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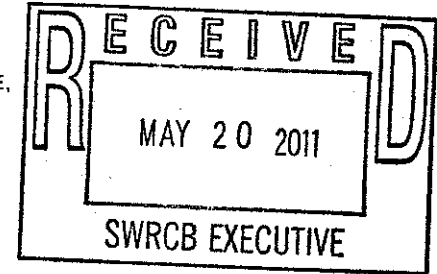
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May 20, 2011

Via email transmission

commentletters@waterboards.ca.gov

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1101 I Street, 24th Floor
Sacramento, California 95814

Re: Comment Letter – Southern Delta Ag and San Joaquin River Flow Revised
NOP

Ladies & Gentlemen:

I. Review of and revisions of numeric salinity standards at Vernalis and three interior Delta locations is required by past Board Orders.

The State Water Resources Control Board has repeatedly stated that changes in conditions that have occurred since 1978 when numeric salinity standards were first established may require changes in these numeric salinity standards, both at Vernalis and at the interior Delta locations. Yet in the revised Notice of Preparation and additional scoping meeting Notice dated April 1, 2011, the Board makes it excruciatingly clear that no consideration of changes in the numeric salinity standard at Vernalis and at the interior Delta locations is to occur or to be examined in the Water Quality Control Plan and CEQA process. The past adopted orders of the Board between 2004 and 2006 in regard to the Water Quality Control Plan, together with the Board's past notices in regard to the salinity standards, constitute an irrefutable record that full and open-minded environmental review of the current standards, alternatives to the current standards, and current conditions is required but is not going to occur. The SWRCB may not simply decide that it will "do nothing" with the salinity standards after the admissions that have been made in its past orders and statements.

II. What does the record show?

On September 30, 2004 the SWRCB adopted the Staff Report which recommended “. . . that the SWRCB receive further information to help it to decide whether to amend the following parts of the 1995 Plan: . . . F. Southern Delta electrical conductivity objectives.” The SWRCB adopted the Staff Report. The adoption Order and the Staff Report are attached as Exhibit “1”. Among the items included within the Staff Report are at page 29:

“As cropping patterns may have changed since the current objectives were established, staff recommends that the Southern Delta EC objectives be reviewed during periodic review to determine if changes in the objectives or how compliance with those objectives is determined are needed to protect agricultural beneficial uses and to ensure that the objectives do not result in a waste or unreasonable use of water . . .”

(See Exhibit “1” attached.)

In 2005, the SWRCB adopted yet another Resolution and Order after extensive hearings in which expert testimony was presented to the Board. That Resolution and Order 2006-0098 included Appendix 1 entitled “Plan Amendment Report” as Item 5 of the Order (attached as Exhibit “2”). It states:

“The State Water Board will continue to coordinate updates of the Bay-Delta Plan with on-going development of this comprehensive Salinity Management Plan. As part of this larger planning effort, the State Water Board has issued a public notice of a workshop to be held in January 2007 to review: (1) The salinity requirements of the beneficial uses of water in the Southern Delta; . . .” (Page 6).

Appendix 1 included on page 29 states: “The State Water Board will conduct a workshop in January 2007 to commence proceedings to receive information and conduct detailed discussions regarding the southern Delta salinity objectives . . .”. On page 39, the State Board’s adopted Order states:

“There is a need for an updated, independent, scientific investigation of irrigation salinity needs in the Southern Delta (similar to the investigation on which the current Objectives are based). The scientific investigation should address whether the agricultural beneficial uses in the Southern Delta would be reasonably protected at different salinity levels, whether management practices are available that would allow for protection of the beneficial uses at a higher salinity level in the channels of the Southern Delta, and whether such management practices are technically and financially feasible . . . The scientific investigation must be specific to the Southern Delta. The State Water Board will conduct a workshop to discuss this subject in January of 2007” (Exhibit “2”, page 32).

Thus, the SWRCB has repeatedly found and determined by Board action that the numeric salinity standards must be considered for change and alternatives must be considered, but the most recent notice announces that no such review or consideration will occur.

As a result of the Board orders and staff reports, in 2007 the workshop occurred and a world-renowned expert in the effects of salinity upon agricultural practices, Glenn Hoffman, was hired by the SWRCB to prepare a report in regard to the new scientific principles and facts known in regard to salinity’s effect upon agricultural use in the southern Delta area, the new information and facts developed since the 1995 Water Quality Control Plan (really based upon information available in 1978), and to discuss other changed conditions. In its Order adopted December 4, 2007, the Board stated in paragraph 3:

“The Water Board will take actions to address salinity issues in the Bay Delta and upstream areas, including . . . 4. Pursue a contract to pursue the Southern Delta salinity objectives in the Bay Delta plan . . . In the Strategic Work Plan, the Water Board staff will propose for the State Water Board’s consideration the scope of a basin planning and water right process to review and, as appropriate, amend the Southern Delta salinity objectives or their implementation, while ensuring that agricultural uses are protected, . . .”.

Dr. Glenn Hoffman participated in various workshops, providing his draft Study Report entitled “Salt Tolerance of Crops in the Southern Sacramento-San Joaquin Delta Study Report”, the first of which occurred on August 13, 2009, and written comments were provided and responded to.

