of alternative salinity control measures in order to prepare a revised compliance plan. In light of the fact that the

salinity objectives and associated program of implementation contained in the 2006 Bay-Delta Plan are currently under review, completion of the revised compliance plan should be delayed to the extent necessary to allow the plan to take into account any changes to DWR's or USBR's responsibility for meeting the interior southern Delta salinity objectives that may be made as a result of our review of the 2006 Bay-Delta Plan. Accordingly, we will not require the revised compliance plan to be submitted until we have completed our review of the 2006 Bay-Delta Plan and any subsequent water right proceeding to consider whether to change DWR's or USBR's responsibility for meeting the objectives as a result of any changes to the 2006 Bay-Delta Plan.

The revised compliance plan should specify a new compliance deadline, based on the amount of time required to implement the measures necessary to obviate the threat of violation. It may be possible to include the permanent gates in the revised compliance plan, depending on the outcome of the ongoing predation studies and any subsequent efforts to obtain NOAA Fisheries' approval of the gates, but development and implementation of the revised plan should not be delayed indefinitely pending approval of the gates, which may never occur. Accordingly, DWR's request to postpone the compliance deadline until DWR has obtained the approvals necessary to install the gates should be denied.

South Delta and C-WIN suggest that extending the compliance deadline would not be consistent with the State Water Board's statement in the 2006 CDO, that the Board would not extend the deadline beyond July 1, 2009, considering that the salinity objectives were first adopted in 1978, and there is evidence that salinity is a factor in limiting crop yields for southern Delta agriculture. (Order WR 2006-0006 at p. 27.) At the time when the Board made that statement, however, the record supported the conclusion that the permanent gates could be constructed by early 2009, which is no longer the case.

South Delta and C-WIN also contend, as do CSPA and San Joaquin County, that the compliance deadline should not be extended, and the State Water Board should take steps to enforce the 2006 CDO, because alternative salinity control measures exist that DWR and USBR could have implemented in the past, and should implement in the future, in order to obviate the threat of violation. South Delta argues further that the State Water Board found in Decision 1641 that construction of permanent, operable gates alone would not be sufficient to result in attainment of the objectives, and therefore DWR and USBR should have implemented additional salinity control measures in the past.

Specifically, an expert witness for South Delta testified that DWR and USBR could meet the objectives by modifying the design and operation of the temporary barriers, installing low lift pumps at one or more of the barriers, and recirculating water from the CVP's Delta-Mendota Canal through the San Joaquin River. (South Delta Exhibits SDWA 1, SDWA 2, SDWA 12.) Similarly, an expert witness for CSPA testified that DWR and USBR could meet the objectives by implementing some or all of the alternative salinity control measures listed as possible corrective actions in the 2006 CDO, including reducing exports, reducing highly saline drainage from upstream sources, and increasing flows in the San Joaquin River by releasing more water from CVP reservoirs or purchasing water from third parties. (CSPA Exhibit CSPA-2, pp. 5-6.)

It is possible that DWR and USBR could have obviated the threat of violation by July 1, 2009, or earlier, by pursuing multiple compliance strategies simultaneously. In our judgment, however, it was reasonable for DWR and USBR to focus their efforts on implementation of the strategy set forth in the compliance plan approved by the Executive Director in 2006, which included construction of the permanent gates as a necessary first step, until NOAA Fisheries issued its biological opinion in June 2009, and it became clear that operation of the permanent gates may not be feasible. In addition, we find that DWR and USBR were diligent in their efforts to obtain the approvals necessary to construct the permanent gates. With respect to future compliance, as explained in greater detail in section 3.3, below, the record does not support South Delta's contention that alternative salinity control measures exist that would achieve compliance with the objectives and that could be implemented in 2010 without further analysis or environmental review. For these reasons, we disagree with South Delta and CSPA that the compliance deadline should not be extended, or that we should take steps at this point to enforce the 2006 CDO.

