

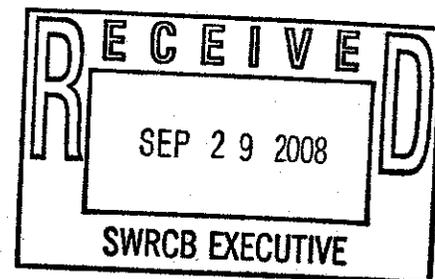
Memorandum

Public Comment
Bay-Delta Fact Finding Issues
Deadline: 9/29/08 by 5:00 p.m.

Date: September 29, 2008

To: Jeanine Townsend, Clerk to the Board
State Water Resources Control Board,
1001 I Street, 24th Floor
Sacramento, CA 95814

Via electronic mail to: commentletters@waterboards.ca.gov



From: Department of Water Resources

Subject: Comments Regarding the Bay-Delta Fact Finding Issues

The Department of Water Resources (DWR) submits the following comments on the State Water Resources Control Board's (State Board) Request for Written Input on Factual Issues Regarding the Bay-Delta. As requested in the Notice, DWR also will be submitting 15 paper copies and an original with signature.

The State Board has requested information and recommendations on what factual issues concerning the Bay-Delta's ecology the State Board should consider in upcoming evidentiary hearings. The proposed purpose of the evidentiary hearings is for the State Board to receive evidence on critical factual issues concerning the Bay-Delta and then render findings of fact. These findings would, in turn, be used to inform the State Board's basin planning and environmental review activities, and other State Board processes.

While DWR understands and appreciates the State Board's desire to inventory and summarize the findings of well-documented, data-based scientific analyses concerning the Bay-Delta's ecology, DWR does have significant concerns regarding the procedural approach of using evidentiary hearings for two reasons. First, given its current and future obligations, DWR is concerned that several of the proposed evidentiary hearings will have the potential to be unreasonably time consuming and will divert vital resources away from the following processes. DWR is currently focusing on and devoting substantial resources to its obligations regarding the ongoing federal Endangered Species Act Section 7 consultations over Central Valley Project and State Water Project operations (known as the OCAP consultation), and to finalizing documents necessary for implementing a federal Habitat Conservation Plan and a State Natural Communities Conservation Plan, referred to, collectively, as the Bay-Delta Conservation Plan (BDCP). DWR also intends to devote substantial resources to the myriad of processes concerning the Bay-Delta that the State Board is, and will be, beginning, including addressing the San Joaquin River flows and south Delta salinity, reviewing the 2006 Bay-Delta Plan, and developing a conservation regulatory program and a comprehensive monitoring program for the Bay-Delta.

In addition, DWR is concerned that conducting evidentiary hearings outside the context of an adjudicatory proceeding in which the State Board has noticed the specific interested parties of identified issues may create confusion as to how the State Board will use the findings at subsequent hearings that are noticed.

Under the State Board regulations (CCR Title 23 section 648 et seq.), the Board conducts adjudicative proceeding to obtain evidence for determining facts for purposes of formulating a decision. In general, evidentiary hearings are used when the parties to a proceeding cannot reach a consensus on an issue and want to adjudicate a material dispute of fact. The decision makers of such disputed issues may use the results of the evidentiary hearing to determine if the evidence supports moving forward with the proceeding or to determine the specific evidence to use in the proceeding.

DWR does recognize that the issues listed in the Notice are not new issues and the disputes of fact concerning the issues have been raised before. Moreover, DWR believes that to resolve many factual disputes of the issues identified in the Notice, the State Board will need to hold evidentiary hearings. However, we do not believe adjudicating the disputes of fact outside the context of a proceeding is likely to be an effective or efficient approach. Presently, the State Board is asking interested parties to adjudicate material issues of fact without a notice of the specific proceeding and the issues that may affect them. The State Board may issue such a notice subsequent to the proposed evidentiary hearings, but the parties attending these evidentiary hearings may not know how the evidence being presented may specifically affect them later. In addition, given the rapid change in the scientific information the State Board seeks, it seems likely it will have to redo the evidentiary process again before it can be used in a particular proceeding.

Thus, DWR respectfully suggests that the State Board initiate the processes that it has outlined in its Bay-Delta Strategic Workplan, identify the parties to those processes, begin the scoping and gathering of evidence, and then, if needed, adjudicate disputes of fact that arise out of those proceedings. By taking this approach, the parties will be better defined, the issues will be better defined, and, most importantly, the consequences of the findings will be known.

Thus, in addition to providing information on the issues listed in the Notice, recommending additional, relevant issues, and assigning priority to the issues, DWR also attempts to identify in what process a particular evidentiary hearing would be most appropriate. The following is DWR's written input on factual issues regarding the Bay-Delta.

Sources of Salt to the Bay-Delta Estuary

DWR believes that the sources of salinity issue related to the southern Delta should be given a high priority by the State Board. In fact, since the State Board is going to hold water quality control planning workshops and issue a Notice of Preparation regarding potential modifications to the southern Delta salinity objectives in the first quarter of 2009, this issue will likely be ripe for an evidentiary hearing in the near future. State Board's consideration of other issues related to sources of salinity should be delayed until the southern Delta salinity issues are addressed by the State Board and the Basin Plan and Water Right Decision 1641 are updated to reflect these needed changes.