How then is it that the State Water Resources Control Board in 2011 now gives a revised Notice of Preparation and an opportunity “. . . to comment on the clarified scope” (Notice, page 3) with no discussion or consideration of possible changes in numeric standards at these locations? The SWRCB states: “Attached to this notice are potential draft modifications to water quality objectives for the protection of southern Delta agricultural beneficial uses; . . .”, but there is no proposed change in the narrative standard of .7 EC during the period of April through August at Vernalis or in the 1.0 standard at Vernalis from September through March, and no change is proposed, nor consideration of changes, in the numeric interior Delta location standards.

It is more than obvious that the SWRCB and its staff do not intend in their environmental documents to support changes in the Water Quality Control Plan or to review any alternatives, any potential changes developed by Glenn Hoffman’s study in regard to the numeric standards, or to consider any other evidence previously provided, including the testimony of Charles Burt and Chris White provided by the San Joaquin River Exchange Contractors Water Authority to the SWRCB in response to the 2004 Notice. More than obviously, flow for fish is a sexier issue and more attractive to the staff of the SWRCB and perhaps the SWRCB Board Members. The difficulty, however, for the SWRCB is that CEQA does not allow a failure to consider matters admitted to be important and admitted to require change or consideration for change just because other issues are sexier.

III. The revised Notice of Preparation and Additional Scoping impermissibly narrows the alternatives to be considered under the functional equivalent process pursuant to CEQA. The SWRCB by its past orders and determinations must consider alternative numeric salinity standards and discuss the impacts of those alternatives in its functional equivalent document.

The Notice provided by the SWRCB states

“The purpose of this notice and the additional scoping meeting is to (1) clarify the scope of the State Water Board’s current review of the southern Delta salinity and San Joaquin

River flow objectives and the program of implementation for those objectives included in the Bay Delta plan, and the scope of the environmental documentation in support of that review, and (2) provide opportunity to comment on the clarified scope.”

The Notice continues by referring to potential draft modifications:

“Attached to this notice are potential draft modifications to: water quality objectives for the protection of southern Delta agricultural beneficial uses; San Joaquin River flow objectives for the protection of fish and wildlife beneficial uses; and the program of implementation for those objectives.”

Although the Notice continues by clarifying that the exact language of alternatives changes “may change”, no alternative numeric salinity standards which will be considered are described in either the Notice or the attached proposed standard language.

Instead, the scoping document diverts to a discussion of achieving a “more natural flow pattern”, and states:

“The State Water Board has determined that more flow of a more natural pattern is needed from February through June from the San Joaquin River watershed to Vernalis to achieve the narrative San Joaquin River flow objectives. Specifically, more flow is needed from the existing salmon and Steelhead bearing (probably intended rearing) tributaries in the San Joaquin River watershed. . . and more closely mimic the hydrographic conditions to which native migratory fish are adapted . . .”.

CEQA does not permit, with the record of the SWRCB’s own statements regarding the numeric standards, for the SWRCB to now divert its examination only to narrative salinity standards and to flow standards. Each impermissibly excludes an examination of alternatives. Public Resources Code Section 21080.5 subd. (a) and CEQA Guidelines §15250 require that the functional equivalent environmental review documents and process must otherwise meet CEQA’s substantive requirements. The analysis must “essentially encompass the information that would appear in an EIR, even though no

separate EIR is prepared.” *San Mateo Coastal Landowners’ Assn v. County of San Mateo* (1st District 1995) 38 Cal.App.4th 523, 551-553. If the SWRCB eventually determines to make no changes in the numeric standards after creating, publishing, receiving comments and responding to comments in regard to a reasonable range of alternatives, CEQA may be complied with. However, simply announcing no alternative in these circumstances is a clear violation of CEQA which will infect any examination of flow regimes since cumulative impacts of changes in different portions of the WQCP must be considered.

Agencies are not granted exemptions from the requirement to consider alternatives and the significant environmental and cumulative impacts arising from alternatives. The Notice provided by the SWRCB cites to only one alternative: “. . . returning water flow to a natural hydrograph.” No other alternatives are mentioned, and no method of appraising the different impacts and alternatives of different numeric salinity standards or flows that differ from natural pre-human development and presence are suggested. This prejudgment and assumption that natural flow conditions must be “right” or “better” is equivalent to the California Board of Optometry suggesting the banning of use of electric lighting in California after sundown because it is “more natural”, would be better for humans’ eyes, and would create more natural sleep patterns, could be implemented under CEQA without examining alternatives or impacts. This SWRCB Notice announces that the SWRCB intends to violate CEQA and CEQA Guidelines §15126.6 subd. (a) and Public Resources Code §21100 subd.(b)(4) since neither the baseline or a range of alternatives to be considered is described.

IV. A Scoping Notice that does not outline alternatives and a regime for examining impacts of a reasonable range of alternatives is insufficient.

The Notice itself in this case is evidence of the prejudgment and violation of CEQA when examined in conjunction with the past refusal of the State Water Resources Control Board to consider and develop evidence of the environmental consequences where a more natural regime or simply more water and colder water has been ordered on a California river. If natural conditions or even colder water are “better”, there are examples in California where those flows have been demanded and provided for years including on the Yuba River and Feather River. Yet this Board and the fishery agencies to this date refuse or fail to provide any method of comparing the quantity of benefits in terms of the number of returning fish to streams in which the hydrology and environmental detriments of “more natural flows” is not “more natural”, or the other alternative means of enhancing fish populations.