South Delta and CSPA also contend that the outcome of the water quality control planning process is too speculative to be considered in determining whether to modify the compliance schedule. We recognize that the outcome of our review of the 2006 Bay-Delta Plan and its

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<sup>&</sup>lt;sup>9</sup> Although the southern Delta salinity objectives were established in order to protect agricultural beneficial uses, not fish and wildlife beneficial uses, CSPA and C-WIN assume that achieving the objectives also will serve to protect fish and wildlife. CSPA and C-WIN are correct that some salinity control measures, such as reducing highly saline drainage, may have incidental benefits to fish and wildlife. Other measures, however, such as recirculation, may have incidental adverse impacts to fish and wildlife. Even increasing San Joaquin River flows, which CSPA favors, could have incidental adverse impacts to fish and wildlife, to the extent that water is released from storage in order to meet salinity objectives later in the irrigation season, which could reduce the amount of water available to protect fishery resources during other periods of the year when the water would be more beneficial to fishery resources.

implementation is uncertain, and the interior southern Delta salinity objectives could remain unchanged. Nonetheless, a reasonable possibility exists that the objectives, or DWR's and USBR's responsibility for meeting the objectives, could change as a result of our review, and therefore DWR and USBR should not be required to prepare and submit a revised compliance plan until our review is completed. To avoid undue delay in the preparation and implementation of the revised compliance plan, we will strive to complete our review of the 2006 Bay-Delta Plan as quickly as possible. Toward that end, we will require DWR and USBR to cooperate in providing any technical assistance necessary to complete our review of the plan and any subsequent water right proceeding expeditiously.

# 3.2 Extending the Compliance Deadline Is Consistent with the State Water Resources Control Board Cases

South Delta and San Joaquin County contend that extending the compliance deadline would constitute a failure to fully implement the interior southern Delta salinity objectives in contravention of the Court of Appeal's holding in the *State Water Resources Control Board Cases* (2006) 136 Cal.App.4th 674. That opinion involved numerous cases challenging various aspects of Decision 1641. In large part, the Court of Appeal upheld Decision 1641, but the Court also held that the State Water Board had erred when it failed to fully implement certain water quality objectives, including the southern Delta salinity objectives. (*Id.* at pp. 689-690, 724-735.)

The Court's holding in the *State Water Resources Control Board Cases* was based on Water Code section 13247, which provides that state agencies "in carrying out activities which may affect water quality, shall comply with water quality control plans approved or adopted by the [State Water Board], unless otherwise directed or authorized by statute . . . ." Based on this section, the Court reasoned that the State Water Board was required to fully implement the southern Delta salinity objectives because the program of implementation contained in the 1995 Bay-Delta Plan had specified that those objectives would be achieved by assigning responsibility for meeting them to water right holders in the Delta watershed. (*Id.* at pp. 724-735.) Specifically, the Court faulted the State Water Board for allowing DWR and USBR to meet a 1.0 EC objective instead of the 0.7 EC objective if permanent gates were constructed or equivalent salinity control measures were implemented. (*Id.* at p. 735.)<sup>10</sup>

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<sup>&</sup>lt;sup>10</sup> The Court also faulted the State Water Board for allowing DWR and USBR to meet the salinity objectives by April 1, 2005, when the 1995 Bay-Delta Plan provided that full compliance would be achieved in 1995 at one of the *[footnote continues on next page]* 

To remedy the discrepancy between the 1995 Bay-Delta Plan and Decision 1641, the Court held that the State Water Board must either initiate a proceeding to assign full responsibility for meeting the southern Delta salinity objectives or duly amend the plan. (*Id.* at p. 735.) Consistent with the Court's decision, and as discussed above, the Board has initiated a review of the current (2006) Bay-Delta Plan to consider whether to change the southern Delta salinity objectives or the associated program of implementation.

Contrary to South Delta and San Joaquin County's contention, extending the compliance deadline in the 2006 CDO does not constitute a failure to fully implement the southern Delta salinity objectives in contravention of the holding in the *State Water Resources Control Board Cases*. As the State Water Board explained in the 2006 CDO itself, the establishment of a compliance schedule as part of the CDO does not relieve USBR and DWR of the requirement to meet the objectives, which remains a condition of their permits. (Order WR 2006-0006 at p. 27.) Instead, the establishment of a compliance schedule constitutes an exercise of the Board's enforcement discretion, in recognition of the fact that DWR and USBR have not taken the steps necessary to avoid a threatened violation, and as a practical matter it will take time to achieve compliance. Likewise, modifying an existing compliance schedule, as contemplated here, constitutes an exercise of enforcement discretion. Essentially, the modification of the compliance schedule in this CDO reflects our determination that further enforcement action would not be warranted, provided that DWR and USBR take steps to obviate the threat of violation in accordance with the modified compliance schedule.

