California Natural Resources Agency
DEPARTMENT OF FISH AND GAME
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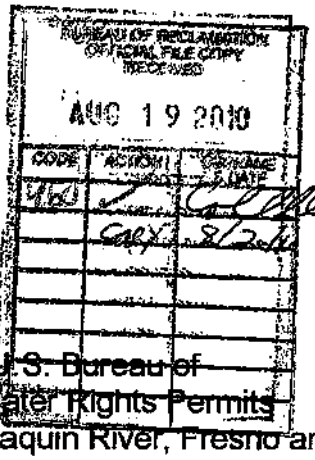

August 13, 2010

Bob Colella MP460
United States Bureau of Reclamation
Mid-Pacific Region
2800 Cottage Way
Sacramento, California 95825-1898

Subject: Comments and Recommendations Regarding U.S. Bureau of Reclamation Proposed Petitions for Change, Water Rights Permits 11885, 11886, and 11887, Friant Dam - San Joaquin River, Fresno and Madera Counties

Dear Mr. Colella:

The Department of Fish and Game (Department) received from the State Water Resources Control Board (SWRCB) a Notice of Petitions for Temporary Transfer of Water and Change to water right permits 11885, 11886, and 11887 (Petition). The proposed change would transfer 389,355 acre feet of San Joaquin River flows from between October 1, 2010 and September 30, 2011 in a wet year type, for fish and wildlife preservation and enhancement.

The proposed Petition would implement the Bureau of Reclamation's (Bureau) Interim Flows Project, consistent with the Final Environmental Assessment/Initial Study for the Flow Monitoring and Management Plan for Water Year 2010 Interim Flows, and in accordance with the San Joaquin River Restoration Settlement Act (Settlement Act). The Settlement Act was intended to restore adequate flows in the San Joaquin River below Friant Dam to support a naturally reproducing population of Chinook salmon. The Bureau, in coordination with other parties, developed the Interim Flows Project in order to study the effects of restoration flows on river morphology and water quality.

The Department, as a State Trustee agency, is consulted by the SWRCB to provide terms and conditions designed to protect fish and wildlife prior to water rights actions appropriating the State's water resources. The Department recommends that the Interim Flows Project accommodate anticipated river restoration studies and activities associated with the Settlement Act, ongoing conservation efforts and San Joaquin River watershed management.

A key guidance document for implementation of the Settlement Act is the restoration program's Fish Management Plan. The Fish Management Plan, through an adaptive management framework, recommends that temperatures in Millerton Lake be monitored to assess the effects of the increased flow releases

A key guidance document for implementation of the Settlement Act is the restoration program's Fish Management Plan. The Fish Management Plan, through an adaptive management framework, recommends that temperatures in Millerton Lake be monitored to assess the effects of the increased flow releases and that ramping of flow releases occur in order to minimize potential stranding of fish downstream from Friant Dam. The Bureau's Petition does not propose either comprehensive monitoring of temperature changes in the reservoir or a schedule for ramping of flow releases. Such actions are vital to enable adaptive management of flow releases.

Interim flows should not adversely affect water temperature or dissolved oxygen, or have the effect of reducing the availability of cold water within Millerton Lake such that instream flows released below Friant Dam adversely affect the fishery. The cold-water pool of the reservoir is maintained by watershed runoff in the spring and early summer, and without an adequate volume of cold water storage within the lake, summer and fall temperatures below Friant Dam could potentially rise above thermal tolerances for juvenile and adult Chinook salmon. A major objective of the Interim Flows Project should be to obtain a three-dimensional understanding of reservoir temperature changes over time, to allow for predictions based on normal, wet, dry, and critically dry water years. Achieving this would require continuous monitoring of temperature at representative locations within the reservoir, as well as inflow to the reservoir. According to the Fish Management Plan, the water temperature model (SJR5Q) was developed for the restoration program to evaluate existing conditions and enable predictions of temperature conditions in the river below Friant Dam. The final SJR5Q model also included a reservoir operation and temperature model of Millerton Lake. The Department recommends that the Bureau submit a monitoring plan to the Department for review and approval that fully addresses the management of reservoir and instream flow releases to maintain appropriate water temperatures, and to ensure a successful restoration program.

Specific timing, magnitude, and ramping rates should also be developed for interim flow releases, in order to protect fish, instream habitat, and water quality downstream of Friant Dam. The Fish Management Plan recommended implementation of flexible flow periods in the fall and spring to provide for timing, magnitude, and ramping rates of flow releases from Friant Dam. Pulse flows are needed to attract salmon into the river mainstem, to maintain water quality and temperature for salmon to pass critical sections of the river, and to help move juvenile salmonids out of the river mainstem and into the Sacramento/San Joaquin river delta. Ramping of flow releases, before and after fall and spring pulse flows, are necessary to prevent stranding fish in habitats subject to periodic inundation. Achieving optimal ramping of flows may be limited due to operational constraints of Friant Dam, but should be employed to the maximum extent feasible. The Department recommends the Bureau provide a schedule of flow

release ramping rates that achieves minimal changes in flow when increasing to or decreasing from target flow releases. The Department also recommends the Bureau provide a water quality monitoring plan for review and provide subsequent monitoring data. This will assist the Department in determining potential impacts to the Millerton Fishery and reintroduced Chinook salmon in the San Joaquin River.

The Department believes the above recommendations are necessary to ensure long-term success of the Restoration Program and San Joaquin River watershed management. The Department looks forward to continuing a cooperative relationship with the Bureau to work towards the goal of restoring a naturally reproducing salmon population on the San Joaquin River.

If you have questions or comments regarding the above discussion, please contact Brian Erlandsen, Staff Environmental Scientist at (559) 243-4014, or by writing to the Department at the above address.

Sincerely,

Jeffrey R. Single, Ph.D.
Regional Manager

cc: Erin Strange, Fishery Biologist
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