

JOINT CALIFORNIA WATER USERS

COMMENTS ON THE DECEMBER 1994 DRAFT WATER QUALITY CONTROL PLAN FOR THE SAN FRANCISCO BAY/SACRAMENTO- SAN JOAQUIN DELTA ESTUARY

Dated: February 22, 1995

These legal and technical comments regarding the December 1994 Draft Water Quality Control Plan ("Plan") for the San Francisco Bay/Sacramento - San Joaquin Delta Estuary ("Bay-Delta" or "Estuary") are submitted to the State Water Resources Control Board ("SWRCB" or "State Board") on behalf of the Joint California Water Users group ("Joint Agencies"). The Joint Agencies are made up of a diverse collection of California water users serving more than two-thirds of the state's urban population and substantial portions of its irrigated farmland. Water users and organizations joining in these comments are listed in Attachment A.

The Joint Agencies commend the State Board on its efforts in preparing the Plan. The document is an important first step in the implementation of the December 15, 1994 Principles for Agreement on Bay-Delta Standards ("Principles Agreement") between and among the State of California, the federal government, and participating water users and environmental organizations. It also provides necessary technical clarity regarding the water quality standards and operational constraints described in the Principles Agreement. As such, the Joint Agencies generally support the requirements proposed in the Plan and look forward to working with the State Board to ensure their future implementation.

The Joint Agencies have a limited number of legal and technical concerns, however, over specific aspects of the Plan and the draft Environmental Report ("DER") attached to it as an appendix. These concerns fall into three categories:

- first, the legal bases pursuant to which the State Board proposes to adopt the Plan should be broadened to avoid jeopardizing the State Board's jurisdictional relationship

with the United States Environmental Protection Agency ("USEPA");

- second, certain technical issues involving the substantive standards contained in Chapters 3 and 4 of the Plan need to be clarified or revised to achieve full consistency with the Principles Agreement; and
- third, certain parts of the environmental and other analyses used by the State Board to support the Plan's compliance with the California Environmental Quality Act ("CEQA") could be further refined or clarified.

The Joint Agencies believe that their concerns in each of these areas can effectively be addressed without significant modification of the contents of the Plan. It is our intent that these comments be viewed as constructive and helpful to the State Board's continuing efforts to finalize and begin implementation of the Plan.

The Joint Agencies' specific comments on the Plan are set forth below.^{1/}

1.0 REGULATORY AUTHORITY OF THE STATE BOARD

Section I(C) discusses the State Board's legal authority to adopt the Plan solely as a water quality control plan under the Porter-Cologne Water Quality Control Act, Water Code § 13000 et seq. ("Porter-Cologne Act"). See Plan at 6. It also addresses the implications of USEPA's review and approval of the Plan under the federal Clean Water Act ("CWA"). *Id.* at 8. The Joint Agencies believe there are difficulties in the Plan's approach to both of these issues and therefore propose several non-substantive modifications to the text of Section I(C) to address their concerns.

1.1 Authority Under the Porter-Cologne Act

The Joint Agencies support implementation of the measures endorsed by the Principles Agreement as part of a comprehensive plan for Bay-Delta protection. We do not agree, however, that the State Board has authority to adopt all of those measures as water quality objectives under the Porter-Cologne Act. A number of measures

^{1/} These comments have been prepared for submission in connection with the State Board's scheduled hearing on the Plan on February 23, 1995. As noted with respect to various specific issues discussed below, the Joint Agencies may wish to submit additional comments on Plan elements prior to close of the public comment period.

contained in the Plan are not embraced within the State Board's water quality regulatory authority alone. These include operational standards and other flow-related measures that will be regulated through separate provisions of state law affecting the management and allocation of water resources generally.

As part of the proceedings to adopt the 1991 Water Quality Control Plan for Salinity in the Bay-Delta ("1991 Salinity Plan"), the State Board explicitly acknowledged that its ability to address flows under the Porter-Cologne Act is limited. Thus, in response to comments on the draft 1991 Salinity Plan, the State Board stated:

Because flow requirements directly affect the exercise of water rights, the final establishment of such requirements must be done in a water right proceeding. Flow plays two distinct roles in protection of the Estuary's water. It is important in this water quality control plan because it is a measure which may be used to implement the water quality objectives. It has in addition a separate role in protecting the Estuary's beneficial uses, because it represents the movement of a volume of water. This second role is not a subject of water quality objectives.

See Responses to Comments on the Draft 1991 Salinity Plan (January 1991), at II-10. Because it recognized that flow requirements could not properly be adopted as water quality objectives, the State Board declined to revise or add new objectives for flow in the 1991 Salinity Plan. Id.^{2/}

The Plan goes beyond this interpretation of the State Board's regulatory authority and proposes that the definitions of "water quality" and "water quality objective" in the Porter-Cologne Act "support the establishment under State law of objectives for flow and project operations." See Plan Section I(C), at 6-8 (citing Water Code §§ 13050(g) and (h)). In particular, the Plan states that "the rate and quantity of water flow, the direction of flow, and the operations of water projects are physical properties or characteristics of the water," and therefore are water quality parameters for which water quality objectives can legitimately be established.

^{2/} See also United States v. State Water Resources Control Bd., 182 Cal. App. 3d 82, 119, 124-25 (1986) (stating that combining the State Board's water quality and water rights functions in the 1978 water quality control plan for the Bay-Delta was "unwise", and recognizing that the State Board lacks authority to enforce flow and operational requirements through the Porter-Cologne Act).