The whole purpose of CEQA in demanding that alternatives be considered and quantifying their impacts is to provide for an impartial and rational analysis of the impacts, costs, mitigation measures, and feasibility. The range of alternatives required to be considered in an EIR or functionally equivalent document is governed and regulated by a “rule of reason”. The purpose of the alternatives is to foster informed decisionmaking and public participation. Here, each of those guidelines and principles is violated.

This type of institutional blindness is not accepted by the Courts. *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 566; *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal.3d 376, 405-406. Cases interpreting NEPA, which is often cited as authority in interpreting CEQA requirements, confirm that an agency may not simply refuse to quantify significantly different project alternatives in order to provide comparisons. *Keith v. Volpe* C.D. California (1972) 352 F.Supp. 1324 at 1336. Alternatives which are even outside of the administrative agency’s powers must be considered. *Environmental Defense Fund v. Corps of Engineers of the United States Army* (5th Cir. 1974) 492 F.2d 1123, 1135. Although not every conceivable alternative must be examined in any EIR (*City of Rancho Palos Verdes* (1976) 59 Cal.App.3d 892), all reasonable alternatives must be assessed (*Wildlife Alive v. Chickering* (1976) 18 Cal.3d 190, 197). Prejudice and the refusal to apply reasoning and scientific principles to decisions and public policy are never allowed, even if the label “natural” is applied. If it were proposed that the California CalTrans eliminate all freeways to achieve a more “natural” mode of transportation, would the label “natural” avoid the requirement of quantifying the impacts or considering alternatives?

V. The SWRCB is itself required under CEQA to develop the baseline analysis and alternatives and provide the means of quantifying the environmental effects. The SWRCB is not permitted to rely upon citizens or their representatives to present alternatives.

The SWRCB cannot simply presume that “natural” is better or that others must show why that “truism” is not correct. Quantitative, comparative analyses of the environmental impacts of project alternatives is required (*Kings County Farm Bureau v. City of Hanford* (5th District 1990) 221 Cal.App.3d 692, 730-737), and substantial information must be provided. Because some of the SWRCB’s duties are quasi-judicial, the SWRCB often basks in the idea that it can sit back and require parties to bring to it the alternatives and formulations of the differences between those alternatives. In fact, CEQA is to the contrary. The agency itself has the burden to formulate alternatives and to adequately describe the impacts and alternatives and compare those impacts and

alternatives. *Laurel Heights, supra*, 47 Cal.3d at 406, *Goleta II*, 52 Cal.App.3d at 568: “CEQA requires that governmental agencies consider reasonable alternatives. It is not limited to alternatives proposed and justified by objectors (*Goleta I*, 197 Cal.App.3d 1178). In the same way, when an inadequate scoping document is presented by the SWRCB, it is not the requirement that alternatives be suggested in the comments to that inadequate scoping document.

Here, on a number of occasions, the SWRCB Board Members and Staff have been asked to commence an evidentiary hearing for the purposes of providing for a reasonable basis to compare the assumption that cold water and high flows is the best tool for enhancing anadromous fish production and other societal values. Finding and comparing the actual and increased numbers and health of fish which cold water or high flows actually benefit, and comparing that tools’ costs to the alternative tools available and to the costs of use of those tools is a process this Board has refused to engage in up to this date. The costs and impacts of those measures can then be compared to the additional numbers or survivability of fish through other means, and society can make a choice. The alternatives of curtailing predator fishery impacts and high commercial and recreational take can also be understood. The SWRCB Scoping Notice announces that it refuses to gather and present that evidence and those facts.

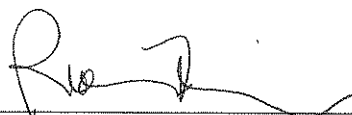
VI. Conclusion:

On both its prior statements in regard to salinity and its proposal to consider mimicking natural flows as sacrosanct and not to be subject to a full CEQA process and consideration of alternatives, this Scoping Notice is unequivocal evidence of an intent to violate CEQA. The SWRCB now has the opportunity to reverse course and correct its behavior, or it can ignore these comments and be subject to the payment of attorney’s fees of those parties who are required to prepare for a proceeding which is defective in the first instance.

Respectfully submitted,

MINASIAN, MEITH, SOARES
SEXTON & COOPER, LLP

By:



PAUL R. MINASIAN

On behalf of the San Joaquin River Exchange
Contractors Water Authority

PRM:dd

Enclosures: Exhibit “1”: Adoption Order and the Staff Report, excerpts
Exhibit “2”: SWRCB Resolution No. 2006-0098, excerpts

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EXHIBIT “1”

**STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 2004-0062**

**ADOPTION OF THE 2004 STAFF REPORT REGARDING PERIODIC REVIEW OF
THE 1995 WATER QUALITY CONTROL PLAN FOR THE SAN FRANCISCO
BAY/SACRAMENTO-SAN JOAQUIN DELTA ESTUARY**

WHEREAS:

1. The State Water Resources Control Board (SWRCB) is responsible for the regulation of activities and factors that may affect the quality of the waters of the State (Wat. Code sections 13000, 13001.)
2. The SWRCB adopted a water quality control plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (1995 Plan) in resolution 95-24. The 1995 Plan was adopted by the SWRCB to establish water quality control measures that contribute to the protection of beneficial uses in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary.
3. The California Water Code and the federal Clean Water Act require, respectively, a periodic and a triennial review of water quality objectives or standards under Water Code sections 13170 and 13240 and under section 303(c)(1) of the federal Clean Water Act (33 USC § 1313(c)(1)).
4. The SWRCB began this review of the 1995 Plan by issuing a notice of public workshop on December 10, 2003, for a workshop that the SWRCB held on January 8, 2004.
5. The SWRCB received comments from interested parties during, and immediately after, the January 8, 2004 workshop.
6. The SWRCB staff have prepared a Staff Report addressing the issues noted in the comments.
7. Based on review of the comments, as well as analysis of the issues, the Staff Report recommends that the SWRCB receive further information to help it decide whether to amend the following parts of the 1995 Plan:
 - a. Delta Outflow objectives
 - b. River Flow objectives: Sacramento River at Rio Vista
 - c. River Flow objectives: San Joaquin River at Airport Way Bridge, Vernalis: February-April 14 and May 16-June
 - d. Export limit objectives
 - e. San Joaquin River at Airport Way Bridge, Vernalis: 31 day Pulse Flow objectives for April 15 – May 15
 - f. Southern Delta Electrical Conductivity objectives

- g. Chloride Objectives, Compliance Location at Contra Costa Canal at Pumping Plant #1, and Potential New Objectives
 - h. Salmon protection objective
 - i. Delta cross channel gates closure objective
 - j. The water quality compliance and baseline monitoring program
 - k. Other parts of the Program of Implementation
8. In addition to recommending consideration of changes in the above parts of the 1995 Plan, the Staff Report recommends that the Program of Implementation section of the 1995 Plan be amended as necessary to address implementation of any new or revised objectives that may be adopted in any plan amendment or revised Plan.
 9. The Staff Report recommends that the following matters should not be considered for changes or new objectives at this time:
 - a. Dissolved oxygen objectives
 - b. Other issues not related to the setting of water quality objectives in the Bay or Delta.
 - c. San Joaquin River electrical conductivity upstream of Vernalis
 - d. Water level objectives
 - e. Western Suisun Marsh salinity objectives
 - f. Year round flow objectives on the San Joaquin River
 10. The Staff Report includes a plan of work that recommends that the SWRCB proceed immediately to conduct informational workshops to receive detailed technical information on the matters that the Staff Report recommends be considered for changes.
 11. Based on the information received during the periodic review and the additional information to be received during future workshops addressing the issues listed in paragraph 6 above, the SWRCB staff will recommend any needed amendments and will prepare draft plan amendments or a draft revised plan for consideration by the SWRCB, and any required environmental documentation. At that time interested parties will have the opportunity, at a public hearing, to comment on staff's recommendations and on the environmental analysis. After the hearing, the SWRCB staff will prepare responses to comments. Subsequently, the SWRCB will hold a Board meeting to consider adopting any proposed changes.

THEREFORE, BE IT RESOLVED:

1. That the SWRCB adopts the Staff Report regarding periodic review of the 1995 Water Quality Control Plan for the San Francisco Bay/Sacramento – San Joaquin Delta Estuary and authorizes the Executive Director to transmit the Report to the U.S. Environmental Protection Agency (USEPA), Region 9, in compliance with section 303(c)(1) of the federal Clean Water Act.

2. That the SWRCB affirms that the 1995 Water Quality Control Plan for the San Francisco Bay/Sacramento – San Joaquin Delta Estuary, as it currently exists, remains effective until such time as it is changed by formal action of the SWRCB.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on September 30, 2004.



Debbie Irvin
Clerk to the Board

SWRCB continued the existing objectives for chloride concentration and, until more information is developed regarding these constituents, set a water quality 'goal' for bromides of 0.15 mg/l. The SWRCB also noted that the 150 mg/l chloride objective was maintained in part, because it provides ancillary protection for other municipal and industrial uses in the absence of objectives for trihalomethanes and other disinfection by-products. These objectives remain unchanged in the 1995 Plan.

Staff Recommendation:

Commentors recommend further SWRCB review of several specific issues regarding the Water Quality Objectives for Municipal and Industrial Beneficial Uses. These issues include potential modifications to the 150 mg/l chloride objective, relocation of PP#1, and potential new objectives for bromides or other disinfection by-products and TOC. Staff notes that the 1991 Plan reviewed objectives similar to the new objective proposed by CCWD and deferred adoption of these objectives pending further scientific review of these constituents. Accordingly staff recommends that the SWRCB hold a workshop regarding potential new objectives for bromides or other disinfection by-products and TOC to receive new information that may have been developed since the 1991 Plan was adopted. Several parties comment on the 150 mg/l chloride objective. The paper plant whose operations were protected by the objective is no longer operating. However, since the SWRCB has maintained the 150 mg/l objective due to its ancillary protection of water quality in the absence of objectives for other constituents, staff recommends that the SWRCB also address this objective in a workshop. Finally, several parties comment on the location of PP#1 and offer substantive arguments both in favor and opposed to moving this compliance location. Accordingly, staff recommends that this issue also be addressed in a workshop before the SWRCB. Staff also recommends that the program of implementation for this objective be reviewed as appropriate.