For the reasons explained above, establishing or modifying a compliance schedule does not constitute a failure to fully implement the southern Delta salinity objectives. Moreover, establishing a compliance schedule is consistent with Water Code section 13247, which was the basis for the Court's holding in the *State Water Resources Control Board Cases*. As stated earlier, section 13247 requires state agencies to comply with water quality control plans "unless otherwise directed or authorized by statute . . . ." Water Code section 1831, subdivision (b) expressly authorizes the State Water Board to establish a compliance schedule in a CDO issued in response to a violation or threatened violation of a water right requirement. Thus, assuming for the sake of argument that establishment of a compliance schedule constitutes a

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compliance stations, and by the end of 1997 at two of the compliance stations. (*Id.* at pp. 734-735.) The Court acknowledged, however, that the issue of delayed implementation of the objectives had become moot by the time the Court rendered a decision. (*Id.* at p. 735.)

failure to fully implement the southern Delta salinity objectives, the establishment of a compliance schedule is nonetheless entirely consistent with section 13247.

#### 3.3 Interim Protective Measures

Having decided that the compliance schedule contained in the 2006 CDO should be modified, we turn to the next key hearing issue, which is whether to impose any interim protective measures. South Delta, CSPA, C-WIN and San Joaquin County oppose any changes to the 2006 CDO, and therefore do not recommend that any interim protective measures be imposed. As discussed above, however, South Delta, CSPA, C-WIN, and San Joaquin County contend that a variety of alternative salinity control measures exist that DWR and USBR could and should implement in order to meet the interior southern Delta salinity objectives, including modifications to the design and operation of the temporary barriers, installation of low lift pumps at one or more of the barriers, recirculation of water from the CVP's Delta-Mendota Canal through the San Joaquin River, reducing exports, reducing highly saline drainage from upstream sources, and increasing flow in the San Joaquin River by releasing more water from CVP reservoirs or purchasing water from third parties.

DWR contends that no interim measures should be imposed because DWR already is taking actions to improve the temporary barriers program, and USBR continues to implement measures to reduce salt loads in the San Joaquin River. (DWR Closing Brief, pp. 13-18.) DWR argues that any additional measures would require further analysis to determine whether they would be effective in controlling salinity. In addition, DWR argues that before implementing any additional measures, the potential environmental impacts of the measures would need to be evaluated pursuant to CEQA and NEPA, and ESA consultation likely would be required.

Like DWR, USBR, SLDMWA, and Westlands contend that the only appropriate interim protective measure is continuation of the temporary barrier program. (USBR Closing Brief, pp. 3-6; SLDMWA and Westlands Closing Brief, pp. 1, 7-8.) USBR argues that any interim protective measure involving a flow requirement, in particular, would require an analysis of the environmental and water supply impacts of the requirement, and a determination of whether the requirement constitutes a reasonable use of water pursuant to article X, section 2 of the California Constitution. Similarly, SLDMWA and Westlands argue that interim measures should not be imposed if they would exacerbate the water supply shortage that SLDMWA's member

agencies are currently experiencing. Specifically, SLDMWA and Westlands oppose recirculation to the extent that recirculation would displace pumping to supply water to SLDMWA's member agencies. For its part, Stockton East opposes any interim measures that would entail an increase in releases from New Melones Reservoir. (Stockton East Closing Brief, pp. 2-3.) Stockton East also opposes recirculation, unless it would serve to reduce reliance on New Melones.<sup>11</sup>

DWR, USBR, and South Delta appear to agree that DWR should continue to implement the temporary barriers project and pursue improvements to its operation and design. For example, expert witnesses for both DWR and SDWA testified that tying open culverts on the Old River barrier during certain tidal periods and increasing the Middle River barrier by one foot are technically feasible and have the potential to improve water quality. (DWR Exhibit DWR-05, pp. 4-5; South Delta Exhibit 12, pp. 1-2.) DWR's witness testified that for the past several years DWR has tied open certain culverts and monitored the results. (DWR Exhibit DWR-05, pp. 4-5.) In addition, DWR has applied or will apply for the permit amendments necessary to raise the height of the Middle River barrier.