The Plan's expanded definition of "water quality" is inconsistent with the way that term generally has been construed in a regulatory context. See, e.g., 3 Beck & Goplerud, Waters and Water Rights § 201 (1988) ("In general, 'water quality' refers to the physical, chemical, biological, radiological, and other properties affecting the usefulness of a specific quantity of water for a specific purpose" [footnotes omitted]), citing Swenson & Baldwin, A Primer on Water Quality 1 (U.S. Dep't of the Interior Geological Survey, 1985). See also USEPA, Manual of Individual Water Supply Systems 6 (1982) ("Physical characteristics [of water] relate to the quality of water for domestic use and are usually associated with the appearance of water, its color or turbidity, temperature, taste, and odor in particular."). Water flow and project operational parameters generally are not considered to be "physical characteristics" of water and therefore cannot be considered attributes for which water quality objectives are appropriate. Rather, they are aspects of water resources management that are more appropriately addressed in the context of the State Board's water rights planning authority.^{3/}

Maintaining the distinction between water quality and water rights planning is critical to the preservation of state primacy over the management and allocation of the State's water resources. Among other things, the establishment of operational and flow management standards as water quality objectives under the Porter-Cologne Act could be taken as an invitation for USEPA to assert jurisdiction in this area pursuant to its authority under CWA section 303. USEPA recently adopted its own federal water quality standards for the Bay-Delta under section 303. See Final Rule OW-FRL-5084-4, 60 Fed. Reg. 4664 (January 24, 1995) (to be codified at 40 C.F.R. Part 131) ("Final Rule"). It also has committed to withdraw its standards if the State Board adopts a final plan consistent with the Principles Agreement. When finalized, the Plan will provide the vehicle for submitting state standards to USEPA as a predicate to withdrawal of the federal requirements.

According to USEPA's interpretation, water quality objectives and beneficial use designations under the Porter-Cologne Act "serve as water quality standards for purposes of section 303 of the CWA." Final Rule at 10. Moreover, there is no inherent distinction in this interpretation between objectives for water quality parameters like chemical constituents, temperature, and dissolved oxygen, and standards for flow management and project operations. Thus, USEPA could take the

^{3/} The recognition in the Plan that the State's water quality and water rights functions have been combined in the State Board does not mean that the latter function has been subsumed by the former. All of the Water Code citations relied upon on page 8 of the Plan reflect the clear distinction the Legislature has established and maintained between those two functions. The fact that the State Board must pay attention to the water quality consequences of water rights determinations does not imply a grant of authority to make those determinations pursuant to the Porter-Cologne Act.

position that water quality objectives for flow management and project operations are subject to review and approval (or disapproval) as water quality standards pursuant to section 303.

The Joint Agencies strongly believe that the State Board should not create opportunities for the federal government to assert claims of jurisdiction over water allocation issues in California. Those issues historically have been reserved to the State, a fact explicitly acknowledged by Congress in the Clean Water Act itself. See CWA § 101(g) ("It is the policy of Congress that the authority of each State to allocate quantities of water within its jurisdiction shall not be superseded, abrogated or otherwise impaired by this Act."). There is no need to depart from this approach in the present context.

The Joint Agencies believe that the State Board should refer to multiple legal authorities in adopting the Plan. These authorities should include provisions governing the adoption of water quality control plans under the Porter-Cologne Act as well as the State Board's water resources planning authorities in Division 2 of the Water Code. Moreover, the State Board does not need to distinguish between different plan elements as either water quality objectives or water resource planning criteria; rather, different requirements may be joined together as a part of a coordinated program, each element of which is an essential component of the whole.^{4/}

For these reasons, the Joint Agencies recommend that the discussion of legal authorities in Section I(C)(1)-(4) of the Plan be revised by replacing the present text with a listing of the legal authorities that support the full range of requirements contained in the Plan. These authorities include:

- a. Authority to adopt water quality control plans, including the designation of beneficial uses, water quality objectives, and an implementation plan, pursuant to Water Code sections 13170 and 13240-13244.
- b. Authority to ensure that water use is reasonable and beneficial, pursuant to Article X, section 2, of the

^{4/} Given the multiple legal authorities implicated by the Plan in addition to the Porter-Cologne Act, it may be misleading to continue to call the Plan simply a "water quality control plan". See Water Code § 13050(j) (defining the term specifically for purposes of water quality regulation under the Porter-Cologne Act). In that regard, the Joint Agencies endorse the suggestion of previous commenters to call it the "Coordinated Estuarine Protection Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary."

California Constitution and Water Code sections 100, 275, 1050.

- c. Authority to reasonably protect "public trust" resources in accordance with the California Supreme Court's decision in National Audubon Society v. Superior Ct., 33 Cal. 3d 419, 189 Cal. Rptr. 346 (1983).
- d. Authority for the planning of investigations and establishment of conditions on the exercise of water rights for the protection of all beneficial uses, for the protection of the public interest, and for compliance with appropriate water quality control plans, under Water Code sections 183, 1251, 1253, and 1256-1258.

Finally, the Joint Agencies believe it is important to emphasize in Section I(C) of the Plan that its adoption (in conjunction with the DER) will be in compliance with applicable requirements of CEQA, notwithstanding the need to refer to both the water quality and the water resource planning authorities just described. In developing and adopting the Plan, the State Board is employing procedures that generally are applicable to the preparation of statewide and regional basin plans. As noted in the DER at I-12, the State Board's basin planning program has been certified by the Secretary of Resources as meeting the requirements of Public Resources Code section 21080.5, which authorizes state agencies acting pursuant to a certified program to rely upon "functionally equivalent" plans or other documentation to assess the environmental impacts of their actions in lieu of a formal environmental impact report ("EIR"). See Cal. Code Regs. tit. 14, § 15251(g).