Table 2 Issues

Issue 2: Southern Delta Electrical Conductivity

Comments Received:

CDWA comments that the Vernalis electrical conductivity (EC) objective of 0.7 mmhos/cm should be required in March, September and October, in addition to the current application of the objectives during the April through August period. CDWA comments that the 1.0 mmhos/cm objective for November through February should be maintained in order to protect existing agricultural uses.

The SJRGA, however, comments that there should be no EC objectives at Vernalis from November through March. The SJRGA states that it is a waste and unreasonable use of water to require releases of water from New Melones Reservoir during November through March to meet an agricultural EC objective when there are few diversions from the southern Delta during this period.

SDWA comments that the SWRCB should review the description of the EC objectives as they apply during April. SDWA states that due to the 30-day averaging methodology for determining compliance with the objectives, USBR is able to maintain salinity at higher levels early in the month because the 31-day April-May San Joaquin River pulse flow objective required at Vernalis results in high flows and therefore low salinity at the end of the month, enabling USBR to meet the objectives. SDWA recommends that the 30-day running average calculation restart on April 1 of each year in order to protect agricultural beneficial uses starting at the beginning of the month.

SDWA comments that the 0.7 EC objectives should also apply in March, September, and October because significant irrigation occurs during these months. SDWA comments that the agricultural EC objectives were imposed to protect alfalfa in the fall and winter and beans in the spring and summer and that the objectives should be reexamined to reflect the water quality needs of current cropping patterns, including tree and grape vine crops which generally require lower salinity irrigation water.

SDWA comments that the SWRCB should immediately implement the interior southern Delta water quality objectives (San Joaquin River at Brandt Bridge, Old River near Middle River, and Old River at Tracy Road Bridge) at all four southern Delta compliance locations. SDWA also comments that the SWRCB should consider setting new compliance locations to insure that there is unidirectional flow in South Delta channels to protect water quality throughout the southern Delta.

Discussion:

Elevated salinity in the southern Delta is caused by low flows, salts imported in irrigation water by the SWP and the CVP, and discharges of land-derived salts, primarily from agricultural drainage. The southern Delta EC objectives are intended to protect southern Delta agricultural uses from these effects.

The SWRCB established the current southern Delta EC objectives for the protection of agricultural beneficial uses in the 1978 Delta Plan. The approach used in developing agricultural salinity objectives for the Delta involved an initial determination of the water quality needs of significant crops grown in the area, the predominant soil type, and irrigation practices in the area. In addition, the extent to which these water quality needs would be satisfied under "without project" (SWP/CVP) conditions was also considered. The SWRCB based the southern Delta EC objectives on the calculated maximum salinity of applied water which sustains 100% yields of two important salt sensitive crops grown in the southern Delta (beans and alfalfa) in conditions typical of the southern Delta (surface irrigation of mineral soils) per the University of California Guidelines and Irrigation and Drainage Paper 29 of the Food and Agriculture Organization of the United Nations (page VI-16 – VI-19, 1978 Delta Plan). The SWRCB set an objective of 0.7 mmhos/cm during the summer irrigation season (April 1 through August 31) based on the salt sensitivity and growing season of beans and an objective of 1.0 mmhos/cm during the winter irrigation season (September 1 through March 31) based on the growing season and salt sensitivity of alfalfa during the seedling stage.

The SWRCB delayed implementation of the objectives pending negotiations by DWR, USBR, and SDWA concerning construction of physical facilities to protect agriculture in the southern Delta. Due to the fact that the negotiations were never completed, the SWRCB proposed a staged implementation of the objectives in the 1991 Plan that called for implementation of the Vernalis and Brandt Bridge objectives by 1994 and the Old River objectives by 1996 unless a three-party agreement was reached between DWR, USBR and SDWA. In the 1995 Plan, the SWRCB further delayed implementation of the EC objectives for the two Old River sites until December 31, 1997.

In D-1641, the SWRCB required a staged implementation of the southern Delta EC objectives. Pursuant to D-1641, USBR is required to meet the Vernalis EC objectives using any measures available to it. DWR and USBR are also required to meet an EC objective of 1.0 mmhos/cm at Brandt Bridge on the San Joaquin River, Old River near Middle River, and Old River at Tracy Road Bridge (the interior southern Delta stations) from March to September until April 1, 2005. As of April 1, 2005, DWR and USBR are required to meet an EC objective of 0.7 EC from April through August. The 0.7 EC objectives are replaced by the 1.0 EC objectives from April through August after April 1, 2005 if permanent barriers are constructed, or equivalent measures are implemented, in the southern Delta and an operations plan that reasonably protects southern Delta agriculture is prepared by DWR and USBR and approved by the Executive Director of the SWRCB.

