

Item 10: Consideration of a proposed Resolution adopting a staff report on the Periodic Review of the 2006 Bay Delta Water Quality Control Plan.

The following changes (shown by strikethrough and underline in the text below) are proposed to be made to the 2009 Draft Periodic Review Staff Report:

1. Table of Contents:

Page 1, Amend VI. Appendix A...58

VI. Appendix A: Summary and responses to comments received in response to Notice of Public Workshop on Review of the 2006 Bay-Delta Plan and Request for Written Input on Factual Issues.....58

Page 1, Add below VI. Appendix A...58

VII. Appendix B: Comment letters received in response to the Notice of Adoption Hearing of 2009 Draft Periodic Review Staff Report.....72

2. Executive Summary:

Page 4, Para. 1

For each issue, the Staff Report includes a description of the issue, staff's recommendation related to that issue, a brief discussion regarding the current scientific understanding of the issue, and a conclusion with an expanded recommendation.

Page 4, Para 3

Staff recommends that the following issues not be reviewed further in the is basin planning process at this time, but instead be addressed as recommended in the associated discussion for each issue.

Page 5, Add two new paragraphs under list ending with Biological Indicators

Ammonia and toxicity are priority issues for the Water Boards and, at this time, staff recommends that they be addressed primarily by the San Francisco Bay and Central Valley Regional Water Quality Control Boards (Regional Boards) as part of their water quality control programs for control of point and non-point sources of waste. The State Water Board and Regional Boards will continue to coordinate their efforts on these issues through the Water Boards Bay-Delta Team, which consists of representatives from the Division of Water Rights, the Division of Water Quality, the Division of Financial Assistance, and the Regional Boards. Ammonia and toxicity effects on beneficial uses will also continue to be considered during the State Water Board's review of various flow objectives.

This Staff Report identifies priority issues and recommends further review of these issues. In preparing this report, staff conducted an initial review of the scientific literature and summarized the conclusions therein; staff did not independently analyze data or draw independent scientific or regulatory conclusions from the literature. The summary discussion of the preliminary literature review is included in the Staff Report to assist the public in understanding the key sources of information supporting the staff recommendations. The Staff Report does not establish findings of fact. Nor does the summary of the scientific literature represent the final conclusions of the State Water Board on these issues. The information on which the report is based will be subject to further review and evaluation during the next phase of the water quality planning process in which the State Water Board considers potential amendments to the 2006 Bay-Delta Plan. Interested persons will have an additional opportunity to provide input and comment on potential amendments and the science underlying such amendments in this next phase. To ensure that staff continues to evaluate information contained in the comments received during this periodic review, those comments are appended to this report as Appendix B.

3. Water Quality Control Plan Process:
Comments Received

Page 11, amend list of comments received at the periodic review workshop held on October 8, 2008 by removing the following commenter

◆ ~~South Delta Water Agency~~

Page 11, Add new paragraph, below bullet identifying United States Department of the Interior

The State Water Board received comments in response to the May 15 Notice of Adoption Hearing for the 2009 Draft Periodic Review Staff Report of the 2006 Water Quality Control Plan for the San Francisco Bay/ Sacramento- San Joaquin Delta Estuary from the following organizations:

- ◆ **The Bay Institute and National Resources Defense Council**
- ◆ **California Farm Bureau Federation**
- ◆ **California Water Impact Network and California Sportfishing Protection Alliance**
- ◆ **Central Delta Water Agency**
- ◆ **Central Valley Clean Water Association**
- ◆ **City of Tracy**
- ◆ **Department of Water Resources**
- ◆ **Sacramento Regional County Sanitation District**
- ◆ **San Francisco Bay Conservation and Development Commission (Late)**
- ◆ **San Joaquin River Group**
- ◆ **San Luis & Delta-Mendota Water Authority and Westlands Water District**
- ◆ **South Delta Water Agency**
- ◆ **State Water Contractors**
- ◆ **Stockton East Water District**
- ◆ **United States Department of the Interior**
- ◆ **United States Environmental Protection Agency**

