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6

7 BEFORE THE
8 CALIFORNIA STATE WATER RESOURCES CONTROL BOARD
9

10 In the Matter Of:)
11 HEARING TO CONSIDER MODIFICATION)
OF)
12 ORDER WR 2006-0006)
Department of Water Resources and)
13 U.S. Bureau of Reclamation)
14 Sacramento and San Joaquin Rivers)
and Delta)

**CLOSING BRIEF OF THE
CALIFORNIA DEPARTMENT OF WATER
RESOURCES**

15
16
17 **INTRODUCTION**

18 The Department of Water Resources (DWR) hereby presents its
19 closing brief addressing the Key Issues identified by the State Water
20 Resources Control Board (State Water Board) in its June 5, 2009,
21 Notice of Public Hearing, relating to DWR's and the U.S. Bureau of
22 Reclamation's (Reclamation) joint request to modify Part A of Order WR
23 2006-0006 (Order).

24 In addressing the issue of whether the State Water Board
25 should amend Part A of the Order, the Notice of Public Hearing
26 identified the following two issues: What modifications, if any,
27 should the State Water Board make to the compliance schedule set forth
28 in Part A of the Order? If the compliance schedule is modified, what,

1 if any, interim protective measures should be imposed?

2 As detailed below, the evidence in the record demonstrates
3 that the State Water Board should stay Condition A-1 of the Order
4 until either DWR has the obtained the required regulatory approvals to
5 implement the permanent operable gates or the State Water Board
6 completes its review of the 2006 Water Quality Control Plan for the
7 San Francisco Bay/Sacramento San Joaquin Delta Estuary (2006 Bay-Delta
8 Plan) and its program of implementation. In addition, the evidence
9 now before the State Water Board demonstrates that any feasible,
10 effective protective measures that can be implemented soon have
11 already been implemented or soon will be implemented after pending
12 regulatory approvals are obtained.

13
14 **SUMMARY OF FACTS**

15 On May 3, 2005, the State Water Board, Division of Water
16 Rights, sent notices to DWR and Reclamation of proposed Cease and
17 Desist Orders (CDOs) against each of them for a threatened violation
18 of their water right permit condition implementing the southern Delta
19 water quality objectives. At the request of DWR and Reclamation, the
20 State Water Board held a hearing to determine whether the CDOs should
21 be adopted, or modified and adopted.

22 On February 15, 2006, upon conclusion of the above hearing
23 and after considering the evidence presented, the State Water Board
24 issued Order WR 2006-0006. The State Water Board ordered DWR and
25 Reclamation to take corrective actions under a time schedule to
26 correct threatened violations of their permits and license. Order at
27 1. Specifically, Condition A-1 of the Order states that DWR and
28 Reclamation "... shall implement measures to obviate the threat of

1 non-compliance with ... the 0.7 mmhos/cm electrical conductivity (EC)
2 objective by July 1, 2009." Order at 28.

3 Condition A-2 of the Order further requires DWR and
4 Reclamation to submit, within 60 days from the date of the Order, "...
5 a detailed plan and schedule to the Executive Director for compliance
6 with the conditions mentioned above, including planned completion
7 dates for actions that will obviate the current threat of non-
8 compliance with the 0.7 EC objective at stations C-6, C-8, and P-12 by
9 July 1, 2009." Order at 29. In addition, if DWR and Reclamation
10 decided to implement the permanent barriers project or equivalent
11 measures, Condition A-3 requires, within 60 days from the date of the
12 Order, an operations plan that will reasonably protect southern Delta
13 agriculture. Ibid. Both Condition A-2 and A-3 state that the plan
14 and schedule and operations plan are subject to approval by the
15 Executive Director. Ibid.

