



United States Department of the Interior

BUREAU OF RECLAMATION
Central Valley Operations Office
3310 El Camino Avenue, Suite 300
Sacramento, California 95821

IN REPLY
REFER TO:

CVO-100
WTR-4.00

JUN 28 2017

Mr. Michael Lauffer
Acting Executive Director
State Water Resources Control Board
P.O. Box 2000
Sacramento, CA 95812

Subject: Sacramento River Temperature Management for 2017

Dear Mr. Lauffer:

This letter describes the Sacramento River Temperature Management Plan (Plan) for Water Year 2017. The Plan represents our intended operations this year pursuant to Water Rights Order 90-5.

Reclamation's Plan consists of a compliance point at Balls Ferry, using 56°F daily average temperature (DAT) metric from May 15 through October 31. Our intended temperature management operation also includes an evaluation study targeting 53°F DAT at the Sacramento River-Clear Creek gaging station (CCR gaging station) during the same time frame. This acts as a surrogate location and temperature for 55°F seven-day average daily maximum at the most downstream winter-run redd. If redds become located farther downstream from the CCR gaging station, Reclamation will further discuss any potential changes to the operational study with the relevant agencies. The study is anticipated to run through 100% of winter-run emergence, but this topic may be reevaluated based on other considerations such as anticipated fall and winter releases, storage, cold water pool management, and fall run redd dewatering.

The Plan was formulated with input from Federal and State biologists and stakeholders. The Plan represents Reclamation's best effort to balance system-wide water demands and the seasonal river temperatures to be protective of winter-run Chinook salmon. As you are aware, appropriate management of the Shasta Reservoir cold water pool is important so that suitable spawning and egg/alevin incubation can be maintained in the Sacramento River during the summer and fall season for federally-listed endangered Sacramento River winter-run Chinook salmon and threatened Central Valley spring-run Chinook salmon. This is especially critical given poor conditions for winter-run Chinook salmon during the recent drought years. The Plan is also consistent with implementation of the Trinity River Restoration Program and management later in the year for river temperatures on the Trinity River.

The National Marine Fishery Service (NMFS) 2009 BiOp Reasonable and Prudent Alternative (RPA) Action I.2.4 requires Reclamation to submit a series of forecasts of Central Valley Project (CVP) operations and corresponding Sacramento River temperature modeling runs to NMFS for review and concurrence. In accordance with this requirement, Reclamation has provided several

sets of forecasts and temperature model runs and worked with NMFS during early spring 2017 to develop this Plan to protect the cold water pool in Shasta Reservoir. On March 17, 2017, Reclamation provided an initial forecast to NMFS (Enclosure 1). On March 21, 2017, NMFS concurred with Reclamation's proposed operation and initial water supply allocation (Enclosure 2). On April 12, 2017, Reclamation transmitted a clarification to NMFS regarding the intended operation for 2017 (Enclosure 3). On May 23, 2017, Reclamation provided the proposed Plan to NMFS (Enclosure 4). On June 1, 2017, NMFS concurred with the Plan (Enclosure 5), with further clarifications as outlined in an email exchange on June 23, 2017 (Enclosure 6).

Preliminary temperature operation modeling results were distributed at the April 27, 2017, Sacramento River Temperature Task Group (SRTTG) meeting, and have been updated at the May 25, 2017, and June 26, 2017 meetings. Reclamation solicited feedback from SRTTG members on the proposed operation and simulation results, and no comments were received. Operational release performance projections were based on two probabilistic hydrologic assumptions rather than fixed flowrates; actual release operations are expected to be within the specified ranges based on the hydrologic and operational considerations at that time. Results show end of September storage in Shasta Reservoir of about 3.3 million acre-feet. The suite of results indicated high likelihood of accomplishing temperature management and that partial side gate use of the Shasta Reservoir Temperature Control Device would begin between late August and early September.

This Plan was also presented to stakeholders and interested parties at public meetings held on April 25, 2017, and June 22, 2017, as a part of the outreach efforts associated with the process being undertaken by Reclamation and NMFS to review potential amendments to the Shasta Dam related components of the NMFS RPA. Input from stakeholders on the Plan and its implementation was solicited at these meetings.

Reclamation will continue to work through the SRTTG and with the various stakeholders in the implementation of the Plan this summer and fall. If you have any questions regarding this report, please call Mr. Jeff Rieker at 916-979-2197

Sincerely,

A handwritten signature in black ink, appearing to read "Ronald Milligan". The signature is fluid and cursive, with the first name "Ronald" being more prominent than the last name "Milligan".

Ronald Milligan
Operations Manager

Enclosures-3

cc: See next page.

cc: Continued from previous page.

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(w/encl to each)