

**From:** Milligan, Ronald [<mailto:rmilligan@usbr.gov>]

**Sent:** Friday, February 05, 2016 3:43 PM

**To:** Howard, Tom@Waterboards

**Cc:** ARROYAVE, PABLO; Murillo, D@USBR; Cowin, Mark@DWR; Leahigh, John@DWR; Grober, Les@Waterboards; Riddle, Diane@Waterboards; Stein, Russell@DWR

**Subject:** Re: Conditions of the December 18, 2015 Revised Order.

Hello Tom,

Pablo asked that I forward our status summary to you.

Ron

Reclamation is providing the following status summary in response to WR 2015-0043 Order (Order). The Order outlines a broad range of Central Valley Project (CVP) information intended to help plan for continued drought conditions. Reclamation has been working with the resource agencies and the stakeholders to compile meaningful data to help support productive water management decisions this coming year.

Conditions have steadily improved since early December 2015, and the long-range forecasts continue to suggest wetter than average precipitation for the next several months. This situation is certainly welcome news, but it does present a unique set of challenges as the system recovers from the extended and severe drought conditions.

In light of the quickly changing hydrologic conditions, and the time and resource demands of real-time Project operations, we are providing the following summary and timeline to focus our planning efforts over the coming months. In the interim, we plan to operate the CVP, in coordination with the State Water Project, to divert, store, and convey Project water consistent with applicable law, and we will continue to update the Board on a monthly basis.

**Sacramento River Operation Outlook (3.a), Sacramento River Temperature Modeling Plan (3.c.iii), and 2015 Sacramento River Temperature Modeling Evaluation (3.c.iv)**

We are currently engaged in cooperative meetings with NMFS, FWS, CDFW and SWRCB staff to discuss and evaluate the process of developing Sacramento River temperature operations and temperature modeling. Meetings held on January 26, 2016 examined last year's operations outlook and development process, technical components of the temperature model, limitations of data collection and model input, and limitations due to forecasted predictions. On February 5, the group met to further review and evaluate the temperature modeling process and data sets used. Further meetings will help better refine the process to share information over the coming temperature management season. A summary report of these review activities should be available in mid-April 2016.

Monthly operational outlooks (February through June) at one or more levels of percent runoff exceedance will be developed and distributed as part of the Drought Contingency Plan (DCP) updates. When hydrology data is available and processed in the month of February, a Keswick 90% runoff exceedance release schedule will be submitted to address NMFS RPA Actions and will be part of the February update to the DCP. A more-detailed Temperature Management Assessment (based on the most current hydrologic and cold-water pool conditions) is expected April 1, 2016 to address NMFS RPA Actions and will be re-evaluated monthly. Per WR 90-5 requirements, we plan to submit a Temperature Management Plan to the SWRCB by June 1, 2016. We anticipate Sacramento River Temperature Modeling cooperative meetings to continue in the near term fulfilling communication of information and evaluation requests.

**American River Operation Outlook (4)**

We previously submitted, as part of the 2016 Drought Contingency Plan, an operational outlook for the American River. Through January, the conditions in the American River basin have improved significantly. Monthly operational outlooks at one or more levels of percent runoff exceedance will be developed and distributed February through June. As of February 1, 2016 we are confident future outlooks will indicate storage conditions in excess of 200 TAF at the end of October 2016. A Temperature Management Plan for the

American River is expected May 1, 2016, to address NMFS RPA Actions and will be re-evaluated monthly.

### **Stanislaus River Operation Outlook (5)**

Monthly operational outlooks at one or more levels of percent runoff exceedance will be developed and distributed January through June as part of updates to the Drought Contingency Plan. For 2016, we are working closely with the Water Districts supplied by the Stanislaus River to achieve the NMFS Biological Opinion RPA Actions minimum flow requirements through the year on the Stanislaus River. Snow accumulations in the Central Sierra Nevada continue to track at near normal levels.

Temperature and New Melones storage expectations will be discussed during the scheduled monthly Stanislaus Operations Group (SOG) meetings, and we are coordinating with the local Water Districts regarding their expected upstream operations and their views on projected river temperatures. A key decision point will be just prior to the anticipated spring pulse flow (likely in April). We are also working with the Local Water districts on coordinated operations (both upstream and Tulloch Reservoir) and to assess river conditions over the coming season.

Water Year 2015 Stanislaus River operations, storage conditions, and temperature performance are captured in the following report:  
<http://deltacouncil.ca.gov/sites/default/files/2015/10/Item%205%202015%20SOG%20Annual%20Report%20with%20Attachments.pdf>.

#### **Timeline:**

Monthly Updates to the DCP Operational Forecasts – the 20th of each month (Feb-Jun)

Preliminary Sacramento River Temperature Assessment – 25 March

Sacramento River Temperature Model Evaluation – mid-April

Sacramento River Temperature Plan – early May

Stanislaus River Operations Outlook – mid-May

## American River Temperature Plan – early June

On Tue, Feb 2, 2016 at 10:40 AM, Howard, Tom@Waterboards  
<[Tom.Howard@waterboards.ca.gov](mailto:Tom.Howard@waterboards.ca.gov)> wrote:  
Pablo,

Thank you for letting me know.

Sent from my iPad

> On Feb 1, 2016, at 3:12 PM, ARROYAVE, PABLO <[parroyave@usbr.gov](mailto:parroyave@usbr.gov)> wrote:  
>  
> Good afternoon Tom: as you know there are several reporting requirements in the subject order  
for the projects over the coming months. Per Condition 2, the projects did submit the first  
drought contingency plan on January 15th, 2016. In addition, we are diligently working to  
substantively comply with the other conditions.  
>  
> Specifically, submittals to meet Condition 3(c) and Condition 4 are due today, February 1,  
2016. We are pulling together all relevant information now and are on track to make our  
submittals NLT Wednesday, February 3rd.  
>  
> Our February 3rd submittal will include the following:  
> 1. As much of the requested information as exists at this time.  
> 2. A detailed timeline to ensure substantial compliance under the order.  
> 3. Details on how we believe we can meaningfully comply with the order and justification for  
proposed deviations of the precise details documented in the order.  
>  
> We appreciate you and your staff's patience as we work through the challenges of another  
trying year. Please let me know if you have any questions. Thanks  
>  
> --  
> Pablo R. Arroyave  
> Mid-Pacific Deputy Regional Director  
> 916-978-5010