While the basin planning process typically focuses on the designation of beneficial uses and appropriate water quality objectives, it is not necessarily limited to those activities. Basin plans also are required to include programs of implementation that may involve actions by entities, including the State Board, functioning outside the regulatory scope of the Porter-Cologne Act. See Water Code § 13242 (implementation plans may include recommendations for action by "any entity, public or private"). These include policies and prohibitions, such as water resource policies and standards, that may affect water quality management. See SWRCB Administrative Procedures Manual, Chapter 8, "Water Quality Planning" (March 1991), at 5, 19 ("the State Board may utilize powers, such as water rights authority granted to the State Board under State statutes, to achieve water quality control").^{5/}

^{5/} Consideration of water resource management issues has always been a part of the basin planning process. When regional basin plans were first developed during the 1970s, basin contractors were specifically directed to include recommendations on management requirements as part of their planning efforts. Among other
FOOTNOTE 5 CONTINUED ON NEXT PAGE

In this light, consideration of water resource management issues clearly is a legitimate part of the basin planning program which has been certified as the "functional equivalent" of the environmental review process required under CEQA. Thus, the inclusion of flow and project operational standards in the Plan, with reference to water resource planning authorities outside the scope of the Porter-Cologne Act, does not trigger the need to prepare an EIR for those standards at this time. To the extent additional CEQA review may be required to implement the standards in the future, that review is properly deferred until completion of necessary water rights proceedings by which implementation would be achieved. Nothing in CEQA requires the preparation of a separate environmental document to address the impacts of proposed flow and operational criteria now.^{6/}

1.2 Implications Under Federal Clean Water Act

Given the diverse goals and regulatory strategies the Plan reflects, it should be submitted to USEPA for review and approval, where appropriate, under multiple provisions of federal law, including CWA sections 208, 303, and 319. The State Board should take the position that, consistent with the Principles Agreement, the Plan as a whole addresses the concerns that USEPA previously expressed in its disapproval of the 1991 Salinity Plan pursuant to CWA section 303. The State Board also should take the position that the Plan meets the criteria for approval as a nonpoint source management program under section 319(d) (and, as appropriate, an areawide waste treatment management plan under section 208), and that it should be approved under those provisions of the CWA as well. Finally, because some aspects of the Plan are

FOOTNOTE 5 CONTINUED FROM PREVIOUS PAGE

things, the State Board directed basin contractors to "include in the Basin Plan reports, their recommendations as to actions that the Board should take regarding water rights and uses, particularly as regards protection and improvement of quality, within the authority already granted by Division 2 and other provisions of the Water Code." SWRCB Management Memorandum No. 26, "Water Rights Considerations in Basin Planning" (June 4, 1973), at 1. Recommendations on water resource management criteria continue to be a feature of contemporary regional basin plans. See, e.g., Basin Plan for the Central Valley Regional Water Quality Control Board (Region 5) (approved March 22, 1990), at IV-16 (recommendations on conditions to be imposed in new permits for water storage or diversions which involve interbasin water transfers).

^{6/} To the extent that the State Board relies solely on its water resources planning authority when including flow and project operational standards in the Plan, the Plan also may be considered statutorily exempt from CEQA as a feasibility or planning document. See Public Resources Code § 21102; CEQA Guidelines § 15262 (feasibility and planning studies for possible future actions that a state agency has not approved, adopted, or funded do not require the preparation of an EIR but do require consideration of environmental factors). See also Office of Planning and Research CEQA Guidelines (December 1993) §§ 15307, 15308 (actions by regulatory agencies to ensure the maintenance, restoration, enhancement, or protection of natural resources or the environment are categorically exempt from CEQA where the regulatory process involves procedures for the protection of the environment).

outside USEPA's regulatory purview altogether, the State Board should make clear it that the Plan is to that extent being submitted for review solely as a matter of state-federal comity.

In order to reasonably accommodate the multiple, competing uses of water derived from the Estuary (as required under state law), the Plan must include requirements unrelated to the establishment of limited section 303 water quality standards. Water quality standards serve two related purposes under section 303 of the Clean Water Act: first, they provide general water quality goals for specific water bodies; and second, they provide a regulatory basis for setting water quality-based treatment controls and strategies. See 40 C.F.R. § 131.2. These controls and strategies are represented by effluent limitations contained in National Pollutant Discharge Elimination System ("NPDES") permits for point source discharges under CWA section 401. The problems confronting the Bay-Delta are not limited to those attributable to point source pollutant discharges alone, however, but also are attributable to many factors that have altered conditions in the Estuary.

Among other things, the Clean Water Act specifically addresses diversion-related salt water intrusion through requirements for state implementation of areawide waste treatment management planning processes under section 208. See U.S. ex rel. TVA v. Tenn. Water Quality Control Bd., 717 F.2d 992 (6th Cir. 1983) (dam-induced nonpoint source pollution required to be addressed under section 208). See also National Wildlife Federation v. Gorsuch, 693 F.2d 156 (D.C. Cir. 1982). More recently, state authority to control water quality conditions resulting from salt water intrusion has been supplemented by requirements for state development of nonpoint source pollutant management programs generally under section 319. See also CWA § 304(f) (nonpoint sources of pollution include "salt water intrusion resulting from reductions of fresh water from any source").

