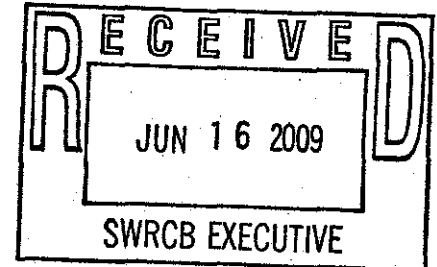




Making San Francisco Bay Better

LATE COMMENT

June 16, 2009



Ms. Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-2000

SUBJECT: Comments on the 2009 Periodic Review Staff Report of the 2006 Water Quality Control Plan for San Francisco Bay/Sacramento-San Joaquin Delta Estuary

Dear Ms. Townsend:

On May 18, 2009, the Commission received a Notice of Adoption Hearing for the 2009 Periodic Review Staff Report of the 2006 Water Quality Control Plan for San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Periodic Review Staff Report). On July 7, 2009, the State Water Resources Control Board (State Water Board) will hold a hearing to consider adopting the Periodic Review Staff Report, which focuses on key issues concerning the Bay-Delta's ecology and water quality.

Although the San Francisco Bay Conservation and Development Commission (Commission) itself has not reviewed the Periodic Review Staff Report, the staff comments discussed below are based on the McAteer-Petris Act, the Suisun Marsh Preservation Act, the Commission's *San Francisco Bay Plan* (Bay Plan), the *Suisun Marsh Protection Plan* (Marsh Plan), the Commission's federally-approved coastal management plan for the San Francisco Bay, and the federal Coastal Zone Management Act (CZMA).

The Commission staff supports the Water Board's staff's recommendations to conduct further review of freshwater inflow standards for the Bay and Suisun Marsh as part of the basin planning process in light of new scientific information and actions taken by other agencies.

Jurisdiction. The Commission's permit jurisdiction includes all tidal areas of the Bay up to the line of mean high tide or, in areas of tidal wetlands, up to five feet above Mean Sea Level or the extent of tidal wetland vegetation; all areas formerly subject to tidal action that have been filled since September 17, 1965; and the shoreline band that extends 100 feet inland from and parallel to the Bay jurisdiction. The Commission also has jurisdiction over certain managed wetlands adjacent to the Bay, salt ponds, and certain waterways, and the Suisun Marsh.

Commission permits are required for placement of fill, construction, dredging, and substantial changes in use within its jurisdiction. Permits are issued when the Commission finds proposed activities to be consistent with its laws and policies. In addition to any needed permits under its state authority, federal actions, permits, licenses and grants affecting the Commission's coastal jurisdiction are subject to review by the Commission, pursuant to the federal CZMA, for their consistency with the Commission's federally-approved coastal management program for the Bay.

From reviewing the Notice of Adoption Hearing, it appears that the following topics proposed for further review are most relevant to the Commission's Bay and Marsh jurisdictions: Delta Outflow Objectives, Export/Inflow Objectives, and Suisun Marsh Objectives.

Fresh Water Inflow. The Bay Plan and Marsh Plan policies call for adequate freshwater inflow to the Bay and Suisun Marsh. The Bay Plan recognizes the importance of fresh water inflows to the ecosystem of the Bay. The Bay Plan findings state that "conserving fish, other aquatic organisms and wildlife depends, among other things, upon availability of ...proper fresh water inflows, temperature, salt content, water quality, and velocity of the water."

The Bay Plan's Fresh Water Inflow policies state, in part:

Diversions of fresh water should not reduce the inflow into the Bay to the point of damaging the oxygen content of the Bay, the flushing of the Bay, or the ability of the Bay to support existing wildlife....

High priority should be given to the preservation of Suisun Marsh through adequate protective measures including maintenance of freshwater inflows....