Biological Impacts of Constant or Variable Salinity on Fishes

This issue should not be given a high priority until the ongoing Endangered Species Act Section 7 consultations and the longfin smelt regulation process is completed. These processes will likely require DWR to present information on this issue to the fish agencies, who will, in turn, make their own findings on the biological impacts of constant or variable salinity on fishes. DWR believes that the results of the above processes will at least inform the State Board and could potentially help resolve factual disputes regarding this issue.

Essentially, DWR is not aware of much information regarding the biological impacts of constant or variable salinity on fishes. There is information related to the relationships between average X2 in the late winter and spring period, and the population abundance indices of several Delta fishes which were used by the State Board to establish their X2 objectives. Additionally, these relationships were reviewed and updated a few years later by Dr. Wim Kimmerer. Finally, the POD investigation has looked even more recently at the relationship between average Delta outflow in the fall (which is closely correlated with X2) and the delta smelt abundance index. However, while all these analyses suggest a relationship between average salinity and Delta fishes, they do not address the State Board's question about the impact of variations in Delta outflow within or between years. In fact, DWR is not aware of any studies that do, with the exception of a paper by Drs. Moyle and Swanson that suggests variability might be beneficial. However, their conclusion is based more on their scientific judgement than specific scientific data and analysis

The issues related to X2 are currently being evaluated in detail in the BDCP process. The State Board's premature involvement in this issue before it can be addressed in the BDCP's comprehensive conservation and ESA regulatory process would disrupt the BDCP process and be contrary to the State Board's practice of allowing parties time to resolve their issues.

Biological Benefits of Fish Screens in the Legally Defined Delta

As stated in the State Board's Bay-Delta Strategic Workplan, there are approximately 2,300 diversions in the Delta. Studies of these diversion have been inconclusive about the benefits of screening to fish populations (Report for the Science Board, CALFED Ecosystem Restoration Program, January 2002. P. Moyle and D. White, Univ. of California, Davis).

A study of screened and unscreen diversion in Horseshoe Bend (*Evaluating Entrainment Vulnerability to Agricultural Irrigation Diversion: A Comparison among Open-Water Fishes*, M. Nobriega, Z. Matica, and Z. Hymanson, Calif. Dept. of Water Resources, 2004) observes that entrainment losses are strongly affected by fish habitat use, size and diet behavior. The study recommends additional studies to better understand the use of screens to protect fish. Given the status of the pelagic fish in the Delta, conclusive studies should be undertaken.

Thus, DWR recommends the State Board consider a study to determine the impact of unscreened local Delta diversion on various pelagic fish species. Once the results are known and, more importantly, if they are disputed, the State Board should then consider initiating an evidentiary hearing specifically related to some noticed potential regulatory process so the potential parties can be given due process in such an hearing.

Biological Impacts of Ammonia Discharges

DWR believes that understanding the biological impacts of ammonia should be given a high priority by the Board. DWR recommends that ammonia and other toxic substances, along with southern Delta salinity, be the first issues the State Board addresses when reviewing and possibly amending the 2006 Bay-Delta Plan.

DWR monitoring data shows strong increasing trends in ammonia nitrogen in the lower Sacramento River, Suisun Bay, and parts of the Delta. This is of concern because of the potential for a) direct toxicity of unionized ammonia to sensitive fish, including delta smelt and salmonids, and b) effects of ammonium on phytoplankton growth and community composition that can reverberate throughout the entire aquatic food web. DWR supports investigations of ammonia effects on Bay-Delta fish and the food web, including the "screening level" project described on page 54 of the Bay-Delta Strategic Workplan.

Also, there is a great deal of scientific literature on the effects of ammonia on biological organisms, some of which has been used by EPA and other to set waste discharge standards. Dr. Dugdale's work at San Francisco State University suggests that high ammonia levels might be inhibiting the growth of phytoplankton in the Suisun Bay and western Delta.

However, DWR looks to the Central Valley Regional Water Quality Control Board's staff to summarize the studies for the State Board since they now chair the Contaminant Work Team, which follows and coordinates studies of contaminants and related work for the Pelagic Organism Decline studies.

Biological Impacts of other Toxic Substances

As stated above, understanding the biological impacts of toxic substances should be given a high priority.

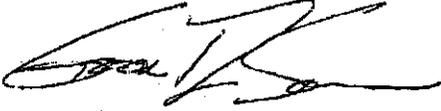
Biological Impacts of Net Outflow Objectives

This issue is closely related to the salinity variability issue discussed above. As such, DWR suggests that this issue also be deferred until the Endangered Species Act Section 7 consultations, the longfin smelt regulation process and the BDCP are completed.

DWR appreciates the opportunity to comment and looks forward to working with the State Board in its basin planning and environmental review activities. If you or your

staff have questions on these comments or would like additional information please contact me at (916) 653-8826 or esoderlu@water.ca.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'Erick Soderlund', written in a cursive style.

Erick Soderlund
Staff Counsel