Section 319 directs states to identify waters that cannot reasonably be expected to attain or maintain applicable water quality standards without additional action to control nonpoint sources of pollution. CWA § 319(a). In addition, states are directed to develop nonpoint source management programs that identify best management practices ("BMPs") or measures that will reduce pollutant loadings from specified nonpoint source categories. CWA § 319(b)(2)(A). Management programs also must identify state regulatory and nonregulatory programs to achieve implementation of BMPs. CWA § 319(b)(2)(B). Section 319 management programs must be submitted to USEPA for review and approval. As with section 208 waste treatment management plans, however, USEPA has no authority under section 319 to separately adopt its own nonpoint source management programs in lieu of disapproved state programs. See CWA § 319(d).

In addition to complying with CWA section 303, the Plan conforms to the statutory framework for nonpoint source management programs under CWA sections 208 and 319. It specifies a range of measures, including flow control and operational measures, to achieve applicable standards. It also identifies other regulatory and nonregulatory programs to achieve implementation of these measures, including future water rights proceedings under Water Code Division 2 and separate regulatory actions to be taken by the State Board and other agencies in the future. Given the interrelationship between water quality and the allocation of water resources in the Bay-Delta, however, the State Board should not attempt to bisect the Plan for the purpose of linking individual program elements to specific provisions of the CWA. No individual program element should be submitted for review by USEPA independently of the Plan as a whole.

For these reasons, the Joint Agencies recommend that the discussion of USEPA's approval authority in Section I(C)(5) of the Plan be revised by replacing the present text with the following:

Upon adoption, this water quality control plan will be submitted to USEPA for review and (to the extent appropriate) approval under the federal Clean Water Act (33 U.S.C. § 1251 et seq.) ("CWA"). To the extent that the plan addresses concerns outside the scope of the CWA, it is the intent of the SWRCB that the plan also would be submitted for consideration by USEPA as a matter of state/federal comity. As to matters within the scope of the CWA, it is the intent of the SWRCB that the plan would be reviewed and approved by USEPA as an integrated program pursuant to the combined authority of section 208 (Areawide Waste Treatment Management), section 303 (Water Quality Standards and Implementation Plans), and section 319 (Nonpoint Source Management Programs), consistent with the requirements of section 101(g) (policy regarding the authority of each State to allocate quantities of water within its jurisdiction).

With respect to USEPA's review and approval authority under section 303 of the CWA, the SWRCB believes that the plan is consistent with the December 15, 1994 Principles for Agreement on Bay-Delta Standards Between the State of California and the Federal Government. The SWRCB therefore expects that existing federal standards adopted for the Bay-Delta pursuant to section 303 will be

promptly withdrawn upon final adoption of the plan. Upon withdrawal, the objectives and beneficial use designations in the plan that are water quality standards within the meaning of the Clean Water Act will be California's water quality standards for purposes of the Clean Water Act.

2.0 TECHNICAL ISSUES REGARDING STANDARDS

In general, the standards set out in Chapter III of the Plan are consistent on technical grounds with the relevant provisions on water quality standards and operational constraints in the Principles Agreement. Some remaining areas of potential discrepancy or ambiguity already have been addressed by the State Board in the statement of Errata to the Plan which accompanied the issuance of the DER. There are several issues raised by the proposed standards for which further modification or clarification still may be required, however.

An essential premise of the Principles Agreement was that proposals already made by members of the Joint Agencies (the California Urban Water Agencies/Agricultural Water Users, or "CUWA/Ag") would provide the base case for Bay-Delta protection, except as modified by the Principles Agreement itself. The CUWA/Ag proposals in turn were described in Biological Explanation of the Joint Water Users Proposed Bay-Delta Standards (November 3, 1994) ("Biological Explanation Document"), which is incorporated herein by reference.

As a general matter, the Joint Agencies believe that the standards proposed in the Plan should reflect fully the applicable provisions of the Principles Agreement and, to the extent incorporated in the Principles Agreement, relevant elements of the earlier CUWA/Ag proposals. Consistent with this overall approach, the Joint Agencies therefore have several specific comments on standards contained in Chapter III of the Plan. Where corresponding references to pertinent standards also are made in the DER, those references are noted as well.

2.1 Page 18, Footnote 11 (DER page II-9). The reference in the second sentence of this footnote to "maximum daily or 14-day running average" is confusing. The reference should be substituted with the phrase "daily average or 14-day running average".

2.2 Page 16 (DER page II-7), San Joaquin Salinity. The standard included in the Plan for San Joaquin River Salinity (San Joaquin River between Jersey Point and Prisoners Point) is inconsistent with the standard endorsed in the Principles Agreement for San Joaquin River Salinity (Striped Bass Spawning). The operations group ("Ops

Group") established by the Principles Agreement has been meeting to determine how this standard should be implemented. The Joint Agencies expect to provide a specific recommendation on this standard prior to the close of the public comment period for the Plan.

2.3 Page 16 (DER page II-7), Suisun Marsh Salinity. The standards included in the Plan for Eastern and Western Suisun Marsh Salinity and for Brackish Tidal Marshes of Suisun Bay (see footnote [7] at page 18) are inconsistent with those contained in the Suisun Marsh Preservation Agreement, which was endorsed by CUWA/Ag and the Principles Agreement. The Ops Group also has been meeting to determine how this standard should be implemented. The Joint Agencies expect to provide a specific recommendation on this standard prior to the close of the public comment period for the Plan.