Staff Recommendation:

As cropping patterns may have changed since the current objectives were established, staff recommends that the southern Delta EC objectives be reviewed during periodic review to determine if changes in the objectives, or how compliance with those objectives is determined, are needed to protect agricultural beneficial uses and to ensure that the objectives do not result in a waste or unreasonable use of water. As recommended by SDWA, staff recommends that the SWRCB review whether additional protection may be needed during the periods preceding and following the April 15 to May 15 pulse flow period. Given recent developments and requirements for salinity management in the Lower San Joaquin River and southern Delta, staff also recommends that the implementation recommendations for these objectives be reviewed to ensure that they are timely described, effective, feasible, and consistent with existing requirements for salinity management in the southern Delta. To the extent possible, staff recommends that review of this issue be coordinated with the CVRWQCB's ongoing TMDL and Basin Plan Amendment (BPA) efforts for salt and boron on the San Joaquin River.

Issue 3: San Joaquin River Electrical Conductivity Objectives Upstream of Vernalis

Current Objectives:

Currently there are no water quality objectives for EC (salinity) on the San Joaquin River upstream of Vernalis.

EXHIBIT “2”

**STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 2006 - 0098**

**ADOPTION OF THE AMENDED WATER QUALITY CONTROL PLAN FOR THE
SAN FRANCISCO BAY/SACRAMENTO-SAN JOAQUIN DELTA ESTUARY**

WHEREAS:

1. The State Water Resources Control Board (State Water Board) is responsible for the regulation of activities and factors that may affect the quality of the waters of the state. (Wat. Code, §§ 13000, 13001.)
2. The State Water Board has undertaken a proceeding under its water quality authority to amend the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan) adopted in 1978 and amended in 1991 and in 1995.
3. The State Water Board commenced this proceeding on September 29, 2006 by issuing a notice of public hearing for Consideration of an Amended Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, to commence on November 13, 2006. The draft amended Bay-Delta Plan and accompanying appendices, including environmental documentation, accompanied the Notice of Public Hearing.
4. Prior to commencing this proceeding, the State Water Board conducted a series of workshops in 2004 and 2005 to receive information on specific topics addressed in the Bay-Delta Plan. The State Water Board sent notice of all workshops to all parties who indicated an interest in receiving notice.
5. The amended Bay-Delta Plan consists of four volumes, including the Plan, Appendix 1 (Plan Amendment Report), Appendix 2 (Referenced Documents), and Appendix 3 (Response to Comments).
6. The amended Bay-Delta Plan was prepared under a program certified at California Code of Regulations, title 14, section 15251(g) as meeting the requirements of Public Resources Code section 21080.5. Accordingly, the amended Bay-Delta Plan with its appendices constitutes adequate environmental analysis to satisfy the requirements of the California Environmental Quality Act (CEQA) at Public Resources Code section 21000, et seq.
7. The State Water Board has considered all of the oral and written comments that were submitted and, in accordance with the State Water Board's regulations (Cal. Code Regs., tit. 23, § 3779), has prepared responses to the comments containing significant environmental points as well as responding to some other comments. The Plan and Appendix 1 of the Plan have been revised in response to the comments received from the interested parties, and Appendix 3 of the Plan has been added to respond to the comments.
8. The Bay-Delta Plan supplements the other water quality control plans that cover the Bay-Delta Estuary. Together they include all necessary elements of water quality control plans in accordance with Water Code sections 13241 and 13242 and federal requirements.

9. The Bay-Delta Plan will be reviewed periodically in compliance with Water Code section 13240 and federal Clean Water Act section 303(c) (33 U.S.C., § 1313(c)).
10. The amended Bay-Delta Plan will become effective after it is approved by the Office of Administrative Law (OAL). The water quality standards (as defined under the federal Clean Water Act) in the Plan also will be submitted to the U. S. Environmental Protection Agency (U.S. EPA) in accordance with the federal Clean Water Act (33 U.S.C., § 1251, et seq.). To the extent that any water quality standards, as defined, are amended, those standards would require U.S. EPA approval before the amended versions go into effect. In the view of the State Water Board, however, there are no substantive amendments to any water quality standards in the amended Bay-Delta Plan. Other portions of the Bay-Delta Plan, such as the program of implementation, are to be submitted to U.S. EPA as part of the continuing planning process, but do not require approval. The State Water Board does not concede that it is required under the federal Clean Water Act to submit all parts of this Plan to the U.S. EPA for approval. In the view of the State Water Board, the objectives for flow and operations are not subject to U.S. EPA approval, and are provided to U.S. EPA for its consideration as a matter of state/federal comity.

THEREFORE BE IT RESOLVED THAT THE STATE WATER BOARD:

1. Adopts the amended Bay-Delta Plan in accordance with Water Code section 13170, including Appendices 1, 2, and 3.
2. Authorizes the State Water Board staff to submit the amended Bay-Delta Plan to OAL and to U.S. EPA.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on December 13, 2006.

AYE: Tam M. Doduc
Arthur G. Baggett, Jr.
Charles R. Hoppin
Gary Wolff, P.E., Ph.D.

NO: None

ABSENT: None

ABSTAIN: None



Song Her
Clerk to the Board

would reduce effectiveness of existing water storage facilities; (3) increased rainfall that could exacerbate flooding; and (4) adverse biological effects from changes in flow and water quality. Water quality control planning must begin to address these possible effects. Future State Water Board activities therefore should be responsive to the impacts of climate change and provide timely response and guidance to water resources agencies, consistent with the Water Quality Control Plan, as they submit plans and requests to process applications for water conveyance facilities and flow control structures such as the current South Delta Improvements Project or potential future conveyance structures such as a Delta peripheral canal.