The impact of diversions of fresh water inflow into the Bay should be monitored by the State Water Resources Control Board, which should set standards to restore historical levels (1922-1967) of fish and wildlife resources. The Bay Commission should cooperate with the State Board and others to ensure that adequate fresh water inflows to protect the Bay are made available.

The Marsh Plan recognizes that the Suisun Marsh, located where salt water and fresh water meet and mix, contains "the unique diversity of fish and wildlife habitats characteristic of a brackish marsh."

Marsh Plan policies state, in part:

There should be no increase in diversions by State or Federal Governments that would cause violations of existing Delta Decision or Basin Plan standards....

Water quality standards in the Marsh should be met by maintaining adequate inflows from the Delta.

To address these policies, we recommend that the Water Quality Control Plan for San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan) include analysis of the fresh water flow needs of the entire estuary. This includes the need for peak flows that transport sediment and nutrients to the Bay, increase mixing of Bay waters, and create low salinity habitat in Suisun Bay, San Pablo Bay and the upper part of central San Francisco Bay.

The *Delta Vision Strategic Plan* (October 2008) included recommendations regarding adequate flows for the Bay-Delta ecosystem. Strategy 3.4 calls for restoring Delta flows and channels to support a healthy Delta estuary, including:

- Flows to produce sufficient volumes of open water habitat of the appropriate water quality, including salinity, temperature, and concentrations of dissolved oxygen and contaminants, e.g., adequate low salinity fall habitat for the Delta smelt;

- Flows to reduce fish entrainment in pumps and other water facilities; and
- Flows to provide adequate fish migration cues, e.g., high flows that trigger migration of salmonids.

The Commission staff supports the State Water Board staff recommendation to further review and consider changes to Delta outflow objectives, export/inflow objectives and Suisun Marsh objectives in the Bay-Delta Plan. The staff recommends that the State Water Board consider the flow recommendations in the *Delta Vision Strategic Plan* and other recent publications and resource agency biological opinions in order to determine the appropriate flows needed support ecosystem processes as well as the recovery of individual species in the Bay and Suisun Marsh.

Suisun Marsh Protection. The Commission manages natural resources in the Suisun Marsh pursuant both to its McAteer-Petris and its Suisun Marsh Preservation Act authorities. The Commission is currently participating in the Suisun Marsh Charter Group to develop a new Habitat Management, Preservation and Restoration Plan for Suisun Marsh. Our priorities for the new plan include enhancing seasonal and managed wetlands that provide essential wintering habitat for waterfowl of the Pacific Flyway, supporting tidal restoration, and supporting maintenance of Suisun Marsh levees.

Suisun Marsh Protection Plan policies state, in part:

The diversity of habitats in the Suisun Marsh and surrounding upland areas should be preserved and enhanced wherever possible to maintain the unique wildlife resource....

Where feasible, historic marshes should be returned to wetland status, either as tidal marshes or managed wetlands. If, in the future, some of the managed wetlands are no longer needed for private waterfowl hunting, they should be restored to tidal or subtidal habitat, or retained as diked wetland habitat and enhanced and managed for the benefit of multiple species....

The Suisun Resource Conservation District should be empowered to improve and maintain exterior levee systems as well as other water control facilities on the privately owned managed wetlands within the primary management area.

Our staff urges the State Water Board to incorporate Marsh Plan policies, as well as the information in the Commission's draft staff report on climate change, as it considers changes in the Bay-Delta Plan in order to ensure that the Suisun Marsh continues to provide essential ecological functions.

Climate Change. Climate change and accelerating sea level rise could result in devastating impacts to the Bay and Suisun Marsh. As the Commission staff has noted in the draft staff report *Living with a Rising Bay: Vulnerability and Adaptation in San Francisco Bay and on the Shoreline* (April 2009):

Salinity increases due to climate change may dramatically impact the brackish and freshwater marshes found in Suisun Marsh....
Since brackish and freshwater tidal marshes tend to be more productive and provide habitat for a greater diversity of plants than salt marshes, elimination of these valuable wetlands or their

conversion to salt marshes could reverberate throughout the food web and reduce the habitat available to rare and endangered species (Callaway et al. 2007, Newcombe and Mason 1972, Baye et al. 2000, Lyons et al., 2005).

