Fact Sheet

Revised Draft Substitute Environmental Document for Flow Requirements on the Lower San Joaquin River and Salinity Standards for the Southern Delta

Overview

The San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta) includes the Sacramento-San Joaquin Delta, Suisun Marsh, and San Francisco Bay. California's two major rivers, the Sacramento and the San Joaquin, converge in the Delta and meet incoming seawater from the Pacific Ocean in San Francisco Bay. Water diversions from the Delta supply a portion of the drinking water to more than two thirds of Californians and for millions of acres of farmland.

On Sept.15, 2016, the State Water Resources Control Board (State Water Board) staff released a draft proposal to update water quality requirements for salinity in the southern Delta and water flows in major tributaries to the San Joaquin River (the Stanislaus, Tuolumne, and Merced Rivers), which drains into the southern Delta. The refined salinity requirements reflect updated scientific information about salt levels that reasonably protect farming in the southern Delta. The new flow requirements for the San Joaquin River's major tributaries recognize the vital role upstream water flows provide for habitat and migratory signals for native fish species. In summary, the draft proposes increasing flows for fish and wildlife and adjusts the salinity requirements to a slightly higher level to reflect updated scientific knowledge.

State Water Board Responsibility

The State Water Board holds dual responsibilities of allocating surface water rights and protecting water quality. The State Water Board allocates water through an administrative system that is intended to maximize the beneficial uses of water while protecting the public trust, serving the public interest, and preventing the waste and unreasonable use or method of diversion of water. This requires balancing of all of those interests.

State water quality law requires the adoption of Water Quality Control Plans that identify existing and potential beneficial uses of waters of the state and establish water quality objectives to protect these uses. The plans also contain implementation, surveillance and monitoring elements.

While most water quality control planning is done by the Regional Water Boards, the State Water Board has authority to adopt statewide Water Quality Control Plans and adopts the Bay-Delta Plan because of its importance as a major source of water supply for the state. The Bay-Delta Plan protects water quality in the region and includes water quality objectives to protect municipal and industrial, agricultural, and fish and wildlife beneficial uses.

The Bay-Delta Plan

The Bay-Delta Program resides in the State Water Board's Division of Water Rights because of the critical importance of flow objectives in the Water Quality Control Plan the San Francisco Bay/Sacramento-San Joaquin Delta Estuary Bay-Delta (Bay-Delta Plan).The State Water Board adopts plans and policies to protect beneficial uses of the water in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta) pursuant to the California Water Code and federal Clean Water Act. Among taking other actions, the Board may implement the Bay-Delta Water Quality Control Plan through water right actions

Developing the Plan

The State Water Board is in the midst of a four-phase process of developing and implementing updates to the Bay-Delta Plan and flow objectives for priority tributaries to the Delta to protect beneficial uses in the Bay-Delta Watershed. This phase (Phase I) proposes amendments to the Bay-Delta Plan involving the Lower San Joaquin River flow objectives and southern Delta salinity objectives.

In a separate process, referred to as Phase II, the State Water Board is reviewing and considering updates to other elements of the Bay-Delta Plan, including Delta outflows, Sacramento and tributary inflows (other than the San Joaquin River inflows), Suisun Marsh salinity, Delta Cross Channel Gate closure, export limits, and reverse flows in Old and Middle River. In Phase III, the State Water Board will implement changes to the Bay-Delta Plan from Phases I and II through water right actions. Phase IV focuses on the development and implementation of flows in the Sacramento River watershed to address tributary-specific public trust needs, with consideration for other beneficial uses of water, and will be integrated with the Phase II effort. A draft scientific basis report for the Phase II proceeding will be issued in the next few weeks with proposed amendments to the plan to come next year.

Phase 1 Substitute Environmental Document

The State Water Board previously released a Draft Substitute Environmental Document (SED) in December 2012 (2012 Draft SED). This recirculated Draft SED, released on September 15, 2016, makes substantial changes to the 2012 Draft SED in consideration of the large number of oral and written public comments received concerning that document, and in light of additional information, including information learned from the recent drought. Changes were also made in response to the state's adoption in 2014 of a state policy for sustainable groundwater management (Wat. Code, § 113) and passage of the Sustainable Groundwater Management Act (SGMA) (Wat. Code §§ 10720 et seq.), which provide a roadmap and directive for sustainable local groundwater management.

Phase I Plan Amendments

In Phase I, the State Water Board is proposing to update two elements of the 2006 Bay-Delta Plan:

- San Joaquin River flow objectives for the protection of fish and wildlife: the flow element of the proposed plan update would increase the required flows to be left in the rivers and would change the area currently protected by flow requirements by adding compliance locations on the Stanislaus, Tuolumne, and Merced Rivers, instead of only on the San Joaquin River at Vernalis.
- Southern Delta salinity objectives for the protection of agriculture: the salinity element of this proposal would adjust the salinity requirements to a slightly higher level to reflect updated scientific knowledge of salt levels that reasonably protect farming. Monitoring and compliance locations would be changed to better reflect overall salinity levels and protection of agriculture.

San Joaquin River Flow Objectives

- The recirculated draft SED for the first phase of the Bay-Delta Plan recommends an increased flow on the San Joaquin River and its tributaries to a range of 30 to 50 percent, with a starting point of 40 percent of unimpaired flow from February through June. Unimpaired flow represents the water production of a river basin, unaltered by upstream diversions, storage, or by export or import of water to or from other watersheds. Historical median February through June flows from 1984–2009 in the Merced, Tuolumne, and Stanislaus Rivers were, respectively, 26, 21, and 40 percent of unimpaired flow. In other words, half of the time more than 60 or 70 percent of each river's flow is diverted out of the river during these months.
- Scientific studies show that flow is a major factor in the survival of fish like salmon and that current flows are inadequate to protect many endangered and threatened species, as well as species relied upon by the commercial fisheries. The Draft SED recognizes that other factors, like predation and loss of habitat, affect fish populations, and those factors are also addressed in the Draft SED.
- The unimpaired flow requirement is designed to mimic the cues of nature that species have evolved to respond to, but is not intended to be a rigid and fixed percent of unimpaired flow. It is intended to determine a quantity of water as a baseline, but the proposal provides and encourages collaboration to use the flows as a block of water that can be "shaped" or shifted in time to provide more functionally useful flows that provide increased habitat, more optimal temperatures, or a migration cue. That type of targeted effort can provide more timely and efficient use of flows, in combination with habitat restoration or in light of observation, than a set regime.
- The Draft SED recognizes the financial and operational challenges to local economies of reduced diversions. The proposed increased flow requirement range is a compromise

between optimal flows for fish and wildlife, and the needs of agriculture and local economies.

- Stakeholders are encouraged to work together to reach voluntary agreements that could implement Bay-Delta Plan objectives for fish and wildlife beneficial uses. Voluntary actions to implement non-flow measures to improve conditions for fish and wildlife may support a change in the flows within the 30 to 50 percent range.

- The proposal contemplates that the biological goals will be among the tools that inform future State Water Board decisions on whether to adjust the unimpaired flow percentage within the 30 to 50 percent range. Put another way, adaptive management will optimize the balance between fishery and human uses, while rewarding actual improvements in biological conditions that support native fish. Adaptive implementation of flows will also allow a nimble response to changing information and changing conditions while minimizing unintended impacts.

Southern Delta Salinity Objectives

- The recommended amendment to the southern Delta salinity objective (southern Delta salinity proposal) would eliminate the seasonal element of the current objective by changing the objective to a higher salinity level (1.0 deciSiemens per meter (dS/m) year-round, from the current 0.7 dS/m April through August and1.0 dS/m September through March.

- Analysis of southern Delta water quality and crop salinity requirements shows that the existing salinity conditions in the southern Delta are suitable for all crops and that the existing April through August salinity objective is actually lower than what is needed to reasonably protect agriculture.

- The United States Bureau of Reclamation will be required to continue to comply with the 0.7 dS/m salinity level for the SJR at Vernalis as a condition of its water rights.

- The revised water quality objectives coupled with the implementation measures included in the Bay-Delta Plan update would provide the same or better conditions for agricultural uses in the Delta compared to existing conditions through the continuation, or improvement, of existing management actions, including maintenance of water levels.

- The proposal includes requirements that the State Water Project and Central Valley Project address the impacts of their export operations on water levels and flow conditions that may affect salinity conditions in the southern Delta.

- The southern Delta salinity proposal would also replace the three current fixed points for monitoring southern Delta salinity compliance, and instead identifies three extended channel segments for monitoring conditions and measuring compliance.

- Increased February through June flows under the San Joaquin River flow element would improve salinity conditions in the southern Delta early in the irrigation season.

Next Steps

This is a draft staff proposal and SED. Comments on both the Bay-Delta Plan amendments and the Draft SED are due on Nov. 15, 2016. A public hearing will be held on Nov. 2 and Nov.10, 2016 in Sacramento, and Nov. 4, 2016 in the Modesto area, to receive additional oral comments.

Staff will prepare a draft final SED for consideration by the State Water Board's members. The Board members will consider the draft final SED before approving the project, and the SED will become final upon project approval. The Board will consider approving the proposed Bay-Delta Plan amendments at a public meeting that will be held in early 2017.

An expanded summary of the proposed updates to the Bay Delta Plan is available here.

(This fact sheet was last updated on Sept. 15, 2016