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## State Water Resources Control Board

April 29, 2020

Kristin White  
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U.S. Bureau of Reclamation  
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### ORDER 90-5 SACRAMENTO RIVER TEMPERATURE MANAGEMENT PLANNING

Dear Ms. White:

This letter is regarding the U.S. Bureau of Reclamation's (Reclamation) April 17, 2020 letter to the State Water Resources Control Board (State Water Board) responding to the State Water Board's April 3, 2020 letter regarding Sacramento River temperature management planning pursuant to Water Rights Order 90-5 (Order 90-5). As you are aware, the State Water Board's April 3, 2020 letter indicated that an evaluation of additional Sacramento River temperature management scenarios should be provided with the April draft Sacramento River Temperature Management Plan. Our April 3 letter also indicated that we would provide a two-week public comment period on the draft Temperature Management Plan and alternate scenarios. Reclamation submitted an initial draft Temperature Management to the Sacramento Temperature Task Group (SRTTG) on April 23, 2020 and plans to submit an updated version at the end of April based on input from the SRTTG.

Order 90-5 requires Reclamation to operate Shasta Dam and Keswick Dam to meet a daily average water temperature of 56 degrees Fahrenheit (F) on the Sacramento River at Red Bluff Diversion Dam (RBDD) when higher temperatures would be detrimental to the fishery, unless factors beyond Reclamation's "reasonable control" prevent Reclamation from maintaining 56° F at RBDD. If there are factors beyond Reclamation's reasonable control, Order 90-5 permits Reclamation to identify a new compliance point within Reclamation's reasonable control at which to manage water temperatures. In order to meet temperatures at an alternate compliance point, Reclamation must file an operation plan showing [Reclamation]'s strategy to meet the temperature requirement at the new location. If the State Water Board's Deputy Director for Water Rights (Deputy Director) or Executive Director does not object to the change, then Reclamation may operate to meet the temperature requirement at the new location.

In determining whether to approve an alternative compliance location and associated operation plan, the State Water Board must evaluate the extent to which Reclamation

E. JOAQUIN ESQUIVEL, CHAIR | EILEEN SOBECK, EXECUTIVE DIRECTOR

can reasonably control water temperatures, taking into consideration a variety of controllable and uncontrollable factors, including cold-water storage conditions, projected inflows to Shasta Reservoir, ambient air temperatures, and Shasta Project operations, including the timing and volume of releases from Keswick Dam for water supply deliveries and other purposes, and operation of the temperature control device in Shasta Dam. The Deputy Director may also be advised by any “parties who believe that it is within the [Reclamation’s] reasonable control to meet the temperature requirement at a location different from the location [Reclamation] proposes...”

When Reclamation proposes a new compliance location, Order 90-5 states that “whether a particular factor is within [Reclamation’s] reasonable control depends on the specific facts and is a matter for the [Deputy Director] or the Board to decide...” (Order 90-5, p. 20.). Evaluating scenarios with different water supply delivery assumptions is necessary to inform the State Water Board’s consideration of the Temperature Management Plan, ensure that Reclamation develops a plan that satisfies Reclamation’s obligations under Order WR 90-5, and evaluates actions that are or could be within Reclamation’s “reasonable control.”

Reclamation’s April 17 letter claims that evaluation of additional scenarios within Reclamation’s control is inconsistent with Order 90-5, because Reclamation claims limited discretion regarding contract deliveries to senior water users and wildlife refuges. The State Water Board recognizes that Reclamation’s contractual obligations to the Sacramento River settlement contractors are unique because they claim to hold riparian and pre-1914 appropriative water rights, which are not subject to Order WR 90-5 requirements. However, evaluation of alternative operational scenarios with different water supply delivery assumptions is not inconsistent with Reclamation’s contractual obligations to the settlement contractors or their senior claims of right, provided that none of the operational scenarios evaluated involve a reduction in deliveries of natural flows to which senior water right holders may be entitled. During much of the temperature management season, releases from Keswick Dam are typically well above natural inflows to Shasta Reservoir, especially in a dry year such as this one, and therefore this is unlikely to be an issue. Moreover, it should be possible to structure the operational scenarios to ensure that releases are not reduced below natural inflows.

The scenarios included in the April 23 initial draft Temperature Management Plan provide less optimal conditions during the fall that could impact both winter-run and fall-run Chinook salmon. While Reclamation evaluated many scenarios in developing the initial draft Temperature Management Plan, those scenarios all included the same water supply operational assumptions. Also, despite this year being a Shasta Critical year at this point that would limit Sacramento River Settlement and south of Delta Exchange Contractors and refuges to 75 percent deliveries under their contracts, the initial draft Temperature Management Plan does not include or evaluate reductions in deliveries to those users.

To inform the State Water Board’s consideration of the Temperature Management Plan, Reclamation should evaluate a scenario that backs water up into storage in Shasta

Reservoir consistent with a Shasta Critical year in order to improve temperature conditions, particularly this fall, reduce concerns for redirected impacts to fall-run and spring-run Chinook salmon, and provide for improved carryover storage conditions going into next year. Reclamation should also evaluate a scenario for providing these improvements if the Shasta Critical Year determination changes and this water year is no longer a Shasta Critical Year, including a scenario in which temperatures during the fall are maintained at similar levels identified for the spring period (53.5 to 54.5 degrees F at Clear Creek on the Sacramento River). These scenarios should be provided with the draft Temperature Management Plan provided to the SRTTG on April 30 if possible, or shortly thereafter and not later than May 5, 2020. Having the additional scenarios will help inform relative tradeoffs between potential water supply and fishery impacts, as well as facilitate voluntary agreements among watershed stakeholders that seek to balance and minimize these impacts.

The State Water Board understands that these scenarios may not constitute Reclamation's proposed operations. If that is the case, Reclamation should explain why, so that the State Water Board can take that information into consideration. Long-term processes for evaluation of management actions within Reclamation's reasonable control should be part of the temperature management planning protocol discussed in the State Water Board's April 3 letter.

State Water Board staff looks forward to continuing to work with you to ensure compliance with Order 90-5. As indicated previously, the State Water Board strongly encourages voluntary measures where possible. Without the additional scenario analyses, the State Water Board is not able to fully consider what actions are within Reclamation's control, and other stakeholders (including fisheries agencies and other water right holders) will be unable to plan or modify existing plans in a manner that facilitates broad multi-party stakeholder solutions that could be jointly developed to address identified temperature issues later in the summer and fall. Unfortunately, the potential for such collaboration is minimized without the scenario analyses that Reclamation could provide.

If you have any questions regarding this letter, please contact Diane Riddle at [diane.riddle@waterboards.ca.gov](mailto:diane.riddle@waterboards.ca.gov). Please be aware that due to the public health concerns regarding the COVID-19 virus and the resulting pandemic, many Division of Water Rights staff are telecommuting; therefore, the best avenue of communication at this time is via email.

Sincerely,

*ORIGINAL SIGNED BY*

Eileen Sobeck

Executive Director

State Water Resources Control Board