Efforts to use water control structures, such as salinity gates, to artificially reduce salinity in Suisun Marsh in dry years are likely to become increasingly difficult in the face of climate change. The Suisun Marsh Salinity Control Gates restrict the flow of higher salinity water from incoming tides and retain [lower salinity] Sacramento River water from the previous outgoing tide. An eastward shift of the salinity gradient caused by sea level rise will likely reduce opportunities for importing freshwater into the Suisun Marsh.

We therefore request that the State Water Board consider changes to the Bay-Delta Plan in relation to potential climate change impacts on the estuary, particularly on the brackish wetlands of the Suisun Marsh.

Multiple Levee Failures. The Delta Risk Management Strategy and other recent publications have explored the potential impacts of multiple levee failures and the simultaneous flooding of several Delta islands. These analyses focused on the disruption of water exports and economic consequences. As the DRMS report states, "Impacts to aquatic species were not quantified in the DRMS Project and require further study." Similarly, impacts to water quality were not quantified in the DRMS Project. The State Water Board should consider the potential impacts of multiple levee failures on the ecosystems of the estuary, including Suisun Marsh and the Bay, and how those impacts might vary in different conveyance and water project operations scenarios as part of its potential revisions to the Bay-Delta Plan.

Minimize Harmful Effects to the Bay. The potential revisions to the State Water Board's Bay-Delta Plan would need to be consistent with all applicable San Francisco Bay Plan policies. The Bay Plan policies on fish, other aquatic organisms, and wildlife, state that marshes, mudflats, and subtidal habitat should be "conserved, restored, and increased." The Commission staff recommends that the State Water Board consider how changes to the Bay-Delta Plan will affect the hydrology, sediment dynamics, water quality and biological resources of the Bay. As mentioned above, the Board should analyze how climate change impacts, including the potential impacts of sea level rise, precipitation patterns, and changes in air and water temperature, will affect the need for freshwater inflow to the Bay and Suisun Marsh. The Board should also consider the potential impacts of other projects being planned for the Bay-Delta estuary and its watershed, such as a peripheral canal or dual conveyance of water through and around the Delta, dam construction, habitat restoration, levee repairs and upgrades, and the deepening of the Stockton and Sacramento Ship Channels, and how those projects may affect flow requirements.

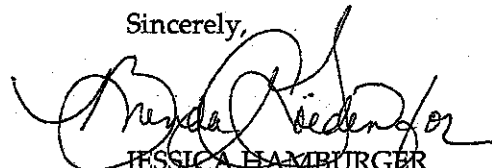
Water Quality. Pursuant to the Commission's water quality policies in the Bay Plan, pollution in the Bay's water "should be prevented to the greatest extent feasible." The State Water Board should analyze the impacts of potential changes in the Bay-Delta Plan on salinity, temperature and concentrations of dissolved oxygen and contaminants in the Bay and Suisun Marsh.

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Mitigation. In the event that the potential changes in the Bay-Delta Plan would result in adverse environmental impacts that cannot be avoided, the State Water Board should discuss mitigation measures. The Commission's policies regarding mitigation state, in part, that "projects should be designed to avoid adverse environmental impacts to [the] Bay" and, further, that "[w]henver adverse impacts cannot be avoided, they should be minimized to the greatest extent practicable....[and] measures to compensate for...impacts should be required."

Thank you for the opportunity to comment on the Periodic Review Staff Report. If you have any questions regarding this letter or the Commission's policies, please call me at (415) 352-3660 or email me at jessicah@bcdc.ca.gov.

Sincerely,



JESSICA HAMBURGER
Coastal Program Analyst

JH/rca