16 On April 14, 2006, DWR and Reclamation submitted a report
17 to satisfy the requirements of Conditions A-2 and A-3 (Compliance
18 Report (found at [www.swrcb.ca.gov/waterrights/water_issues/programs/
19 hearings/delta_salinity/wrorder06_0006compliance.shtml](http://www.swrcb.ca.gov/waterrights/water_issues/programs/hearings/delta_salinity/wrorder06_0006compliance.shtml))). In the
20 Compliance Report, DWR and Reclamation describe the strategy they will
21 pursue to obviate a threat of non-compliance of the 0.7 EC standard.
22 For interior Delta stations C-8 and P-12 (Old River near Middle River
23 and Old River at Tracy Road Bridge, respectively), DWR and Reclamation
24 decided that salinity would be most feasibly managed by implementing
25 the permanent operable gates component of the South Delta Improvements
26 Program (SDIP). Compliance Report at 1. DWR and Reclamation
27 acknowledged that additional actions to control local salinity
28 discharges may also be needed, but the permanent operable gates were

1 seen as a "necessary first step." Compliance Report at 2. Regarding
2 Monitoring Station C-6 (Brandt Bridge), the Compliance Report states
3 that DWR and Reclamation "believe that the only way to successfully
4 manage salinity at Brandt Bridge is to continue all ongoing San
5 Joaquin River salinity management activities as well as expanding such
6 solutions to discharges downstream of Vernalis." Compliance Report at
7 5.

8 On May 12, 2006, the State Water Board's Executive Director
9 responded to the Compliance Report submitted by DWR and Reclamation,
10 stating that the Compliance Report "... meets the requirements of
11 conditions A-2 and A-3" May 12, 2006, letter at 1 (found at
12 [www.swrcb.ca.gov/waterrights/water_issues/programs/hearings/
13 delta_salinity/wrorder06_0006compliance.shtml](http://www.swrcb.ca.gov/waterrights/water_issues/programs/hearings/delta_salinity/wrorder06_0006compliance.shtml)). In the May 12, 2006,
14 letter, the Executive Director also states the following:

15 "DWR and [Reclamation] shall immediately inform me of any
16 delays or changes to the three milestone timelines included
17 in the report, including the reasons for such delays or
18 changes. I reserve the right to require additional
19 measures to assure compliance with conditions A-2 and A-3
20 in response to any delays." May 12, 2006, letter at 2.

21 On May 31, 2006, DWR submitted the first Quarterly
22 Status Report pursuant to Condition A-6 of the Order. In the
23 Status Report, DWR reiterated that DWR and Reclamation's
24 preferred method to help manage salinity in the southern Delta is
25 through the permanent operable gates. DWR also reported that it
26 anticipated a certified SDIP Environmental Impact Statement/
27 Environmental Impact Report (EIS/EIR) in August 2006 and that the
28 operable gates would be in by April 2009. DWR-13 at 2.

1 DWR finalized and certified the EIS/EIR for the SDIP on
2 December 15, 2006. DWR-16. However, the formal federal Endangered
3 Species Act (ESA) consultation on SDIP had been complicated by the re-
4 initiation of consultation on the federal biological opinions for the
5 State Water Project (SWP) and the Central Valley Project (CVP),
6 resulting in significant delay in completing the biological opinions
7 for SDIP. DWR-16 at 2.

8 DWR and Reclamation argued for continuing the ESA
9 consultation as planned for SDIP in order to minimize delays in
10 obtaining all the permits needed for construction of the gates.
11 However, as described in the May 31, 2007, Quarterly Status Report,
12 the National Marine Fisheries Service (NMFS) would not consult on the
13 SDIP gates unless they were included in the ESA consultation on the
14 Operations Criteria and Plan (OCAP) for the SWP and CVP. DWR-17 at 1.

15 The May 31, 2007, Quarterly Status Report informed the
16 State Water Board that the biological opinions for OCAP were not
17 expected until April 2008 and that, due to the significant delay in
18 completing the ESA consultation, the permanent operable gates would
19 not be installed and operable by April 2009, as described in the
20 Compliance Report. DWR-17 at 2. In light of the delay, DWR requested
21 that the State Water Board modify the time schedule in Condition A-1
22 to July 1, 2011, pursuant to its authority under Water Code Section
23 1832. Ibid. Consistent with the request, DWR submitted revised
24 schedules for the permits required to construct and operate the gates
25 and the milestone schedules for constructing and operating the gates
26 and developing an operations plan. See DWR-17.

27 Although the State Water Board did not issue a notice in
28 the summer of 2007, it did acknowledge DWR's request in Resolution No.

1 2007-0079¹ (Resolution at 2, para. 10), adopted on December 4, 2007,
2 and resolved to act on DWR's request to change Order 2006-0006.
3 Resolution at 7, para. 3. As such, DWR continued to provide Quarterly
4 Status Reports over the next year that stated the NMFS biological
5 opinion was expected in May 2009 and that the gates would not be
6 operable until November 2012. See Exhibits DWR-19 through DWR-23.

