

**Before the
State Water Resources Control Board
February 17, 2009**

In the Matter of
Taking an Emergency Drought-Related Water Rights Action on a Petition for
Temporary Urgency Change filed by
the Department of Water Resources and the United States Bureau of Reclamation
Regarding Temporary Relaxation of the
February Delta Outflow and the San Joaquin River Flow Objectives
In Response to Current Dry Conditions

Policy Statement of the California Department of Fish and Game

Board Members Baggett and Hoppin, good afternoon. My name is Perry Herrgesell, and I am the Bay Delta Water Policy Coordinator for the Department of Fish and Game. The Department is providing several comments related to the impacts on fish that the Water Board should consider in its deliberations on the Temporary Urgency Change petition to relax several Bay-Delta Water Quality Control Plan objectives in February.

The mission of the Department is to manage California's diverse fish, wildlife, and plant resources, and the habitats on which they depend for their ecological values and the use and enjoyment by the public. As trustee agency for the fishery resources in the state, the Department has a material interest in assuring water flow in the Delta is maintained at levels which are adequate for long-term protection and maintenance of aquatic resources. With regard to the Temporary Urgency Request, the Department's remarks focus primarily on the estuary generally and especially the continued protection of longfin smelt in the Delta and Central valley salmon and steelhead.

The Department is acutely aware that California may be facing a third year of drought, and that the State's water management system is facing unprecedented and extraordinary circumstances in meeting the needs of all water users. In a similar fashion, the Department itself must balance the conservation and management of both anadromous fish and Delta species. Consequently, the Department's comments are primarily focused on potential impacts on the estuarine environment and species, including longfin smelt and our review of very recent Delta outflow projections. The Department agrees the potential also exists for the requested modification to have benefits for salmon and steelhead by preserving cold water for release later in the year.

Now for our comments on the Temporary Urgency Request:

First, the Department would like to reiterate its support for the X2 water quality objective and the importance of compliance with this objective in maintaining essential elements of a healthy estuarine environment. The relationships between outflow and several fish

and one invertebrate species that were the basis of the X2 objective still exist, even though some relationships have shifted in recent years due to other factors to reflect smaller changes in productivity or abundance per increment of flow. Nevertheless, the standard continues to have benefit for many estuarine species, even as the search for explanations of the mechanisms goes on. This linkage is presented in the scientific paper attached to the Petition which reaffirms the importance of X2 to abundance and habitat for some of the estuary's species. The paper also explains likely reasons for the relationship for two species.

Department scientists have reviewed the Petition for the Temporary Urgency Change and I would now like to provide the Water Board with comments on the possible or likely impacts of the standards modification on fish. The petition points out on page 14 that the impact of the modification on longfin smelt in February is unquantifiable. It is probably more accurate to say that the impacts cannot be estimated now because the future hydrology is unknown. The important point is that the relationship between X2 and longfin smelt is based on the average of several months of X2 measurements. Not meeting the X2 standard in February has influenced the locations of longfin smelt spawning and, in turn, the likelihood that larvae will be subsequently transported downstream to suitable rearing habitat.

While longfin smelt and other estuarine species could be impacted by the standards relaxation, the Department believes that entrainment impacts can be minimized by continuing to make real time decisions on Delta outflow, export flows, and their potential effects on fish. With the commitment of DWR and the Bureau, the needs of fish can be evaluated by continued participation in the WOMT process and by acceptance of the recommendation developed in this collaborative process.

Given the low storage levels in Shasta, Oroville and Folsom reservoirs, providing suitable water temperature through the summer and early fall for spawning and rearing salmon and steelhead will be very challenging. At best, the river miles of stream habitat below these dams with water temperature suitable for salmonid reproduction will be diminished. At worst, cold water could run out before the end of the summer, resulting in extensive temperature-related mortality. Reservoir releases have been highly constrained for months due to the dry conditions. Precipitation amounts in the next few months will determine the relative seriousness of the situation. Retaining water in several project reservoirs instead of releasing it to meet outflow objectives in February will add to the reservoirs' cold water pool volume. If properly managed, this added increment of available cold water should help extend the period this summer wherein water temperature in the rivers below these dams remain below harmful levels.

The Department of Fish and Game thanks the Water Board for the opportunity to express our comments. If you have questions of me, I would be happy to respond.

and one invertebrate species that were the basis of the X2 objective still exist, even though some relationships have shifted in recent years due to other factors to reflect smaller changes in productivity or abundance per increment of flow. Nevertheless, the standard continues to have benefit for many estuarine species, even as the search for explanations of the mechanisms goes on. This linkage is presented in the scientific paper attached to the Petition which reaffirms the importance of X2 to abundance and habitat for some of the estuary's species. The paper also explains likely reasons for the relationship for two species.

Department scientists have reviewed the Petition for the Temporary Urgency Change and I would now like to provide the Water Board with comments on the possible or likely impacts of the standards modification on fish. The petition points out on page 14 that the impact of the modification on longfin smelt in February is unquantifiable. It is probably more accurate to say that the impacts cannot be estimated now because the future hydrology is unknown. The important point is that the relationship between X2 and longfin smelt is based on the average of several months of X2 measurements. Not meeting the X2 standard in February has influenced the locations of longfin smelt spawning and, in turn, the likelihood that larvae will be subsequently transported downstream to suitable rearing habitat.

While longfin smelt and other estuarine species could be impacted by the standards relaxation, the Department believes that entrainment impacts can be minimized by continuing to make real time decisions on Delta outflow, export flows, and their potential effects on fish. With the commitment of DWR and the Bureau, the needs of fish can be evaluated by continued participation in the WOMT process and by acceptance of the recommendation developed in this collaborative process.

Given the low storage levels in Shasta, Oroville and Folsom reservoirs, providing suitable water temperature through the summer and early fall for spawning and rearing salmon and steelhead will be very challenging. At best, the river miles of stream habitat below these dams with water temperature suitable for salmonid reproduction will be diminished. At worst, cold water could run out before the end of the summer, resulting in extensive temperature-related mortality. Reservoir releases have been highly constrained for months due to the dry conditions. Precipitation amounts in the next few months will determine the relative seriousness of the situation. Retaining water in several project reservoirs instead of releasing it to meet outflow objectives in February will add to the reservoirs' cold water pool volume. If properly managed, this added increment of available cold water should help extend the period this summer wherein water temperature in the rivers below these dams remain below harmful levels.

The Department of Fish and Game thanks the Water Board for the opportunity to express our comments. If you have questions of me, I would be happy to respond.