2.4 Page 17 (DER page II-8), Barrier at Head of Old River. The CUWA/Ag proposals included requirements to install and operate a physical barrier at the head of Old River between April 15 and May 15, coincident with the outmigration of salmon smolts, and between October 1 and October 31, consistent with the provision of pulse flows to allow attraction of adult fall-run chinook salmon in the San Joaquin River. See Biological Explanation Document, Table 2-1 and pages 2-14, 2-26. These requirements have been omitted from the Plan, which should be revised to include them. The requirements also should recognize that the installation of any non-permanent barrier or the closure of any permanent barrier may be impractical when there is the possibility of flooding. To address these concerns, the Joint Agencies propose that the following should be inserted at the bottom of page 17 of the Plan:

BARRIER OPERATIONS

Compliance Location: Old River at head

Parameter: Installation of barrier

Description: Close head of Old River

Water Year Type: All

Time Period: Apr 15 - May 15 and Oct

In addition, the following new footnote [26] should be added to Table 3 on pages 18-19: "[26] Installation of the barrier will coincide with San Joaquin River pulse flows, as described in footnotes 15 and 16. Installation and operation would be as permitted by hydrologic conditions."

2.5 Page 17 (DER page II-8), Acoustic Barrier at Georgiana Slough. The CUWA/Ag proposals included a requirement to install an acoustic barrier at the head of Georgiana Slough between November 1 and June 30. See Biological Explanation Document, Table 2-1 and pages 2-15 to 16. This requirement has been omitted from the Plan, which should be revised to include it. The Joint Agencies therefore propose that the following also be inserted at the bottom of page 17 of the Plan:

ACOUSTIC BARRIER AT GEORGIANA SLOUGH

Compliance Location: Georgiana Slough at Sacramento River

Parameter: Installation and operation of acoustic barrier

Description: Reduce transport of migrating salmon smolts to interior Delta

Water Year Type: All

Time Period: November 1 - June 30

In addition, the following new footnote [27] should be added to Table 3 on pages 18-19: "[27] It is expected that operation of the acoustic barrier will be managed by the operations coordination group, with disputes resolved by CALFED."

2.6 Page 19, Footnote 17 (DER Page II-10), Export Limits. The Plan includes export limits based on the CUWA/Ag proposals. These limits could impact voluntary water transfers in ways that were not intended. For example, it is unclear whether limits would apply to a transfer from another Delta diverter where total Delta pumping is not thereby increased. It also is not clear whether transfers would be allowed if warranted by biological conditions (determined on a case-by-case basis), even if export limits otherwise would be exceeded.

The CUWA/Ag proposal on this point was not intended to affect the State Board's discretion to act on voluntary water transfer requests. To clarify this point, the Joint Agencies propose that the following language be added to footnote 17 in Table 3 of the Plan: "Export limits are not intended to impede voluntary water transfers, which may be allowed on a case-by-case basis with concurrence of the operations coordination group. The SWRCB intends to develop more specific transfer guidelines in the future."

3.0 PROGRAM OF IMPLEMENTATION

Section IV(A) of the Plan describes the implementation of objectives through future water rights actions. In doing so, it identifies various water quality objectives as water supply-related, including the South Delta agricultural salinity objectives and a San Joaquin River dissolved oxygen objective. The State Board's intention to meet these objectives by means other than flow alone should be clarified in the Plan. A statement therefore should be added in Section IV(A) to recognize that the objectives are water supply-related only "where it is reasonable and in the public interest to meet the objective with flow". A footnote also should be added to the South Delta agricultural salinity and San Joaquin River dissolved oxygen objectives in Tables 2 and 3 of the Plan to state as follows: "The use of flows to meet standards shall only be employed to the extent that it is reasonable and in the public interest."

Section IV(B) describes various recommendations to other entities to undertake actions that help achieve the water quality objectives in earlier Sections of the Plan. These recommendations, which generally concern nonflow-related or so-called "Category III" issues, appear to be substantially based on materials previously submitted by the Joint Agencies. See Biological Explanation Document at 3-1 - 3-9. See also California Urban Water Agencies ("CUWA"), Recommendations to the SWRCB for a Coordinated Estuarine Protection Program for the Bay-Delta (August 25, 1994) at 21-31.

The Joint Agencies support continued emphasis on the development of strategies for addressing nonflow-related factors affecting the Bay-Delta. The Principles Agreement specifically endorsed efforts by the state and federal governments, as well as agricultural, urban and environmental interests, to identify and implement appropriate Category III measures. See Attachment C to the Principles Agreement ("Principles for Implementation of Category III"). In that light, the Joint Agencies currently are working with various governmental agencies and environmental groups to develop a Category III implementation plan for submission to the State Board and others by March 31, 1995. The proposed implementation plan is expected to include recommendations (where practical and appropriate) on: (1) specific measures that should be implemented in the short term (i.e., in 1995 and 1996); (2) procedures by which longer-term actions can be adopted and implemented; and (3) possible mechanisms for funding and managing implementation of the Category III program overall.

The Plan should recognize the efforts of those involved in developing the Category III implementation plan and acknowledge that recommendations on actions to address nonflow-related factors may change as a result of those efforts. To that end,

the Joint Agencies suggest adding a third paragraph to the introductory text in Section IV(B) as follows:

The SWRCB acknowledges that there is an ongoing effort by state agencies, the federal government, and agricultural, urban and environmental interests, to identify, fund, and implement (as warranted) measures to address the broader nonflow-related range of factors potentially affecting water quality and estuarine habitat in the Bay-Delta. Potential measures under consideration include some that would be implemented outside the Bay-Delta itself. The SWRCB recognizes that this effort may result in recommendations to other entities, public and private, that are new or different from those included in this plan. The SWRCB intends to consider any such recommendations and incorporate them in future proceedings to the extent appropriate.

4.0 ENVIRONMENTAL REVIEW UNDER CEQA

The Joint Agencies appreciate the considerable work on the part of the State Board staff in compiling the DER. The document appears in general to be legally adequate and informative for purposes of considering the Plan and other related approvals. The Joint Agencies' comments on the DER are intended primarily to clarify certain items in the text, and in some cases to summarize and/or bring together information that is provided at various points throughout the document and organize it in a format that may be more accessible to the public.