7 By February 2009, DWR had had the opportunity to review a
8 draft of the NMFS biological opinion. The biological opinion
9 concluded that the SDIP gates will degrade the designated critical
10 habitat for Central Valley steelhead. DWR-24 at 1. The Report stated
11 that NMFS has indicated that further evaluation is required to address
12 potential salmonid predation impacts associated with the gates. Ibid.
13 The Report described that the evaluation NMFS was referring to was the
14 two-year predation study required for the temporary barriers as part
15 of the U.S. Army Corps of Engineers Section 404 permit. Id. at 1-2.
16 Since the results of this study are not expected until 2011, DWR
17 acknowledged that the schedule as presented in the November 2008
18 Quarterly Status Report cannot be met. Ibid. Given this further
19 delay, DWR expressed a desire to meet with State Water Board staff to
20 "discuss the SDIP gates, probable schedule revisions, and the best way
21 for us to proceed with respect to the condition in Order WR 2006-
22 0006." Ibid.

23 On May 29, 2009, DWR and Reclamation submitted a letter as
24 an application to the State Water Board, once again requesting that it
25 consider modifying Part A of the Order. Staff Exhibit 4. In

26 ¹ Resolution 2007-0079 is referenced in Staff Exhibit 7 (Strategic Workplan
27 for Activities in the San Francisco Bay/Sacramento-San Joaquin Delta
28 Estuary).

1 addition, DWR and Reclamation requested that the State Water Board
2 issue a notice under Water Code Section 1832 to provide an opportunity
3 for hearing regarding the application. Ibid. In the letter, DWR
4 stated that it would submit the May Quarterly Status Report, which
5 would provide information on the changes in the schedule. Ibid.

6 In the May 2009 Quarterly Status Report DWR informed the
7 State Water Board that, after further clarification from NMFS staff,
8 three years of predation studies rather than two would be needed.
9 DWR-13 at 1. Given the required predation studies, the schedule to
10 begin operation of the permanent operable gates requires an extension
11 of four years. Id. at 2. The Report did not include a complete
12 milestone schedule, but stated that based on the estimated extension,
13 the permanent operable gates could be in operation for the 2016
14 agricultural season. Ibid.

15 Lastly, on June 5, 2009, the State Water Board, in
16 fulfillment of Resolution 2007-0079, acted on DWR's request for
17 modification of the Order and issued a Notice of Public Hearing. In
18 the Notice, the State Water Board acknowledged that ESA concerns have
19 delayed the implementation of the permanent operable gates, noting
20 that the June 4, 2009, NMFS biological opinion or OCAP states "... DWR
21 shall not implement the SDIP because that project would adversely
22 modify critical habitat and [NMFS] has not identified an alternative
23 to the permanent gates that meets the requirements of the ESA."
24 Notice at 3.

25
26 **ARGUMENT**

27 **A STATE WATER BOARD STAY OF ORDER WR 2006-0006**
28 **CONDITION A.1 PENDING COMPLETION OF THE BAY-DELTA**
WATER QUALITY CONTROL PLAN REVIEW OR DWR HAS

1 **OBTAINED REGULATORY APPROVAL TO IMPLEMENT**
2 **PERMANENT GATES IS APPROPRIATE AND REASONABLE.**

3 Following presentation of the written testimony, oral
4 testimony, exhibits and cross-examination at the hearing several
5 conclusions can be reasonably and responsibly reached. First, DWR
6 acted diligently in its attempt to comply with the July 1, 2009
7 deadline, and decisions by other regulatory agencies were the cause
8 for the delay. Second, DWR acted reasonably and responsibly upon
9 learning that implementation of the permanent operable gates would be
10 delayed. Lastly, given that the permanent operable gates'
11 implementation has been delayed indefinitely and a new plan and
12 schedule must be developed, the current review of the 2006 Bay-Delta
13 Plan is the most appropriate process in which to develop a new and
14 reasonable solution for the long-term protection of southern Delta
15 agriculture. Based on the above conclusions, a stay of Condition A-1
16 pending completion of the State Water Board's current review of the
17 2006 Bay-Delta Plan or DWR has obtained the required regulatory
18 approvals to implement the permanent south delta gates is necessary,
19 reasonable and the appropriate modification of the Order.

