From:	Barbara Byrne - NOAA Federal <barbara.byrne@noaa.gov>
Sent:	Monday, May 13, 2019 9:50 AM
To:	Derya Sumer
Cc:	Russ Callejo; J. Stuart; White, Kristin N
Subject:	DCC and OMR restriction assumptions in ROC CalSim modeling

Derya -- I want to check-in on a few CALSIM modeling points, to be sure I am correctly understanding the assumptions for the PA.

1. **DCC - part I:** Is it correct that the DCC "rules" are the same for both COS and PA, but that underlying changes in, e.g. flows, may result in different modeled DCC operations? I saw some results late Wednesday (right after our meeting) that showed different DCC ops in the PA vs. COS in the fall -- was thinking that maybe higher flows in one scenario triggered gate closure to avoid scour?

2. **DCC - Part II:** In terms of December/Jan DCC ops, do the CALSIM DCC rules include any potential opening for WQ purposes in either the COS or PA? If so, can you confirm that the rules are the same in each scenario, and thus that the CALSIM modeling is not sensitive to the proposed changes in DCC ops in Dec-Jan?

3. **OMR real-time restrictions:** Is it correct that the COS scenario includes some operational assumptions about OMR restrictions based on agreements on how to model the RPA? Is it correct that the PA scenario includes some operational assumptions about OMR restrictions based on some predictions of when they might be in effect (e.g. some turbidity bridge and OMR storm flex and salvage/loss threshold triggers)?

My understanding is that CALSIM exports in both the COS and PA scenario are modeled in a way assuming some real-time OMR restrictions. In the real-world, its possible that exports (and associated OMR) might be higher or lower than modeled exports based on specific regulatory circumstances and observed losses at the export facilities. However there are a few specific instances in which my interpretation is specifically that the PA description allows higher-than-modeled exports:
a. OMR storm flex events in the modeling limited to just 7 days/month at -6,000 cfs OMR (which months, if any, dependent on yeartype); PA doesn't restrict flex events in magnitude (other than max pumping capacity) or duration or yeartype.
b. April and May exports in all Above Normal and Below Normal years limited to maintain -3,500 cfs OMR level assuming salvage/loss threshold exceeded by April; in the real world I don't expect those trigger threshold to be exceeded in every AN or BN year and the PA would allow exports associated with -5,000 cfs OMR (assuming OMR offramp criteria not hit yet).

--

Barb Byrne
Fish Biologist
NOAA Fisheries West Coast Region
U.S. Department of Commerce
Office: 916-930-5612
barbara.byrne@noaa.gov
California Central Valley Office
650 Capitol Mall, Suite 5-100
Sacramento, CA 95814

Find us online
www.westcoast.fisheries.noaa.gov