The following comments are divided into two Sections. Section 4.1 (General Comments) summarizes certain broad-based comments regarding the DER overall. Section 4.2 (Specific Comments) provides specific suggestions on possible revisions to the text of the DER.

4.1 General Comments

4.1.1. Summary of Impacts and Mitigation Measures. At numerous places, the DER identifies various impacts of the Plan and lists mitigation measures or other recommendations that have been identified to address these impacts. The document would convey this information more precisely and effectively if the information regarding impacts and mitigation measures were consolidated and provided in summary form.

4.1.2. Level of Analysis. In reviewing the potential environmental impacts of a project, there is inevitably a certain amount of extrapolation and estimation regarding likely future outcomes. Often, there also are unresolved issues regarding project implementation, some of which must be resolved by other agencies. Both of these points are true of the DER. Nonetheless, the "project" for purposes of the DER is sufficiently well-defined at this point for an adequate analysis of potential impacts. The analysis and conclusions in the DER are well-reasoned and based upon the best available evidence, including scientific and technical reports, studies and data. Accordingly, while some of the analysis in the DER may be "speculative" in the sense that future events cannot be predicted with complete accuracy, it is not "speculative" in the sense of being premature or incomplete in any way. This point should be clarified in the text where appropriate.

4.2 Specific Comments

4.2.1. Page I-10, Third Full Paragraph. To provide more complete information, we suggest that a cross-reference be added to the end of the paragraph as follows: "D-1485 and the 1978 Delta Plan are discussed in greater detail on pages III-1 - III-10."

4.2.2. Page I-12, Third Full Paragraph. Because the SWRCB's Water Quality Control (Basin)/208 Planning Program has been certified as meeting the requirements of Public Resources Section 21080.5, the DER is exempt from many of the requirements of CEQA. Nonetheless, the contents of the DER are substantially similar to those of an EIR. It would be useful to highlight the respects in which the DER has gone beyond CEQA's statutory requirements and has incorporated additional environmental review and analysis for the benefit of the public. We suggest that a paragraph be added as follows to address this point:

Although this document is not required to meet the requirements contained in section 21100 *et seq.* of the Public Resources Code for Environmental Impact Reports ("EIRs"), this document is substantially similar to an EIR and contains significant additional information that is not specifically required by section 21080.5. For example, the document contains a project description meeting the requirements of CEQA Guidelines section 15124, a regulatory and environmental setting discussion, and analyses of short-term uses and long-term productivity, significant irreversible changes, growth-inducing impacts, economic and social impacts and cumulative impacts.

4.2.3. Page I-12, Final Paragraph. To more clearly reflect the intended use of the DER with respect to possible modification of D-1485, we suggest that a sentence be added to this paragraph as follows: "The SWRCB may also use the information contained in this report in conjunction with subsequent proceedings required to modify D-1485 to eliminate any inconsistencies between that decision and the Plan."

4.2.4. Page IV-36, Water Supply Developments. The first paragraph in this section incorrectly states that the current Contra Costa Water District ("CCWD") contract with the U.S. Bureau of Reclamation ("USBR") is for a supply level of 145 TAF per year. The correct supply level is 195 TAF per year. The paragraph should be revised accordingly. In addition, to provide an accurate, current description of the status of the Los Vaqueros Project, the following text should be added to the end of the paragraph: "The Los Vaqueros Project has received all the required environmental and water rights permits, and construction has begun. The first stage of the project will be operational in Spring 1997."

4.2.5. Page IV-37, First Full Paragraph. The first sentence in this paragraph should be revised to state that the CCWD provides the municipal and industrial water needs of approximately 400,000 county residents, not 300,000 as stated.

4.2.6. Page IV-38, Surface Water Quality. This section should include a discussion of sewage discharges from public and industrial wastewater treatment plants. While the increased use of secondary treatment facilities has reduced the impact of these discharges on surface water quality in recent years, there should be some recognition of the potential impact of reduced nutrient loadings that are associated with discharges subject to secondary treatment, including possible reductions in zooplankton and phytoplankton production. See discussion at page V-38.

4.2.7. Page IV-39, Last Paragraph. The last paragraph that begins on this page includes a statement that "During periods of reverse flow, bromides from the ocean intermix with Delta water at the western edge of Sherman Island." In fact, low outflow and tidal mixing cause salinity intrusion to Sherman Island regardless of whether the flows in this region are reversed. We therefore recommend that the quoted statement be substituted with the following: "During periods of low Delta outflow, tidal mixing of salts from the ocean (including bromides) extends farther into the Delta, increasing the bromide concentrations at municipal drinking water intakes."

4.2.8. Pages IV-40, IV-46, Wildlife and Fish (Sacramento-San Joaquin Delta, San Francisco Bay). The Joint Agencies recognize that these sections are intended to provide an overview of fish and wildlife supported by the Delta and by the San Francisco Bay system and surrounding lands. The discussion would be more

complete, however, if it included reference to the relative numbers of "introduced" or "exotic" species in the system.

4.2.9. Pages V-1. Natural Variability of Precipitation and Hydrology. The last sentence on this page refers to an analysis of water year types for the period 1930-1992. Failure to address Department of Water Resources ("DWR") SIM output, e.g., simulated D-1485 flows for years prior to 1930 (including the 1928-1934 critical period and the 1924 critical year), may result in an incomplete analysis. This section therefore should be revised to incorporate the full 71-year period between 1922 and 1992. (It also should be noted that 1930-1992 is a 63-year hydrological period, not 62.)