20 **1. DWR Was Diligent In Its Attempt To Implement Measures To**
21 **Obviate The Threat Of Non-Compliance With The 0.7 EC**
22 **Salinity Objectives.**

23 In their written testimonies, SDWA and CSPA state that DWR
24 failed to investigate and implement measures to satisfy the Order and
25 that DWR and Reclamation ignored the "toolbox of alternative
26 solutions" identified by the State Water Board in the Order. See
27 SDWA-12; CSPA-2 at 6. In making these statements, SDWA and CSPA are
28 essentially arguing that DWR and Reclamation could have and, perhaps,
should have taken other actions to comply with the Order. As such, so

1 the argument goes, Condition A-1 should not be modified. This
2 argument, however, ignores the process set forth by the Order and the
3 steps DWR and Reclamation have taken to comply with that process.

4 The Order directs DWR and Reclamation to develop a plan and
5 a time schedule to comply with their water right permit/license
6 conditions requiring them to meet the 0.7 interior southern Delta EC
7 objective. The testimony provided by Ms. Kelly and the evidence now
8 before the State Water Board demonstrate that 1) DWR and Reclamation
9 prepared and submitted a compliance plan and schedule, 2) that plan
10 and schedule was approved by the Executive Director, 3) DWR and
11 Reclamation took substantive steps to implement the plan, including
12 certifying a Final EIS/EIR for the SDIP, limiting the project
13 description to facilitate permitting, and vigorously pursuing ESA
14 consultation, 4) DWR and Reclamation provided the State Water Board
15 with regular progress reports, and 5) decisions by other regulatory
16 agencies ultimately delayed the implementation of the permanent
17 operable gates. No other party provided any contrary evidence. It
18 therefore is appropriate for the State Water Board to find that DWR
19 and Reclamation were diligent in complying with the process set forth
20 by the Order and that it was actions beyond the control of DWR and
21 Reclamation that kept them from implementing measures to comply with
22 the Order.

23 In addition, through Condition A-9, DWR and Reclamation
24 were required to provide the parties to the CDO hearing copies of the
25 plan and schedule DWR and Reclamation developed and their reports on
26 the progress made in implementing that plan. DWR notes that these
27 parties had an opportunity on several occasions to voice their
28 opinions at appropriate times regarding changes to the schedule. As

1 such, DWR believes that the argument by other parties claiming DWR and
2 Reclamation should have analyzed and implemented other measures is now
3 untimely. DWR and Reclamation developed a compliance plan and
4 schedule that they believed would feasibly manage salinity in the
5 southern Delta and could be implemented by the July 1, 2009 deadline.
6 Other parties to the CDO hearing had opportunities to raise their
7 issues with the plan and schedule, which they should have raised at or
8 around the time the Executive Director was reviewing and, ultimately,
9 approving the compliance plan and schedule. Moreover, if other
10 parties believe that DWR and Reclamation should have modified the
11 compliance plan and schedule to include other measures when the ESA
12 complications began in 2007, they should have raised those issues at
13 that time and requested that the Executive Director modify the plan to
14 include additional measures. To raise those issues now, however,
15 ignores the process set forth by the Order and is untimely.

16 **2. DWR and Reclamation Acted Reasonably And Responsibly Upon**
17 **Learning Implementation Of The Permanent Operable Gates**
18 **Would Be Delayed**

19 When DWR learned that ESA-related concerns were going to
20 delay implementation of the permanent operable gates beyond the July
21 1, 2009, deadline, DWR informed the State Water Board of the delay and
22 requested modification of the compliance schedule. DWR-17; DWR-18.
23 In the intervening time between DWR's request for modification and
24 this current proceeding, DWR did not develop a new compliance plan and
25 schedule. In light of the record now before the State Water Board,
26 this approach is reasonable and appropriate for several reasons.
27 First, the installation of the permanent operable gates was the key
28 underpinning for establishing the July 1, 2009 date. As stated in the
Order, "[t]he State Water Board agrees with DWR's request for a

1 meaningful time schedule for implementation of the permanent barriers.
2 Given the anticipated completion date for the barriers in mid-2009
3 [citation omitted], a final completion date of July 2009 should
4 provide adequate time for DWR and USBR to complete construction and
5 begin operation of the permanent barriers." Order at 22. Delays
6 caused by the ESA consultations made the compliance schedule no longer
7 adequate to complete construction. As such, DWR requested that the
8 State Water Board modify Condition A-1 so that it would, once again,
9 be a meaningful time schedule for implementation of the barriers.