3. Delta and Central Valley Salinity

A joint State and Regional Board Workshop on Central Valley salinity issues held in January 2006 resulted in broad stakeholder support for development of a Salinity Management Plan for the Central Valley and Delta (Salinity Management Plan) to protect beneficial uses of both surface waters and ground waters. Development and full implementation of the Salinity Management Plan is expected to take 40 to 50 years and to reduce economic hardship related to managing salinity. The State Water Board will develop regulations and provide regulatory encouragement to ensure that infrastructure is developed that improves and maintains Central Valley and Delta salinity while providing certainty to local and regional planners, municipalities, agriculture, water suppliers, food processors, and others.

The State Water Board will continue to coordinate updates of the Bay-Delta Plan with on-going development of this comprehensive Salinity Management Plan. As part of this larger planning effort, the State Water Board has issued a public notice of a workshop to be held in January 2007 to review: (1) the salinity requirements of the beneficial uses of water in the southern Delta; (2) the causes of salt loading in the southern Delta; (3) practices that could reduce salt loading from Delta sources; (4) flow and salt load reduction measures to implement the salinity objectives; and (5) the timeline for implementation of these measures. The State Water Board intends to develop and manage a study of salinity in the southern Delta as part of this effort. This process could result in amendments to the Bay-Delta Plan, further changes in water rights, or changes in both the Bay-Delta Plan and water rights.

4. San Joaquin River Flows

Data submitted by fisheries agencies suggest that various fish species within the Delta and San Joaquin River basin have not shown significant signs of recovery since adoption of the San Joaquin River Spring Flow and Pulse Flow objectives in the 1995 Plan and the implementation of the Spring Flow objectives in D-1641. Some species have shown significant declines. The San Joaquin River flow objectives are not changed in the 2006 Plan due to a lack of scientific information on which to base any changes.⁵ While the Department of Fish and Game (DFG)

⁵ The Program of Implementation for the Pulse Flow Objectives is amended in the 2006 Plan to allow for staged implementation of the objectives by conducting the Vernalis Adaptive Management Plan (VAMP) until 2011. These changes are consistent with the current implementation of the objectives since 2000 pursuant to D-1641.

B. Water Quality Objectives for Agricultural Beneficial Uses

The water quality objectives in Table 2 provide reasonable protection of the beneficial use AGR, from the effects of salinity intrusion and agricultural drainage in the western, interior, and southern Delta. These objectives are unchanged from the 1991 Bay-Delta Plan.

C. Water Quality Objectives for Fish and Wildlife Beneficial Uses

The water quality objectives in Table 3 provide reasonable protection of fish and wildlife beneficial uses in the Bay-Delta Estuary including EST, COLD, WARM, MIGR, SPWN, WILD, and RARE. Protection of these fish and wildlife beneficial uses also provides protection for the beneficial uses of SHELL, COMM, and NAV. The parameters to be regulated under Table 3 are dissolved oxygen, salinity (expressed as electrical conductivity), Delta outflow, river flows, export limits, and Delta Cross Channel gate operation. Information available in 1995 indicated that, unlike water quality objectives for parameters such as dissolved oxygen, temperature, and toxic chemicals, which have threshold levels beyond which adverse impacts to the beneficial uses occur, there were no defined threshold conditions that could be used to set objectives for flows and project operations. Instead, available information indicated that a continuum of protection exists. Based on that information, higher flows and lower exports provided greater protection for the bulk of estuarine resources up to the limit of unimpaired conditions. Therefore, these objectives were set based on a subjective determination of the reasonable needs of all the consumptive and nonconsumptive demands on the waters of the Estuary. After completion of the POD studies, the State Board will review the study results and may consider amending this Plan to improve water quality protections for fish and wildlife in the Estuary.

- iv. The State Water Board will conduct a workshop in January 2007 to commence proceedings to receive information and conduct detailed discussions regarding the southern Delta salinity objectives, the causes of salinity in the southern Delta, measures to implement salinity objectives for southern Delta agriculture, and other factors. The proceedings following the workshop may result in water right and/or water quality actions.

State Funding of Programs

- i. The State Water Board has various financial assistance programs under which it can contribute funding for programs that will help meet the salinity objectives or to improving understanding about salinity conditions in the southern Delta (primarily the San Joaquin River upstream of Vernalis). To date, it has funded tens of millions of dollars worth of projects and studies for such programs. The State Water Board provides funds through the State Revolving Fund Loan Program, the Agricultural Drainage Loan Program, the Agricultural Drainage Management Loan Program, Proposition 13, 40, and 50 grant funding through the Nonpoint Source Pollution Control Programs and Watershed Protection Programs.

Current Projects and Actions by Other Agencies

The following projects may assist in meeting the southern Delta salinity objectives by reducing high salinity drainage to the San Joaquin River; improving circulation in the southern Delta; and supplementing flows through recirculation. All or a portion of these projects are being funded through the above referenced programs. Each of these projects, described below, should be pursued by the identified agencies. If successful, these projects and the actions they contain could make additional regulatory measures by the State Water Board and the Central Valley Regional Water Board unnecessary.