Instead of simply recognizing DWR's efforts to improve the operation and design of the temporary barriers project, as suggested by DWR, we will require DWR, as a condition of this order, to continue to implement the temporary barriers program and to pursue the improvements to the program discussed above, and any other potential improvements, in consultation with SDWA, and with any necessary assistance from USBR. In addition, we will require DWR and USBR to continue to implement, and update as necessary, the component of DWR and USBR's

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Stockton East argues that H.R. No. 2828 (the Water Supply, Reliability, and Environmental Improvement Act of 2004 (Pub.L. No. 108-361 (Oct. 25, 2004) 118 Stat. 1681)) does not allow USBR to make additional water releases from New Melones Reservoir in order to meet the southern Delta salinity objectives. In conducting the feasibility study of alternative salinity control measures, discussed below, DWR and USBR should address the consistency of any measure that involves increased releases from New Melones with H.R. No. 2828. We emphasize, however, that while H.R. No. 2828 requires USBR to develop methods for reducing reliance on releases from New Melones Reservoir to meet water quality objectives, nothing in H.R. No. 2828 relieves USBR from its responsibility to achieve water quality objectives as required by its water right permits. (*Id.*, § 108(1)(3)&(5); see also 43 U.S.C. § 383 [section 8 of the Reclamation Act of 1902].)

April 14, 2006 compliance plan that was intended to achieve compliance at Station C-6 (San Joaquin River at Brandt Bridge). 12

With the exception of the two requirements described above, the administrative record does not support the imposition of any of the other salinity control measures identified by South Delta, CSPA, C-WIN, and San Joaquin County at the present time. DWR presented expert witness testimony, which South Delta did not refute, that salinity in the southern Delta cannot be significantly improved by increasing releases from reservoirs in the Sacramento River watershed. (DWR Exhibit DWR-06.) In addition, the witness presented testimony that CVP and SWP exports have minimal impact on and control over water quality at the interior southern Delta salinity locations. (*Ibid.*) The record is inconclusive as to the feasibility of the remaining salinity control measures. More information is needed concerning their effectiveness in controlling salinity, technical feasibility, cost, environmental impacts, and water supply impacts.

For example, South Delta did not submit any evidence to substantiate the assertion of its witness that low lift pumps would be effective in controlling salinity and could be installed without further analysis or environmental review. Moreover, an expert witness for DWR explained in rebuttal testimony that the effectiveness of low lift pumps has not been modeled or otherwise analyzed, and additional planning, design, permitting, and environmental review would be required before low lift pumps could be installed. (R.T. (June 30, 2009) pp. 219-223.)

Similarly, the feasibility of recirculation requires further analysis. According to USBR's website (<a href="http://www.usbr.gov/mp/dmcrecirc/index.html">http://www.usbr.gov/mp/dmcrecirc/index.html</a>), USBR is currently evaluating the feasibility of recirculation, formally referred to as the Delta-Mendota Canal Recirculation Project, as required pursuant to Decision 1641 and the Water Supply, Reliability, and Environmental Improvement

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<sup>&</sup>lt;sup>12</sup> CSPA and C-WIN argue that Water Code section 13360 prohibits the State Water Board from specifying the manner of compliance with the southern Delta salinity objectives. Section 13360 provides in relevant part: "No waste discharge requirement or other order of a regional board or the state board or decree of a court *issued under this division* shall specify the design, location, type of construction, or particular manner in which compliance may be had with that requirement, order, or decree, and the person so ordered shall be permitted to comply with the order in any lawful manner." (Italics added.) Section 13360 has no bearing on this order, however, because section 13360 applies only to requirements or orders issued pursuant to Division 7 of the Water Code (commencing with section 13000), and this order is issued pursuant to Water Code sections 1831 and 1832, which are part of Division 2 (commencing with section 1000) of the Water Code.

Act of 2004 (Pub.L. No. 108-361, §103 (Oct. 25, 2004) 118 Stat. 1681). In addition, USBR and DWR are preparing a joint EIS/EIR for the recirculation project pursuant to NEPA and CEQA.<sup>13</sup>

The feasibility of increasing San Joaquin River flows also requires further analysis. In particular, the administrative record does not contain substantial evidence concerning the extent to which the interior southern Delta salinity objectives could be met by increasing flows in the San Joaquin River, the availability of water for purchase or exchange in order to increase San Joaquin River flows, the cost of any such water, or the potential impact of increasing such flows on water supplies, including water supplies needed to protect fishery resources.