10 In requesting modification of the schedule, DWR does not
11 ignore the State Water Board's statement in the Order that considering
12 when the objectives were first adopted, the State Water Board will not
13 extend the date for removing the threat of non-compliance beyond July
14 1, 2009. Order at 27. Instead, DWR focuses on the fact that at the
15 time the State Water Board made the above statement, it could not have
16 foreseen that despite DWR's diligence in attempting to implement the
17 permanent operable gates and the State Water Board's considerable
18 oversight in the process, factors, such as the unexpected decline of
19 pelagic Delta organisms, would significantly delay the process. As
20 such, it is appropriate and reasonable for the State Board to modify
21 the time schedule.

22 Second, the Order states that DWR and Reclamation shall
23 implement the plan and schedule as approved by the Executive Director.
24 Order at 29 (Condition A-2). The Executive Director's approval, in
25 turn, states that DWR and Reclamation shall "... inform me of any
26 delays or changes to the three milestone timelines included in the
27 [Compliance] report, including the reasons for such delays or changes.
28 I reserve the right to require additional measures to assure

1 compliance with conditions A-2 and A-3 in response to any delays.”
2 May 12, 2009 letter at 2. DWR’s evidence presented at the hearing
3 demonstrates that DWR complied with the process established by the
4 Executive Director’s approval. When DWR discovered that the
5 implementation of the permanent operable gates would be delayed, it
6 informed the Executive Director of the delays and the reasons for such
7 delays. See DWR-17 and DWR-18. Upon being informed of the delays,
8 the Executive Director did not modify the approval of the Compliance
9 Report and did not require additional measures. Instead, the State
10 Water Board resolved to act on DWR’s request along with a suite of
11 other actions to address southern Delta salinity. See Resolution
12 2007-0079 at 7. It therefore was appropriate and reasonable for DWR
13 to wait to see how the State Water Board would address the delays and
14 DWR’s request to modify the compliance schedule.

15
16 **3. The Current Review Of The Bay-Delta Plan Is The Appropriate**
17 **Proceeding To Develop A New Compliance Plan And Schedule**

18 Under the current circumstances, the permanent operable
19 gates may no longer be a feasible method to implement the 0.7 EC
20 objective. Further studies required by NMFS before the gates can be
21 implemented will cause additional delays and may result in required
22 modifications that will reduce the gates’ ability to control water
23 level and circulation. Thus, a new plan and schedule must be
24 developed.

25 DWR believes that the current review of the 2006 Bay-Delta
26 Plan is the most appropriate proceeding to develop a new compliance
27 plan and schedule. As stated in D-1641, “the benefits of the barriers
28 are integral to the implementation of several actions approved in this

1 decision." Staff Exhibit 2 at 10. D-1641 goes on to state that the
2 "benefits of the barriers could be achieved by other means, such as
3 increased flows through the southern Delta and export restrictions,
4 but these measures could result in an unreasonable use of water and a
5 significant reduction in water supplies south and west of the Delta."
6 Ibid. In light of the above statements, DWR believes that the current
7 review of the Bay-Delta Plan, whereby the State Water Board reviews
8 and, potentially, rethinks its prior decisions, and the development of
9 a new plan and schedule to implement the 0.7 EC objective, that does
10 not include the gates, must proceed concurrently.

11 In sum, a stay of Condition A-1 until the current review of
12 the Bay-Delta Plan is completed or DWR has obtained regulatory
13 approvals to implement the permanent south Delta gates is necessary,
14 reasonable and the most appropriate modification of Part A of the
15 Order.

