



Merced River  
Conservation Committee

March 14, 2017

Jeanine Townsend, Clerk to the Board  
State Water Resources Control Board  
1001 I Street, 24th Floor  
Sacramento, CA 95814-0100



**Subject:** Comment Letter – 2016 Bay Delta Plan Amendment & SED – Merced River Watershed

### Summary

There is no scientific evidence that flows less than 50% (Unimpaired Flow) UIF will achieve the Resources Agencies' salmon and steelhead doubling targets or ensure a functioning Merced River ecosystem.

Even at these higher-than-historic baseline flows, salmon and steelhead doubling will be possible only if accompanied by sufficient flows plus huge investments in physical restoration of habitat in the lower Merced River.

Salmonid rearing habitat restoration will be required under all flow alternatives, but flows less than 50% UIF require proportionally higher restoration acreages to mitigate lower flows, thus inflating costs.

High temperatures limit egg incubation and juvenile rearing habitat at flows less than 50% UIF. This affects the Merced River carrying capacity and reduces the flexibility to shape flows without serious negative effects.

### Recommended Unimpaired Flows Coupled with Non Flow Conservation Measures

The Board should recognize that flows less than 50% UIF without Non Flow Conservation Measures will not allow achievement of the Population Doubling Objectives for fall-run Chinook and steelhead in the Merced River and floodplain. In addition to increased floodplain inundation and spawning gravel addition, there are other non-flow measures that could improve salmonid population conditions: screen unscreened diversions, increase flood plain habitat with increased flows, reduce the proportion of river flow directly diverted, reduce predator abundance, increase geomorphic flows (by shaping), increase large woody debris, and provide access to habitats of the upper Merced River above Crocker-Huffman and New Exchequer Dams.

Habitat restoration won't produce the desired results if temperatures in the river get too high too early in the year. River reach temperatures are directly related to flows. If young fish cannot escape (migrate), then simply doing habitat restoration won't provide much benefit. Fisheries objectives

must be specified in advance. Monitoring of the salmonid populations will provide data to determine if the objectives are achieved.

We recommend a flexible less than 50% UIF flow standard (with options to increase flows, should fish population targets not be met, through Adaptive Management measures). Science says that a 60% UIF standard is required to meet the salmonid doubling target. Board mandated non-flow measures to compensate for the reductions in flows are necessary for restoration of the salmon and steelhead populations in the Merced and lower San Joaquin Rivers.

### **Board Needs to Identify and Implement Summer and Fall Flow Requirements to Meet Fisheries Objectives**

All life stages of the salmon and steelhead must receive appropriate flows (and non-flow measures) to achieve the doubling goals. The Draft SED identified that the constraints imposed by the severe modification of the February through June flows were associated with the declines in anadromous salmonid populations of the San Joaquin River and its tributaries. There are two sets of life history stages (fall adult returning spawners and over-summering juveniles) which do not receive protections with this SED flows approach. Chapter 19 (@ §19.2.3) acknowledges the probable temperature stressors in stating: “Temperature conditions in September, October, and November are often poor at many locations used by adult migrating and spawning salmon. Furthermore, fry emergence, rearing, smoltification, and emigration life stages are also exposed to suboptimal and even harmful temperature conditions from roughly March through June during many years. Finally, salmonids that stay in the rivers to over summer between July and September have little chance of thriving unless they find the little cold water refugia that potentially exists (depending on the year and river) directly below the dams.” Those temperature conditions below dams are greatly restricted during dry and critically dry water years. Evidence of these conditions are documented by the need for a CADFW steelhead rainbow trout rescue effort in 2014<sup>1</sup> and 2015<sup>2</sup>.

The approach is to address October Flow Requirements for fall adult returning spawners by a process to “reevaluate the assignment of responsibility for meeting the October pulse flow requirement during a water right proceeding, FERC licensing proceeding, or other proceeding, in order to optimize protection for fish and wildlife beneficial uses and minimize impacts to water supplies.” Appendix K @ Page 34. This is basically just prolonging the decision making process into the future. We believe that there is some agreement among Resource Agencies and NGOs in terms of temperature targets, as well as fall adult returning attraction flows, criteria for the Merced River, and these parameters should be included as an element of the “Flows Approach”.