4.2.10. Page V-4. Upstream Impacts. This section generally provides a thorough overview of the upstream impacts on aquatic resources. It also may be appropriate, however, to acknowledge the potential impacts associated with the loss of nutrients and particulate organic carbon ("POC") that may have occurred due to the blocking and impounding of upstream sources as a result of dam construction.

4.2.11. Page V-11. Entrapment Zone. The first paragraph in this section provides an inaccurate description of the relevant hydrodynamics in the entrapment zone. To provide a more accurate description, we propose substituting the third sentence through the end of the paragraph with the following:

The entrapment zone forms where seaward-flowing freshwater meets landward-flowing seawater. Turbulence driven by the large tidal currents causes strong mixing between the upper and lower waters, removing most of the vertical variation in salinity. The combination of vertical mixing between the upper and lower waters and the horizontal density-driven flows traps particles with certain settling velocities.

4.2.12. Page V-13. First Full Paragraph. For purposes of clarity, the words "approximate location of the upstream edge" should be substituted in the first sentence for the word "location".

4.2.13. Page V-16. Last Paragraph. The use of the word "significant" to describe fish losses from agricultural diversions is ambiguous. "Significance" is a concept with both statistical connotations and implications for the analysis of environmental impacts under CEQA. Unless the context makes clear the sense intended, use of this term should be limited in the DER.

4.2.14. Page V-18, Reverse Flows. The last paragraph on page V-18 states that "Reverse flows reportedly disorient anadromous fish as they migrate either upstream or downstream following the salinity gradient." The discussion includes no reference to any particular study or report, however, that would support this statement. Either biologically credible authority should be cited here or the statement should be deleted.

4.2.15. Page V-21, First Paragraph. The reference to CUWA (1994) in support of the statement in this paragraph that "Reverse flows may also influence the number of fish lost via entrainment into the CVP and the SWP pumping stations" is misleading. The referenced report actually concluded that the DWR has found no statistically significant relationships between reverse flow frequency and Delta smelt abundance indices. The paragraph should be revised to reflect this fact.

4.2.16. Page V-32, Conclusion (Aquatic Resources -- General Cause of Declines). This paragraph states that "quantification of the declines [in aquatic resources] has only been done for a few factors such as outflow and diversions." Whether such quantification ever has been successfully achieved for any factor, however, is a matter of ongoing scientific debate. This statement would be more accurate if the word "attempted" were substituted for "done".

4.2.17. Page V-55, Sacramento Splittail. This section does not mention recent data on habitat use that have been developed in connection with technical reviews of the Biological Opinion being prepared to support possible Endangered Species Act ("ESA") determinations involving the Sacramento splittail. To ensure a more complete analysis of this issue, State Board staff should obtain and review these data before finalizing the DER.

4.2.18. Page V-67, Causes of Decline (Longfin Smelt). The discussion in this section on correlation analysis of flow and species abundance should be qualified to reflect that such correlations do not demonstrate cause and effect. In addition, the use of the term "breaking down" in the last paragraph on page V-67 is unclear and should be explained.

4.2.19. Pages VI-3 - VI-4, Striped Bass Model. As noted in the last paragraph, the striped bass model described in this section has "poor predictive ability" and several intrinsic statistical defects. For that reason, the model should not be used as the basis for any analysis contained in the DER. This section should therefore be deleted.

4.2.20. Pages VI-9 - VI-14, Salmon Models. As noted in the last paragraph on page VI-11, the statistical validity of the U.S. Fish and Wildlife Service ("USFWS") smolt survival models described in this section has been disputed. As with the striped

bass model discussed in comment 4.2.19, above, the smolt survival models have several inherent analytical problems and should not be used as the basis for any analysis contained in the DER. This section should be deleted.

4.2.21. Page VII-1, Second Paragraph. Water Supply is currently included as a separate section, rather than being incorporated in the environmental impacts discussion. This may have been done to clarify that the document satisfies obligations both under the Porter-Cologne Act and for environmental review. Water supply is also addressed separately in the environmental impacts discussion at Chapter VIII. To clarify the relation between water supply and environmental impacts analysis, we suggest that a sentence be added to the end of this paragraph as follows: "Water supply impacts are also a component of the environmental impacts analysis and also are addressed in Chapter VIII."

4.2.22. Page VIII-1, Second Paragraph. As discussed above, the use of the term "speculative" could be misconstrued to suggest that the Plan and the DER are in some way premature and/or incomplete, which they clearly are not. To avoid this confusion, we suggest that the first sentence be replaced with the following:

The following discussion of the environmental effects of the proposed standards is a thorough analysis based upon the best available evidence, including scientific and technical reports, studies and data. As the SWRCB implements the objectives by allocating responsibility to meet the objectives at the water rights phase of the proceedings, additional information will be developed.

4.2.23. Page VIII-2, Delta Outflow. The first sentence in this paragraph states that "Delta outflow is known to be positively correlated with the population sizes of numerous aquatic species." No specific studies or reports are cited in support of this statement, however, and we are not aware of any analysis showing valid relationships between outflow and abundance for any species. This sentence should therefore be deleted. In addition, references in this paragraph and in Figures VIII-1 - VIII-4 to the "G model" developed by CCWD are misleading. A more accurate reference would be to CCWD's additional outflow model, which was based on the G model.

4.2.24. Pages VIII-7 - VIII-8, Figures VIII-7 - VIII-10. The reference to "Contra Costa" in these figures includes CCWD diversions (but not North Bay and City of Vallejo). In addition, to be consistent with the Principles Agreement, the export/inflow ratios labelled as "STANDARD" should apply to Tracy and Banks exports only. For clarity, these points should explicitly be noted in the figures.