16 **IF THE SCHEDULE IN PART A OF ORDER WR 2006-0006**
17 **IS STAYED PENDING REVIEW OF THE BAY-DELTA PLAN,**
18 **NO ADDITIONAL INTERIM PROTECTIVE MEASURES ARE**
19 **NECESSARY BEYOND ACTIONS THAT DWR AND RECLAMATION**
20 **ARE TAKING OR PLAN TO TAKE.**

21 Two and one half days of evidentiary hearings produced very
22 little that would warrant the State Water Board to impose interim
23 protective measures above and beyond what DWR and Reclamation are
24 already implementing or plan to implement. DWR is already taking
25 actions that are intended to make the temporary barriers more
26 efficient, potentially addressing areas historically prone to salinity
27 buildup. In addition, Reclamation continues to work with other
28 entities to implement measures that reduce salt loads into the San
Joaquin, and continues to meet the Vernalis objective. Lastly, many

1 of the actions proposed by other parties have not been analyzed as to
2 their effectiveness and will likely have to go through extensive
3 environmental review and/or permitting processes similar to that done
4 for the permanent operable gates before they can be implemented. DWR
5 therefore asks the State Water Board not to impose any protective
6 measures in its order modifying Part A. Instead, the State Water
7 Board's order should acknowledge the efforts DWR and Reclamation are
8 making, recognizing that the State Water Board will maintain its
9 oversight and ability to address salinity issues as DWR and
10 Reclamation continue to comply with Order WR 2006-0006's reporting
11 conditions.

12 **1. DWR And Reclamation Are Already Implementing, Or Will Soon**
13 **Implement, Feasible Measures That Are Protective Of**
14 **Southern Delta Salinity**

15 As explained in the testimony of Mark Holderman, the Chief
16 of the Temporary Barriers Project, DWR, along with SDWA, have been
17 investigating ways to better operate the temporary barriers and
18 determine if these new operations could help improve circulation and
19 resulting water quality. See DWR-05. Hydrodynamic modeling was done
20 of numerous alternatives to barrier operations. This modeling
21 resulted in conclusions that tying open culverts on the Old River near
22 Tracy barrier during certain tidal periods, as well as increasing the
23 height of the Middle River barrier by one foot, would increase
24 circulation down Old River and potentially improve water quality in
25 that channel. Ibid.

26 Importantly, the above measures are likely to improve
27 circulation at or around the Old River at Tracy Road Bridge compliance
28 station (P-12). See DWR-05 at 10, slide 7. This particular
compliance station is in an area historically prone to salinity

1 buildup. In fact, the record demonstrates that Station P-12 is the
2 only station where salinity exceeded the objective this summer. DWR-
3 32. At stations C-6, C-8 and C-10, the salinity objective has been
4 met for all of 2009 as of July 3, 2009.² Ibid. Thus, implementing
5 actions that are expected to improve circulation and reduce salinity
6 buildup around Station P-12, is an important step in improving
7 conditions in the southern Delta.

8 Additionally, evidence presented at the hearing
9 demonstrates that Reclamation, along with other entities, continues to
10 make progress in reducing salt loads in the San Joaquin River. As
11 discussed in Mr. Joseph McGahan's, Drainage Coordinator for the
12 Grassland Bypass Project, rebuttal testimony, the salt load for the
13 Grassland Bypass Project has been reduced by 72 percent since the
14 project started in 1995. Record Transcript for June 30, 2009, at 165.

15 Salt load reduction programs within the San Joaquin Basin,
16 such as the Grassland Bypass Project, are important and effective
17 measures that are already being implemented to help manage salinity in
18 the southern Delta. These measures contribute to meeting the required
19 salinity concentrations at Vernalis. In fact, the evidence
20 demonstrates that Reclamation is consistently meeting its Vernalis
21 obligation. As of July 3, 2009, the Vernalis EC level was running
22 well below the actual objective. DWR-32.

23
24 ² The State Water Board hearing on the CDO modification concluded June 30,
25 but continued reporting on the DWR's California Data Exchange Center
26 (<http://cdec.water.ca.gov/>) shows that the salinity at Vernalis and the two
27 other interior south Delta compliance locations continues to be well below
28 0.7 EC while P-12 is above the 0.7 EC.

1 In light of the measures that are already being implemented
2 by DWR and Reclamation to manage southern Delta salinity, the
3 effectiveness of those measures, and the potential for improvement in
4 the operation by increasing the height of the Middle River barrier in
5 the future, it should be recognized that significant and successful
6 efforts have been implemented to help manage southern Delta salinity
7 and protect agricultural beneficial uses.