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<sup>1</sup> FERC eLibrary Accession 20161031-5156. Merced Irrigation District, Merced River Hydroelectric Project, FERC Project No. 2179-047, Fish Rescue Information.

<sup>2</sup> FERC eLibrary Accession 20160406-5183. Merced Irrigation District, Merced River Hydroelectric Project, FERC Project No. 2179-047, Reply to FERC’s March 7, 2016 Letter.

## **The Board Needs to Manage Entire Watershed for Sustainable Fisheries under all Water Year types**

The SED needs to evaluate alternatives and rules for the Merced River which allows for sustained operations in dry and critically dry water years. The elements of that management structure are: a) adjusting flows to water years (more water diversion in wet years, less in critically dry years); b) generally reducing agricultural irrigation deliveries from baseline; c) set a protective project reservoir carryover storage to partially mitigate dry and critically dry years; d) have a triage plan for drought conditions to protect aquatic resources; and e) don't rely on adaptive management to solve aquatic resource problems.

### **Comments on Chapter 16- § 16.3.8 Fish Passage Improvements – Removal or Modification to Human-Made Barriers to Fish Migration and Chapter 18 Summary of Impacts and Comparisons of Alternatives Table 18-7. CEQA Significance Summary of LSJR Alternatives—Non-Flow Measures**

The analysis correctly identifies that blockage of migration of anadromous fish to historical habitat by dams and other human-made barriers is recognized as a major reason for historical declines and current status of ESA-listed salmon, steelhead, and sturgeon in the Central Valley, and, specifically, in the Merced River. We disagree with the statement that:

“Implementation of fish passage or re-introduction programs that restore passage of anadromous salmonids to reaches above impassable dams on the SJR tributaries would not likely occur within an effective timeframe to contribute to the State Water Board's implementation program or other non-flow measures that may be implemented in the foreseeable future to improve anadromous fish production in the currently accessible reaches below the dams (e.g., floodplain and riparian habitat restoration).” (Page 16-186)

National Marine Fisheries Service (NMFS, 2014<sup>3</sup>) has identified a process and time-lines that are projected to be “implemented within the foreseeable future.”

The SED should be modified to reflect the NMFS Federal Power Act Preliminary § 18 Prescriptions and §10(j) recommendations. In turn, that finding affects the CEQA analysis in Chapter 18.

This table (Page 18-22) includes a scoring for “Biological Resources” for “Fish Passage Improvements-Human-Made Barriers to Migration” as L (Less than significant). It was incorrectly scored because it incorrectly assumed that an action would not be implemented in the foreseeable future. It should be scored as “SU\*” (\* Indicates that the impact after mitigation may be less than significant; however, given the various factors influencing the potential implementation of mitigation, and until such time that mitigation measures are implemented, the impacts would remain significant and unavoidable, consistent with State CEQA Guidelines Section 15091; SU = significant and unavoidable impact).

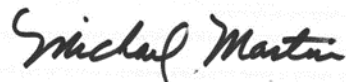
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<sup>3</sup> FERC eLibrary Accession 20140722-5069. NOAA Fisheries Service's Resource Management Goals and Objectives; our Federal Power Act Preliminary § 18 Prescriptions, § 10(j) Conditions, and § 10(a) Recommendations; and Motions to Intervene for the Merced River (P-2179-043) and Merced Falls (P-2467-020) Hydroelectric Projects on the Merced River, California.

## Conclusion

We believe that water flows on the Merced and lower San Joaquin River must be adequate to restore and protect salmon and steelhead populations and fisheries—and to protect the public trust value of the Bay-Delta estuary. A 40% UIF prescription will not result in recovery of anadromous salmonid populations. Science tells us that we need 60% UIFs on the San Joaquin River for the health of the Bay-Delta.

Sincerely,

A handwritten signature in black ink that reads "Michael Martin". The signature is written in a cursive, slightly slanted style.

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