4.2.25. Page VIII-15, Aquatic Resources. As discussed in this section, the Plan is intended to benefit many levels of the aquatic ecosystem of the Bay-Delta, so that conditions are improved for a broad range of species utilizing the system. The discussion should acknowledge, however, that not all species will receive the same level of protection. For example, efforts to increase salmon populations on the Mokelumne River rely on production of both chinook salmon smolts from the river and chinook salmon yearlings from hatcheries. The yearling salmon migrate downstream during the late fall, which also is the season when returning adult salmon migrate through the Delta and into the Mokelumne River. It is possible that when implemented, aspects of the Plan could change flow patterns through Old and Middle Rivers and the Delta portion of the lower Mokelumne River during fall months when the Delta cross-channel is open, thereby affecting the survival of yearling salmon and increasing straying of adult salmon during this period. These effects in turn could make it more difficult to meet fishery management goals established for improving salmon populations generally on the Mokelumne River. The DER should include a statement that potential adverse impacts on upstream fisheries resources will need to be assessed based on the results of monitoring.

4.2.26. Page VIII-73, Irreversible or Irrecoverable Commitment of Resources. The text currently identifies certain irreversible commitments of resources, but does not indicate why these commitments are justified. We suggest that the following paragraph be added to address this point:

This commitment of resources is justified in light of the enhanced protection that the plan will provide to aquatic habitat-related beneficial uses in the Estuary. If the plan is not adopted and implemented, there may be further declines in fresh- and brackish-water aquatic and terrestrial habitats in the Delta, resulting in the potential listing of additional species under the federal and state ESAs.

4.2.27. Page VIII-81. The reference to "D-1631" in the MWD (1993) citation is a typographical error and should be changed to "D-1630".

4.2.28. Pages XI-1 – X-13, Chapter X, Mitigation and Unavoidable Significant Impact. Chapter X, together with the recommendations and other information contained in various other chapters of the DER, adequately identifies potential impacts and mitigation measures for the Plan. To make the document more accessible, it might be helpful if Chapter X contained a table summarizing the following:

- (1) each potentially significant impact of the Plan;

- (2) mitigation measures, if any, including:
 - (a) recommendations to other agencies, and
 - (b) future proposed actions or decisions by the SWRCB that would mitigate the impact; and
- (3) whether the impact would remain significant if the mitigation measure(s) were implemented.

4.2.29. Page X-10, Offstream Storage Projects. To provide a more consistent description of the status of the Los Vaqueros Reservoir Project in this paragraph, we propose substituting the last sentence with the following: "The Los Vaqueros Reservoir Project, which will be used to improve water quality in the Contra Costa Water District and provide emergency storage, has received all necessary environmental and water rights permits and currently is under construction."

4.2.30. Pages XI-1 - XI-12, Description of Alternatives. It might be useful if Chapter XI included a brief description and analysis of a "no action" alternative. Because the DER is not required to meet the formal requirements of an EIR, it technically is not required to analyze the consequences of a "no action" alternative. Nevertheless, a discussion of a "no action" alternative would provide further justification for the Plan and would help to clarify for the public why that alternative is unacceptable.

In addition, it should be noted that some of the alternatives described in this chapter were developed based upon striped bass and salmon smolt survival models that have been shown to be statistically unreliable. See comments 4.2.19 and 4.2.20, above. While it may be necessary to refer to the models in describing alternatives, Chapter XI should acknowledge that the models should not be used as the basis for comparing them. It also may be appropriate to note that efforts are underway to refine the models or develop better models for addressing specific resource issues.

4.2.31. Pages XIII-1 - XIII-49, Special Status Species. This Chapter contains an analysis of the preferred alternative on special-status species. For clarity, we recommend that a paragraph be added to the first page prior to Section 1 to discuss the relationship of this Chapter to the environmental impacts discussion: "Special-status species impacts are also a component of the environmental impacts analysis, and were considered in analyzing potential environmental impacts of the project and in selecting the preferred alternative."

4.2.32. Monitoring Program. While Public Resources Code section 21081.6 does not apply to the Plan as a certified regulatory program under section 21080.5, it might be helpful if the DER included a brief summary of expected actions to ensure future implementation of Plan requirements, including the triennial review process, water rights proceedings, and additional monitoring and data collection efforts. In that regard, members of the Joint Agencies already have identified a number of elements that should be considered as part of the triennial review process, including compliance with standards, habitat response to standards, Category III implementation, water supply impacts, and possible modification of standards. This group expects to provide the State Board with additional information on this subject prior to the close of the public comment period for the Plan.

4.2.33. Organizations and Persons Consulted. The document would be more useful and accessible to the public if it contained a list of organizations and persons consulted throughout the DER process.

ATTACHMENT A

**Agencies and Organizations
Participating in the Comments of
The Joint California Water Users
On the December 1994 Draft Water Quality Control Plan
For the San Francisco Bay/Sacramento-
San Joaquin Delta Estuary**

San Luis & Delta-Mendota Water Authority

Kern County Water Authority

Tulare Lake Basin Water Storage District

California Urban Water Agencies:

Alameda County Water District

Contra Costa Water District

East Bay Municipal Utility District

Los Angeles Department of Water and Power

Metropolitan Water District of Southern California

Municipal Water District of Orange County

Orange County Water District

San Diego County Water Authority

San Diego Water Utilities Department

San Francisco Public Utilities Commission

Santa Clara Valley Water District