8 **2. More Environmental Analysis Would Be Needed Before Other**
9 **Protective Measures, Other Than Those Already Implemented,**
10 **Could Be Considered**

11 SDWA presented new modeling data (SDWA-3) that DWR does not
12 dispute, but such data do not support their sweeping conclusions or
13 recommendations. Mr. Hildebrand provided testimony on the merits of
14 recirculation, low-lift pumps, increasing the height of the Middle
15 River barrier and modifying the relative heights of the temporary
16 barriers, and varying barrier flapgate operations. See SDWA-12.
17 However, his conclusions overreached the data SDWA provided. SDWA-3
18 is a report summarizing hydrodynamic modeling done by DWR on various
19 alternatives to barrier operations. DWR agrees with SDWA that the
20 modeling results support conclusions that increasing the height of the
21 Middle River barrier and tying open flapgates will likely improve
22 circulation in certain south Delta channels. However, that data does
23 not address, much less support, the merits of recirculation or low-
24 lift pumps, or the extent to which these actions would be used to
25 attain water quality objectives in the south Delta. In his testimony,
26 Mr. Hildebrand acknowledged that more engineering analysis was needed,
27 but still concluded that as long as all the measures were implemented
28 the salinity objectives would be met. Hearing Video for June 25,
2009, Disk II, at 2:23:00. Mr. Holderman's rebuttal testimony,

1 however, establishes that because of the uncertainty and complexity of
2 south Delta hydrology, SDWA has no basis to conclude that operation of
3 low-lift pumps or recirculation of exported water are reasonable, or
4 even effective actions that would achieve the water quality objective
5 in the southern Delta.

6 In addition, Mr. Hildebrand's contention that there was
7 consensus among DWR, Reclamation and SDWA's engineers that that SDWA's
8 proposed measures would resolve the problem of compliance with south
9 Delta salinity is false. As discussed in Mr. Holderman's rebuttal
10 testimony, the discussions between the engineers focused on what could
11 be done in the short-term by operating the flapgates and culverts in a
12 different way. Later on, they began to look at what DWR could do to
13 modify the weirs, realizing that this would take more time to
14 coordinate and obtain permits for. Record Transcript for June 30,
15 2009, at 215. According to Mr. Holderman, the agreement between the
16 engineers was that increasing the height of the Middle River barrier
17 and tying open flap gates looked promising, should be done first and
18 could be implemented in the near term. Id. at 221. If these measures
19 proved to be ineffective at improving circulation and water quality,
20 then other alternatives would be considered. Ibid. Thus, just as the
21 modeling SDWA presented only supported the specific actions of
22 increasing the height of the Middle River Barrier and tying open flap
23 gates, the consensus that Mr. Hildebrand referred to was similarly
24 limited.

25 In short, SDWA proved very little. Their new data was
26 limited and their sweeping conclusions were unsupported by facts. At
27 this time, there is nothing that warrants imposition of protective
28 measures other than increasing the height of the Middle River barrier,

1 which DWR is actively pursuing through consultation with the fish
2 agencies, and tying open flap gates as needed to improve circulation,
3 which DWR is doing. That said, DWR will continue to work with SDWA in
4 developing alternative barrier operations intended to increase
5 circulation and, potentially, improve water quality.

6 In addition to the need for more analysis, compliance with
7 the California Environmental Quality Act (CEQA), National
8 Environmental Policy Act (NEPA) and potentially the ESA is needed
9 before many of the proposed protective measure could be considered for
10 implementation. Other parties at least suggested that DWR and
11 Reclamation implement the water quality objectives for agricultural
12 beneficial uses in the southern Delta through additional releases from
13 CVP/SWP facilities, reduction in CVP/SWP exports, recirculation of
14 diverted water to the San Joaquin River, CVP/SWP purchases of water,
15 or installation of low-lift pumps. See SDWA-12; CSPA-2; SJC-1.
16 However, the impacts or effectiveness of these measures have not been
17 fully analyzed in any EIR. Moreover, some of the above measures would
18 likely require ESA consultation before being implemented. For
19 example, the raising of Middle River barrier by about one foot has
20 required that DWR consult with NMFS to determine potential impacts to
21 endangered anadromous fish. Accordingly, if the State Water Board
22 adopts an order with any of the above measures, compliance with CEQA,
23 NEPA and ESA would be a required prior to implementation just as CEQA,
24 NEPA and ESA analysis is necessary prior to implementing the permanent
25 operable gates.

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CONCLUSION

For the reasons stated above, the State Water Board should stay Condition A-1 of Order WR 2006-0006 pending completion of the Bay-Delta Water Quality Control Plan and not impose interim protective measures other than those that are already being implemented.

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California Department of Water Resources

By



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