



NCWA
Northern California Water Association

*To advance the economic, social and environmental sustainability of Northern California
by enhancing and preserving the water rights, supplies and water quality.*

March 30, 2015

Tom Howard
Executive Director
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95814

Re: 2015 Sacramento River Operations

Dear Mr. Howard:

The Northern California Water Association (NCWA) and the Sacramento River Settlement Contractors (SRSC) have appreciated working with you and our various partners over the past several dry years in our continuing efforts to manage water under these settlement contracts for various beneficial purposes in the Sacramento Valley, including cities, farms, fish and birds.

In the Sacramento Valley, we have also spent the past several decades developing various projects to improve habitat, re-manage flows and provide for migratory corridors for salmon and we are now embarking on an ambitious salmon recovery program to build on these effort, working with federal and state agencies and various conservation partners. Several of the initial projects that have been developed by SRSC's and our partners include the Nigiri Project by Knaggs Ranch, the Painter's Riffle by Glenn-Colusa Irrigation District and the Knights Landing Outfall Gates (KLOG) by RD 108. In addition, through numerous local efforts and the Central Valley Joint Venture, we have made significant improvements to Pacific Flyway habitat in the Sacramento Valley over the past decade, which has been very helpful to birds, giant garter snakes and other species during this dry period.

Importantly, all of these actions to manage water for these various beneficial purposes have been accomplished along the Sacramento River by working with the Bureau of Reclamation (Reclamation) within the framework of the water rights settlement contracts. We are again exploring innovative ways to manage water supplies for 2015. By fully honoring the settlement contracts, which provide fundamental system-wide stability, we can work creatively under the contracts to meet beneficial purposes in the Sacramento Valley, as well as helping with water supply needs in other parts of the state during this critical year.

As we requested in our March 26 meeting with you, Reclamation and the SRSCs need to agree on operations in the next two weeks so we can set our diversion schedule for the entire season. This diversion schedule provides certainty to Central Valley Project (CVP) operations, river flows and delta operations. We cannot understate the importance of your consideration of the joint operations plan we are developing and the need to balance all beneficial uses. To summarize our meeting and our implementation plan going forward, we are coordinating with Reclamation on the following for 2015:

- Scheduling our diversions in coordination with fishery releases from Keswick Reservoir to provide more precise and reliable temperature management throughout the year for spawning salmon upstream of Clear Creek. The objective is to work with Reclamation to assure more operational flexibility in Lake Shasta and Keswick Reservoir during the late summer and fall, which will allow the optimal operation of the temperature control device and available storage to provide suitable temperature water for salmon. This is designed to avoid the temperature compliance problems experienced in 2014. Further, this operation will insure that other parts of the CVP system will not crash; unlike the current fisheries and SWRCB proposals, which show Folsom Reservoir at dead pool this summer and fall and deliveries south of the Delta will be unnecessarily constrained, including water transfers.
- As described by fisheries biologist Dave Vogel, using figures and tables during our meeting and the scientific literature, the strategy of a modest increase in the target Shasta Dam release from 52 to 53 degrees Fahrenheit would result in negligible impacts to incubating winter-run eggs in redds upstream of the CCR compliance point (Bonnyview Bridge), yet, it would significantly reduce risk of severe impacts later in the season. This circumstance is particularly true if the vast majority of winter run spawn in river reaches closer to Keswick Reservoir (as the salmon have been doing these recent drought years), where water is slightly colder than at Bonnyview Bridge. There would only be very short-term, intermittent excursions slightly above 56 degrees at CCR. Although 56 degrees has been the commonly-used target in the past at various compliance points in the upper Sacramento River, the extraordinary conditions during this fourth drought year should prompt extraordinary pre-emptive actions to avoid a repeat of last year's impact to winter run. Additionally, as demonstrated by prior modeling analyses of CVP operational effects on winter run, use of real-time monitoring provides the opportunity to slightly increase the CCR compliance temperature up to 58 degrees after the eggs hatch, with little likelihood of adverse impacts. Based on careful monitoring of thermal conditions at both Lake Shasta and Keswick Reservoir, riverine temperatures, and redd surveys, an in-season adjustment of the temperature compliance (should it be necessary) could also help reduce adverse impacts later in the season such as occurred in 2014 by preserving more of the cold-water pool in Lake Shasta. This is generally shown in the modeled temperature in Reclamation's fourth scenario, which is attached to this letter.
- The SRSCs will make Dave Vogel available to coordinate with Reclamation and the fishery agencies, including real time monitoring and evaluation of the redds and emerging fry during the water season, to assist in fine-tuning operations, not just from a temperature control point, but based on the actual spawning and emergence which are the key indicators for the proper temperature regime.
- Pursuing water transfers to neighboring water districts with no surface supplies this year, as well as water suppliers in other parts of the state with important needs for water. We believe there are

scheduling benefits associated with transfers that can help with temperature management during April and May, while also helping with water demands later in the summer.

- Use of groundwater wells during the April-May period to supplement diversions from the Sacramento River.
- Glenn-Colusa Irrigation District (GCID) will work closely with refuge managers at the three National Wildlife Refuges (Colusa, Delevan, Sacramento) to re-time deliveries from April-May into the summer. The refuges serve in concert with the ricelands and managed wetlands within the SRSC's as the habitat and feeding grounds for the Pacific Flyway.
- Avoiding impacts to Folsom operations that are essential for Sacramento metropolitan area water supplies. This includes Sacramento and American River stages that are relied upon at the City of Sacramento intakes.

We are developing more detailed information with MBK Engineers and fisheries biologist Dave Vogel on all of these components, as part of our ongoing efforts to coordinate with Reclamation to serve multiple beneficial purposes in the Sacramento Valley.

We look forward to our follow-up meeting with you on April 2 and will forward information to you and your staff ahead of the meeting. Prior to that date, we expect that you will have received information back from the Sacramento River Temperature Task Group, which should further inform our discussions and allow for decisions to be made at this meeting. As we discussed, we need to provide information back to the SRSCs, which have water rights and represent thousands of landowners and 500,000 acres in the Sacramento Valley. As we discussed at the meeting, our timing is critical--we cannot understate the importance of moving forward this week with this plan and the significance of maintaining order in the Sacramento River system.

Please call Thad Bettner (530-934-8881) or Lewis Bair (530-437-2221) if you have any detailed questions. Thank you.

Sincerely yours,



President
David J. Guy

cc: SWRCB Members
Michael Lauffer
David Murillo
Ron Milligan

**Sacramento River Modeled Temperature
2015 March 90%-Exceedance Outlook
53 degree target at Shasta**