- i. Grasslands Bypass Project: The Grasslands Bypass Project manages discharges of agricultural drainage water from 97,000 acres in the Grasslands Watershed. The purpose of the project is to prevent discharges of water containing high levels of selenium to wildlife refuges and wetlands in the San Joaquin Valley, but it has reduced the load of salts by 39 percent (from 187,300 tons to 113,600 tons) from pre-project conditions through various management measures including sump management, recycled tail and tile water programs, on-farm tile and tail water management, and various source control measures. The Grassland Areas farmers, USBR, the Central Valley Regional Water Board, and other agencies should continue to evaluate the various management measures in the Grasslands Bypass Project and should continue to implement those measures that are effective in reducing salinity and selenium discharges to the San Joaquin River.

- ii. West Side Regional Drainage Plan: The West Side Regional Drainage Plan evolved from the Grasslands Bypass Project as a long-term solution to eliminate discharges to the San Joaquin River of drainage water from irrigated agriculture containing high amounts of selenium, salt and other constituents. The plan uses the following practices:
- a) Reduction of drainage volumes by using source control/efficient water management techniques such as replacing furrow irrigation with micro-irrigation technology and lining unlined delivery canals;
 - b) Recirculation of tailwater on primary irrigation lands;
 - c) Collection and reuse of tile drainage water on halophytic croplands to concentrate drainage;
 - d) Installation and pumping of groundwater wells in strategic locations to eliminate groundwater infiltration into tile drains; and
 - e) Treatment and disposal of remaining drainage water through reverse osmosis, evaporation and disposal or reuse of salts.

When fully implemented, the parties implementing the plan expect to assure achievement of the salinity objectives at Vernalis and reduce the frequency of exceedances of objectives at Brandt Bridge by 71 percent over a 73-year hydrology. They expect to complete the plan by 2010. Stakeholder parties to the Westside Regional Drainage Plan should continue work to implement the various practices discussed above to achieve the goal of zero discharges to the San Joaquin River from the Grasslands area by 2010.

- iii. San Luis Unit Feature Reevaluation Project: USBR currently is evaluating seven alternatives as part of the San Luis Unit Feature Reevaluation Project to provide drainage service to the San Luis Unit of the CVP. This project would reduce discharges to the San Joaquin River and sustain long-term agricultural production on drainage-impacted lands. The alternatives under consideration include: on-farm, in-district drainage reduction actions; federal facilities to collect and convey drain water to regional reuse facilities; and some level of land retirement. Additional options under consideration include options for in-valley disposal of drain water, ocean disposal, and Delta disposal. USBR's preferred alternative is an in-valley/land retirement alternative, and would involve treatment of drain water through reverse osmosis and selenium biotreatment before disposal in evaporation basins. USBR expects implementation to help reduce saline discharges to the lower San Joaquin River.
- iv. Central Valley Project Improvement Act (CVPIA) Land Retirement Program: USBR and Westland's Water District are implementing land retirement projects under the CVPIA Land Retirement Program and under settlement agreements in drainage-impacted areas of the San Luis Unit of the Joaquin Valley. The projects will reduce the volume of subsurface drain water discharged to the San Joaquin River.

Recommended Projects, Studies, and Actions:

The following recommended projects, studies, and actions will provide information that can be used during subsequent updates of the Water Quality Control Plan and water rights proceedings to implement the Plan:

- i. Central Valley Salinity Committee and Salinity Study Task Force: At a January of 2006 joint workshop, the State Water Board and Central Valley Regional Water Board established a Salinity Committee to address salinity issues in the Central Valley. The Committee will establish a Salinity Study Task Force to evaluate the impact of salinity on water resources and develop a viable salinity management plan; sponsor a follow-up joint State Water Board/Regional Water Board salinity workshop to receive comments on the salinity management plan; conduct meetings to gather additional public input; contract for preparation of an economic study of salinity impacts and the social and economic consequences of not implementing a viable salinity management program; and sponsor a conference that will highlight the major salinity-related issues and their statewide impacts.
- ii. Southern Delta Salinity Objectives: There is a need for an updated independent scientific investigation of irrigation salinity needs in the southern Delta (similar to the investigation on which the current objectives are based). The scientific investigation should address whether the agricultural beneficial uses in the southern Delta would be reasonably protected at different salinity levels, whether management practices are available that would allow for protection of the beneficial uses at a higher salinity level in the channels of the southern Delta, and whether such management practices are technically and financially feasible. The investigation could address the feasibility of providing an alternative method of delivering fresh water to agricultural water users in the southern Delta. The scientific investigation must be specific to the southern Delta. The State Water Board will conduct a workshop to discuss this subject in January 2007.

2. San Joaquin River Dissolved Oxygen Objective

D-1641 directs the Central Valley Regional Water Board to establish a TMDL to address the dissolved oxygen (DO) impairment in the San Joaquin River. In November of 2005, the State Water Board approved an Amendment to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins. The amendment, approved by the Office of Administrative Law in August 2006, consists of a Control Program for Factors Contributing to the DO impairment in the Stockton Deep Water Ship Channel (DWSC) and other actions to implement DO objectives in the DWSC portion of the San Joaquin River. The DO basin plan amendment includes implementation measures and a timeline for implementation for both the 1995 Plan DO objective and the DO objective in the Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin.