



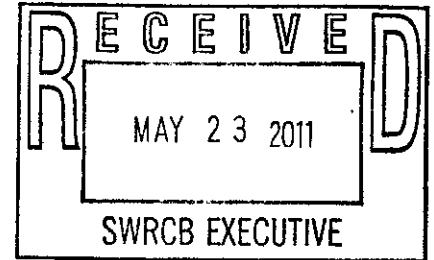
State of California – The Natural Resources Agency  
DEPARTMENT OF FISH AND GAME  
[Insert Your Division/Region/Branch or Program]  
[Insert Your Full Mailing Address]  
[www.dfg.ca.gov](http://www.dfg.ca.gov)

Public Comment  
Stthrn Delta Ag & SJR Flow  
EDMUND G. BROWN Deadline: 5/23/11 by 12 noon  
JOHN McCAMM.



May 23, 2011

Charles R. Hoppin, Chair  
State Water Resources Control Board  
1001 I Street  
Sacramento, CA 95814



Subject: Revised Notice of Preparation and Notice of Additional Scoping Meeting

Dear Mr. Hoppin:

The Department of Fish and Game (Department) would like to thank the State Water Resources Control Board (SWRCB) for clarifying the notice of preparation (Notice) and for the opportunity to provide input on the draft modifications. As stated previously, the Department commends the SWRCB staff for their continuing effort to better understand and address the complex water issues involving the Sacramento-San Joaquin Delta (Delta) and its watershed.

The Department agrees with the direction taken in the revised Notice and the draft modifications and supports the SWRCB determination that both more flow and a more natural flow pattern is needed in the San Joaquin River watershed to Vernalis. The protection of California's fish and wildlife resources is important to both our agencies and part of our responsibilities under statute and the Public Trust Doctrine. In continuing with your basin planning process we offer the following comments along with our commitment to assist you in this process.

Should you have any questions or require clarification, please contact me at (916) 445-1272.

Sincerely,

Scott Cantrell  
Water Branch Chief, Acting

Enclosure

## **Department of Fish and Game Comments on Revised Notice of Preparation and Additional Scoping Meeting**

### **San Joaquin River Flow Objectives**

The Department of Fish and Game (Department) supports the use of a narrative value for the San Joaquin River Fish and Wildlife Flow Objective. As suggested in the notice of preparation (Notice), the value should be based on maintaining flow conditions in the San Joaquin River (SJR) watershed sufficient to support the natural production of viable native fish populations migrating through the Sacramento-San Joaquin Delta (Delta). However, the Department is concerned that this objective may be focused on adult production and not protective of all life stages of anadromous fish. The Department recommends that the narrative flow objective be primarily focused upon juvenile salmon production leaving the tributaries and both entering and exiting the South Delta, and then secondarily be focused upon adult salmon production to ensure protection and ecological continuity of all life stages of anadromous fish. The required base flows must provide suitable adult spawning and juvenile rearing habitat and unimpeded fish passage from the tributaries to the Delta. Additionally, the concept of providing flows protective of all fish life stages should be a focus area of the Coordinated Operations Group and part of the adaptive management strategy.

The Department supports the continued Vernalis compliance location and the additions of the confluence of the Tuolumne, Merced, and Stanislaus rivers with the SJR identified in Table 3. However, any compliance point(s) chosen will need to ensure that flow benefits to fish are provided through the tributaries and downstream to Vernalis. Without an identified implementation strategy to assure that environmental flow requirements are maintained within and through the rivers, there are concerns that flows could potentially be removed from a tributary below a dam release point and returned just above a compliance location.

We are also concerned about water temperature in the SJR and its tributaries as described in our February 7, 2011 comments to the SWRCB. There is direct evidence (cause and effect) of water temperature limiting salmon populations in the SJR tributaries. The evidence strongly indicates that fall-run Chinook salmon smolts do not leave the river unless they have adequate (lower) water temperatures. Water operations of the lower rim dams/reservoirs directly affect water temperatures in the lower SJR tributaries by reducing flows in the spring time period. The lack of flow elevates water temperatures in the lower tributary nursery and out-migration corridors preventing sufficient production of juvenile salmon across years. More clarification about how the SWRCB will assure that flows are maintained in the river and tributaries down to the compliance locations should be included in the Substitute Environmental Document (SED) and program of implementation. In addition, the Department recommends that narrative language be developed that limits diversions of more flow than is necessary for a covered beneficial use, even if that flow is returned to the system at a downstream location.

## **San Joaquin River Flow Objectives Program of Implementation**

The Notice does not indicate what levels of percentage of unimpaired flow (%UIF) will be evaluated in the CEQA review. The Department recommends that the current conditions be the base and that at least two additional alternatives be evaluated: i) 40% UIF and ii) an upper bookend of 60% UIF. Evaluating these flow ranges will yield a realistic perspective on how the SJR basin needs to be re-operated to remove the large discrepancy in apportionment of beneficial use flows, that favor one beneficial use over another, and the types of changes that may be necessary to accommodate this change in operation.

The Department supports the use of a natural flow regime based flow criteria for the SJR and its tributaries as described in your Technical Report and our earlier submittals. While the suggested objectives in the program of implementation discuss %UIF, it is not clear how the SWRCB will calculate that %UIF. Realizing that developing reliable runoff forecasts has many uncertainties, especially considering the uncertainty of downscaled climate change projections, the Department recommends that the SWRCB utilize a system that is as simple and straight forward as possible. In our February 7, 2011 comments the Department provided an example of how to calculate instream flows based on a %UIF using 3-day averaging with a 3-day lag period. This type of averaging based method would result in a manageable system while still providing biologically important variable flow patterns. Further clarification and discussion of the SWRCB's method of determining a %UIF should be discussed at the June 6, 2011 scoping meeting and a determination of a method should be included in the program of implementation.

The Department suggests that the SWRCB further clarify how it will address some key concerns when determining what range of %UIF will be evaluated as alternatives and in the adaptive management program. Our concerns include: study problems resulting from too wide a range of alternatives selected (i.e., too many variables), using too low of a range of %UIF that a detectable signature in biological parameters may not be measurable, and how the %UIF will affect inflow to export (I/E) ratios. Clarification of these issues should be provided at the June 6, 2011 scoping meeting and in the SED.

The Department supports the formation of a coordinated operations group (COG) and a new San Joaquin River Monitoring and Evaluation Program (SJRMEP). While we believe that the Department and other resource agencies are well-suited to conduct and evaluate scientific studies, the Department has limited discretionary funding and staff resources to support these activities. To effectively participate in these new working groups, the Department will need additional funding and staffing. The Department recommends that the SWRCB clarify how the COG and SJRMEP will be supported and evaluate alternatives that could address this issue. Additionally, a better definition of the roles of various agencies and organizations, the process used for decision making, development of definable and measurable goals, and the safeguards to assure strong scientific standards should be included.

In principle the Department supports the concept of "adaptive management". However, we recommend that the SWRCB develop a clear and concise definition of adaptive

management to guide the amendment process. Adaptive management involves the development of hypotheses as the conceptual basis and rationale to support implementation of management actions, followed by monitoring and assessment of outcomes to determine whether the project goals and objectives are being achieved. A rigorous assessment of outcomes in an adaptive management process serves as a test of the established hypotheses and informs potential future changes in management actions. The term “adaptive management” has also been used to describe less rigorous processes that allow flexibility in the implementation of management actions (e.g., the releases of instream flows to accomplish real-time oriented objectives). Adaptive management should not suggest that standards are flexible, but should provide a systematic process for determining whether or not defined and measurable biological goals were met by the management actions. Thus to avoid confusion and reduce the potential for conflict, the Department recommends that the SWRCB clearly define the term “adaptive management”.

The Department is unclear about how the SWRCB’s amendment process (i.e., standard setting and implementation) will be coordinated/integrated with the Federal Energy Regulatory Commission (FERC) process. We believe that urgent actions are needed to address the vulnerable populations of fall-run Chinook salmon in the SJR basin tributaries. One such action would be to increase instream flows in the Merced and Tuolumne Rivers prior to issuance of FERC licenses since the scope of instream flows needed to restore SJR salmon is likely beyond what would be adopted through the FERC process (e.g., scope extends from the lower rim dams all the way to Vernalis).

The Department recognizes the Public Trust authority afforded to the State that enables the SWRCB the opportunity to move outside of the timeframes, and scope, of the on-going FERC relicensing processes unfolding in the SJR tributaries. Therefore, providing a better understanding of how the SWRCB might use this authority, along with its Clean Water Act (e.g. Section 401) authority, to ensure that future FERC license instream flow terms are in agreement with established and implemented Bay-Delta Plan standards, would help to clarify some of this uncertainty.

In addition, there are many other on-going state and federal programs such as: San Joaquin River Restoration Program, Central Valley Project Improvement Act, Delta Stewardship Plan, Central Valley Flood Protection Plan, various Integrated Regional Water Management Plans, California Climate Action Team and Climate Action Initiative, and Bay-Delta Conservation Plan whose coordination/integration should also be better described.

Although discussed in general, the Department also suggests further clarification be provided on how the SWRCB will phase the implementation of the flow objectives and the projected timeline. As mentioned, the Department is concerned that the anadromous fish populations of the San Joaquin River system are at critical thresholds. We believe that as agencies responsible for protecting the public trust resources, and to comply with Fish and Game Code 5937, DFG and SWRCB are required to take action as swiftly as practical to assure healthy anadromous fish populations in the San Joaquin

River. We recommend that the SWRCB front load this phased approach for implementation in an effort to quickly stabilize the anadromous fish populations.

### **Southern Delta Agricultural Water Quality Objectives and Program of Implementation**

The Department supports the changes to the southern Delta agricultural water quality objectives and the program of implementation. As mentioned in our February 7, 2011 comments, the Department remains concerned with conditions that could result in hypersaline conditions, salt loading to wildlife area soils, or mixing of trace elements and heavy metals in saline water complexes. Therefore, the Department recommends that any program of implementation or regulatory actions that result in an increase in flows, which in turn increases assimilative capacity, do not also increase the salt loading downstream (total mass delivered). Additionally, the Department supports the development of a Comprehensive Operations Plan which includes continued evaluation of agricultural barrier operations and the effects they have on fish and wildlife. Again to fully participate in this working group, the Department would need additional funding and staff to effectively engage in this worthwhile planning effort.