To remedy the lack of information concerning the effectiveness and feasibility of alternative salinity control measures, we will require DWR and USBR to conduct a feasibility study and submit a report to the State Water Board. At a minimum, the study should address the effectiveness and feasibility of installing low lift pumps and increasing flows in the San Joaquin River. We will also require DWR and USBR to submit copies of the feasibility study and EIS/EIR for the Delta-Mendota Canal Recirculation Project, once those documents have been completed. Finally, we will delegate to the Executive Director the authority to require DWR and USBR to implement on an interim basis any alternative salinity control measures that the Executive Director determines are reasonable and feasible, based on the feasibility study and any other available information.

#### 4.0 **CONCLUSION**

We find that DWR and USBR have been diligent in their efforts to obtain the approvals necessary to construct permanent, operable gates in the southern Delta in accordance with the compliance plan approved by the Executive Director in 2006. That plan is no longer viable, however, in light of NOAA Fisheries' recent biological opinion, and the associated delay and uncertainty regarding the feasibility of constructing the permanent gates. In recognition of the fact that it will take time to develop and implement a revised compliance plan, we will extend the

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<sup>&</sup>lt;sup>13</sup> We take official notice of the fact that USBR is conducting the feasibility study and USBR and DWR are preparing an EIS/EIR, as evidenced by the documents and other information posted on USBR's website. We take official notice of these facts pursuant to California Code of Regulations, title 23, section 648.2 (authorizing the State Water Board to take official notice of matters that may be judicially noticed), and pursuant to Evidence Code section 452, subdivisions (c) (authorizing judicial notice of the official acts of administrative agencies) and (h) (authorizing judicial notice of facts and propositions that are not reasonably subject to dispute and are capable of immediate and accurate determination by resort to sources of reasonably indisputable accuracy).

compliance deadline set forth in Order WR 2006-0006. Moreover, we will extend the deadline until after we complete our review of the 2006 Bay-Delta Plan and any subsequent water right proceeding, so that DWR and USBR's revised compliance plan can take into account any changes to DWR's or USBR's responsibility for meeting the interior southern Delta salinity objectives that may occur as a result of our review of the 2006 Bay-Delta Plan. We will also require DWR and USBR to provide any technical assistance necessary to support our efforts to complete our review of the 2006 Bay-Delta Plan and any subsequent water right proceeding expeditiously.

In the interim, we will require DWR to continue to implement and improve upon the temporary barriers program, in consultation with SDWA, and with any necessary assistance from USBR. In addition, we will require DWR and USBR to study the effectiveness and feasibility of alternative salinity control measures, and implement any additional measures that the Executive Director determines are both reasonable and feasible.

#### **ORDER**

**IT IS HEREBY ORDERED** that Part A. of the ordering section of Order WR 2006-0006, beginning on page 28, is modified as follows:

- 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 implement measures to obviate the threat of non-compliance with Condition 56 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 Tracy Road Bridge (Interagency Station No. P-12)<sup>14</sup>

Notwithstanding the foregoing, if as a result of the State Water Board's review of the 2006 Bay-Delta Plan, the Board adopts an order or decision modifying DWR's or USBR's responsibility for meeting the interior southern Delta salinity objective, then DWR and USBR shall implement measures to ensure compliance with the Board's order or decision.

2. Within 60 days from the date of this order Within 180 days from the completion of the State Water Board's pending proceeding to consider changes to the interior southern Delta salinity objectives and the associated program of implementation included in the 2006 Bay-Delta Plan, and any subsequent water right proceeding to consider whether to change DWR's or USBR's responsibility for meeting the objectives as a result of any changes to the 2006 Bay-Delta Plan, DWR and USBR shall submit a revised, detailed plan and schedule to the Executive Director for compliance with the conditions mentioned set forth in paragraph one, above., including The plan shall include planned completion dates for actions that will obviate the current threat of noncompliance with the 0.7 EC objective at stations C-6, C-8, and P-12 and shall specify the date by which the threat of non-compliance will be eliminated 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. Notwithstanding the foregoing, if as a result of the State Water Board's review of the 2006 Bay-Delta Plan, the Board adopts an order or decision modifying DWR's or USBR's responsibility for meeting the interior southern Delta salinity objective, then DWR and USBR shall submit a revised, detailed plan and schedule to the Executive Director for compliance with the Board's order or decision. The plan shall include planned completion dates for actions that will ensure compliance with the Board's order or decision and shall specify the date by which compliance will be achieved. For purposes of this paragraph, the pending proceeding