Page 11, amend paragraph below new paragraph inserted pursuant to item 3, and above Next Steps heading

The periodic review notice, fact finding request, transcript from the October 8, 2008 workshop, and the written comments in response to the periodic review notice and the fact finding request, **and the written comments in response to the May 15 Notice of Adoption Hearing on the Draft Staff Report** are posted on the State Water Board's Division of Water Rights' website at:

http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/periodic_review/index.shtml. In addition, Appendix A to this report includes a summary of the comments **received in response to the October 2008 workshop notice and fact finding request** and responses to these comments as they apply to the periodic review of the Bay-Delta Plan **that are relevant to the periodic review of the Bay-Delta Plan. Appendix B to this report includes the comment letters received in response to the release of the May 2009 Draft Staff Report.**

4. Delta Outflow Objectives:

Page 16, Para. 2, Line 4.

Freshwater flow is an important cue for upstream migration of adult salmon and is a significant factor in the survival of smolts moving downstream through the Delta.

Page 17, Para.2, Line 7.

~~Water temperature and s~~Salinity are **is** directly related to outflow.

5. Suisun Marsh Objectives:

Page 23, last paragraph, Line 6.

A public draft is expected in mid-**late** 2009, with a final EIS/EIR in early 2010.

6. Floodplain Flow Objectives:

Page 26, Para. 2, Line 3.

Sommer et al. (2001a) and Opperman (2006) found that floodplain habitat promotes rapid growth and ~~increases survival~~ of juvenile Chinook salmon.

Page 26, Para. 4.

Declines in fishes and other aquatic species have been linked to reduced phytoplankton production and abundance (Baxter et al. 2008a). Due to the lack of river-floodplain connectivity throughout much of the Delta and its watershed, restoration **Inundation** of floodplains and other shallow-water habitats **increase the production of organic matter including phytoplankton** have been proposed to maintain biodiversity of native aquatic species and restore fisheries in the San Francisco Estuary by increasing phytoplankton abundance (**Jassby & Cloern 2000**, Schemel et al. 2004). Declines in fishes and other aquatic species have been linked to reduced phytoplankton production and abundance. Sommer et al. (2001b) suggests that floodplain restoration could support the downstream food web as a result of enhanced production of phytoplankton and detritus material (Sommer et al. 2004). Phytoplankton-enrichment **ed floodplain drainage** has been documented following **a** high-flow years when the Sacramento River inundates **d** its **the Yolo Bypass** floodplains, thereby stimulating the food web of fisheries and other biological resources (Schemel et al. 2004).

7. Biological Indicators:

Page 46, Conclusion, Line 5.

With respect to the decline of conditions within the Bay-Delta, it is important to gather more information on each specific driver **factor** before using biological indicators as objectives.

Page 46, below the last paragraph, add a new paragraph.

It is important to note that this recommendation solely addresses the use of biological indicators in the State Water Board's water quality planning efforts for the Bay-Delta. There are other State Water Board efforts related to establishing biological goals and objectives in the State (e.g., the Water Quality Control Plan for Enclosed Bays and Estuaries - Part 1 Sediment Quality), and as these efforts progress and information is further developed, staff will continue to evaluate the merits of establishing biological indicators as objectives in the Bay-Delta Plan.

8. Bibliography:

Page 51, add a new citation.

Jassby, A.D. and Cloern, J.E. 2000. Organic Matter Sources and Rehabilitation of the Sacramento-San Joaquin Delta (California, USA). Aquatic Conservation: Marine and Freshwater Ecosystems 10:323-352.

9. VI. APPENDIX A:

Page 58, top of page, add heading.

VI. Appendix A: Summary and responses to comments received in response to Notice of Public Workshop on Review of the 2006 Bay-Delta Plan and Request for Written Input on Factual Issues

10. VII. APPENDIX B:

Page 72, new page, add heading.

VII. Appendix B: Comment letters received for Notice of Adoption Hearing of 2009 Draft Periodic Review Staff Report