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<sup>&</sup>lt;sup>14</sup> Hereinafter referred to as the interior southern Delta salinity objective.

to consider changes to the interior southern Delta salinity objectives and the associated program of implementation and any subsequent water right proceeding shall be deemed to have been completed if the State Water Board has not issued a final order in the water right proceeding by January 1, 2013, unless the Deputy Director for Water Rights determines that the water right proceeding has been initiated, is proceeding as expeditiously as reasonably possible, and will be completed no later than October 1, 2014. To assist DWR and USBR in determining when the revised compliance plan is due, the Deputy Director will notify DWR and USBR when the proceeding to consider changes to the interior southern Delta salinity objectives and the associated program of implementation and any subsequent water right proceeding have been completed. The plan and schedule submitted by DWR and USBR are subject to approval by the Executive Director of the State Water Board, shall be comprehensive, shall provide for full compliance with DWR's and USBR's responsibility to meet the interior southern Delta salinity objective (or any Board order or decision modifying DWR's or USBR's responsibility for meeting the objective), 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. Once approved, the revised compliance plan shall supersede any inconsistent requirements established pursuant to Order WR 2006-0006 or this order.

- 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.
- 3. DWR and USBR shall comply without delay with any reasonable requests for technical assistance, including modeling, necessary to assist the State Water Board in its current efforts to review and implement the 2006 Bay-Delta Plan expeditiously.

Specifically, within two weeks of adoption of this order, the Deputy Director for Water Rights will submit to DWR and USBR a scope of work and time schedule for DWR and USBR to provide modeling assistance to the State Water Board in its current efforts to review and implement the 2006 Bay-Delta Plan. DWR and USBR shall execute the scope of work pursuant to the time schedule specified in the scope of work. At the discretion of the Deputy Director for Water Rights, modifications or additions to the scope of work may be made to ensure the expeditious review of the 2006 Bay-Delta Plan, including the addition of technical assistance unrelated to modeling. If DWR or USBR object to any provisions of the scope of work, within two weeks of receipt of the scope of work, or any modifications to that scope of work, DWR and USBR may request reconsideration of the scope of work by the Executive Director of the State Water Board. DWR and USBR shall implement any scope of work approved by the Deputy Director for Water Rights, or by the Executive Director in cases where reconsideration has been requested.

- 4. In order to obviate the threat of violation at Station C-6 (San Joaquin River at Brandt Bridge), within 60 days from the date of this order DWR and USBR shall submit for approval by the Executive Director any necessary revisions to DWR and USBR's April 14, 2006 Compliance Plan for Monitoring Station C-6. DWR and USBR shall implement this element of the April 14, 2006 compliance plan and any revisions to this element of the plan required by the Executive Director.
- 5. DWR, with any needed cooperation from USBR, including funding and technical assistance, shall continue to implement the temporary barriers project. In addition, DWR, with assistance from USBR, shall pursue and implement, if feasible, any improvements to the temporary barriers project, including, but not limited to, the proposed increase in the height of the barrier located in Middle River near Victoria Canal. DWR and USBR shall consult with South Delta Water Agency (SDWA) regarding potential improvements to the temporary barriers project on a yearly basis and as needed throughout the irrigation season. DWR and USBR shall expeditiously complete any necessary analyses to determine the feasibility of any proposed improvements and shall diligently pursue any permitting or funding needed to implement improvements. If DWR or USBR disagrees with SDWA regarding the feasibility of a proposed improvement or the analyses necessary to determine the

Executive Director who will make a determination regarding necessary actions. By
February 1 of each year, DWR and USBR shall submit a plan for approval by the
Executive Director outlining the proposed construction and operation of the temporary barriers during the upcoming irrigation season. DWR and USBR shall implement the plan as approved by the Executive Director.

- 6. USBR shall diligently pursue completion of the Delta-Mendota Canal Recirculation Project Feasibility Study. DWR and USBR shall submit to the State Water Board copies of the Final Feasibility Study and the Environmental Impact Statement/Environmental Impact Report for the project within 10 days of the completion of those documents.
- <u>7.</u> DWR and USBR shall study the feasibility of controlling salinity by implementing measures other than the temporary barriers project, recirculation of water through the San Joaquin River, and construction and operation of the permanent, operable gates. For each measure studied, DWR and USBR shall evaluate the extent to which the measure could control salinity at each of the interior southern Delta compliance locations, whether implementation of the measure would result in compliance with the interior southern Delta salinity objective at each of the locations, the technical and regulatory feasibility of the measure, the costs of the measure, and any potential impacts of the measure, including potential impacts to water quality, fishery resources, or water supplies. The study shall include, but is not limited to, an evaluation of the installation of low lift pumps at one or more of the temporary barriers. In addition, DWR and USBR shall evaluate, through modeling, whether compliance with the interior southern Delta salinity objective could be achieved by increasing flows in the San Joaquin River. In evaluating the feasibility of increasing flows in the San Joaquin River, DWR and USBR shall (1) evaluate the feasibility of both increased releases from CVP and SWP facilities and purchases or exchanges of water from third parties, and (2) evaluate the potential impacts of increasing flows on water supplies, including water supplies needed to protect fishery resources. Within 60 days from the date of this order, DWR and USBR shall submit a study plan to the Deputy Director for Water Rights for the Deputy Director's review and approval. The Deputy Director may direct DWR and USBR to make any changes to the study plan necessary to ensure a

meaningful evaluation of alternative salinity control measures. In addition, the Deputy Director may require DWR and USBR to conduct the study in phases, to refine or augment the study based on the results of an earlier phase, or to evaluate a combination of alternative salinity control measures designed to improve or achieve compliance with the interior southern Delta salinity objective. DWR and USBR shall make any changes to the study plan that the Deputy Director requires within the period that the Deputy Director specifies, and shall conduct the study in accordance with the approved study plan. Within 180 days from the Deputy Director's approval of the study plan, DWR and USBR shall submit a report to the Executive Director that describes the study and its results.

- 8. During the interim period before the revised compliance plan described in paragraph 2, above, is developed and approved, the authority is delegated to the Executive Director to require DWR or USBR to implement any additional salinity control measures that the Executive Director determines are feasible and reasonable based on the Executive Director's review of the studies described in paragraphs 5 and 6, above, or any other available information. Any decision of the Executive Director under authority delegated pursuant to this paragraph is subject to reconsideration pursuant to sections 768 through 771 of title 23 of the California Code of Regulations.
- 49. In the event that DWR and/or USBR projects a potential exceedance of the 0.7 EC objective at Interagency Stations C-6, C-8, andor P-12, prior to July 1, 2009the compliance deadline specified in the plan approved pursuant to paragraph 2, above, DWR and/or USBR shall immediately inform the State Water Board of the potential exceedance and shall describe the corrective actions they are initiating to avoid or reduce the exceedance. Corrective actions may include but are not limited to additional releases from upstream Central Valley 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).

- 510. If there is an exceedance of the 0.7 EC objective for Interagency Stations C-6, C-8, andor P-12, within 30 days from the date of the exceedance, DWR and USBR shall report to the Executive Director (1) the length of time over which the exceedance occurred and (2) the corrective actions taken to curtail the exceedance, including the amount of water bypassed or released from upstream 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 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 exceedance.
- 611. Every three months, commencing on the last day of the month following the date of this orderOrder WR 2006-0006, 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). During the interim period before the revised compliance plan described in paragraph 2, above, is developed and approved, the status report shall describe the activities undertaken to comply with paragraphs 4, 5, 6, 7, and 8, above.
- 712. 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.
- 813. 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.

914. 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 SDWA; San Joaquin County; California Sportfishing Protection Alliance; California Water Impact Network; and Contra Costa Water District, and shall submit a proof of service to the Executive Director or to the Division Chief <u>Deputy Director for Water Rights</u> showing that the copies were served concurrently with their submittal to the Executive Director or the Division Chief-Deputy Director.

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).)

#### 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 5, 2010.

AYE: Chairman Charles R. Hoppin

> Vice Chair Frances Spivy-Weber Board Member Arthur G. Baggett, Jr.

Board Member Walter G. Pettit

NAY: None

ABSENT: Board Member Tam M. Doduc

ABSTAIN: None

> Jeanine Townsend Clerk to the Board

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