TO: Randi Field, USBR
CC: Stanislaus Operations Group
FROM: Barbara Byrne, NMFS
RE: NMFS Determination re: Stanislaus pulse flow [NMFS OCAP BO Action III.1.3]

Via e-mail, 2/2/2010, 4:23pm PST

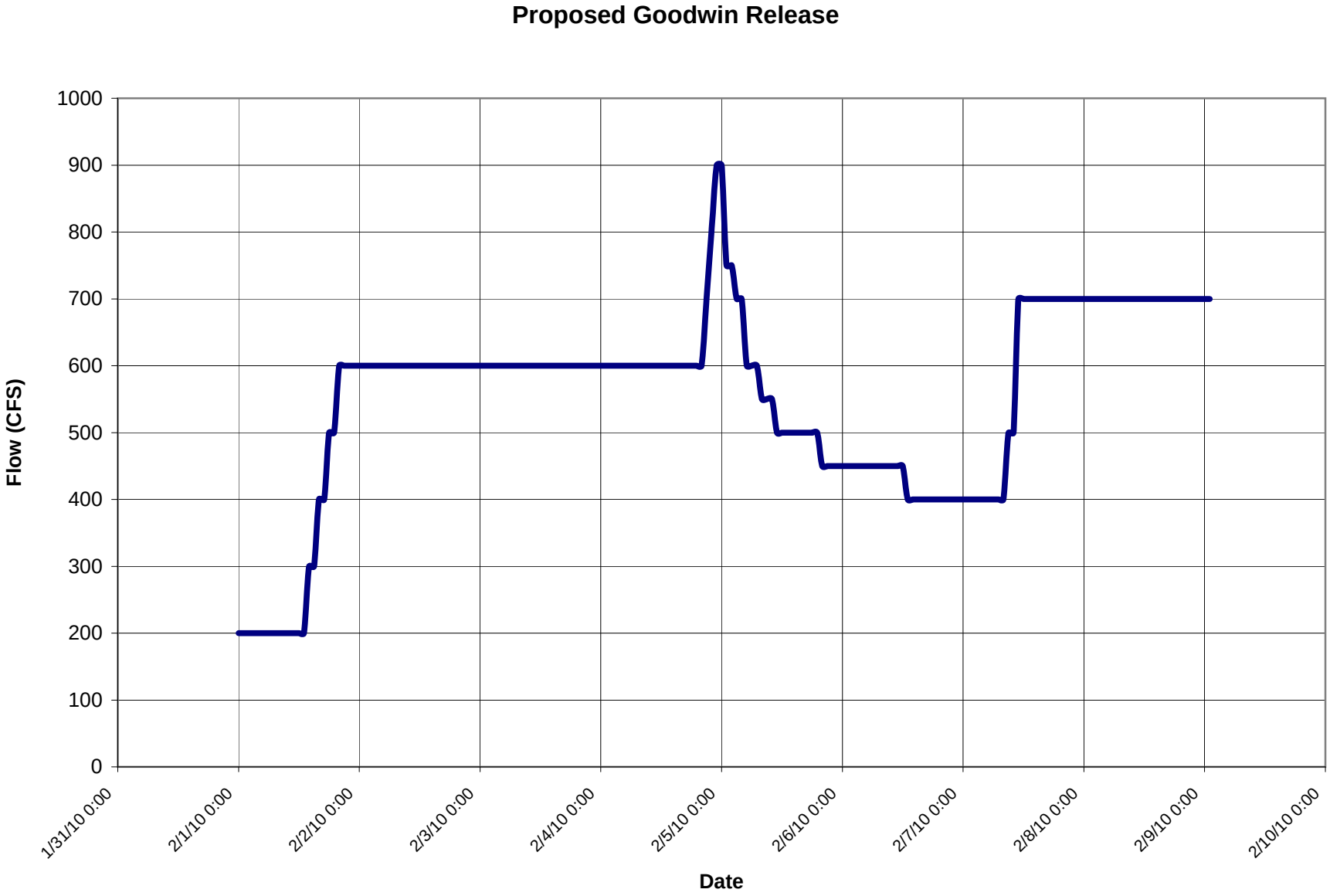
On Monday, February 1, the Stanislaus Operations Group (SOG) held a phone meeting to discuss the timing of the three day February pulse flow called for under the "Dry" yeartype schedule (Table 2) of Appendix 2-E of the NMFS OCAP Biological Opinion (NMFS OCAP BO): at least three days of flows of at least 400 cfs (releases measured at Goodwin Dam), against a "background" minimum instream flow of 200 cfs.

The SOG understands that the February pulse flow can be achieved using releases necessary to meet the Vernalis flow standard under D-1641.

The SOG advised (and NMFS recommended) that the pulse be scheduled during the first week of February. In response to additional e-mail discussion on the SOG e-mail list about the possibility of reshaping the pulse flow to more closely mimic the natural variability of the system, Reclamation has offered to reshape the pulse according to the attached flow schedule. The reshaped pulse flow has a higher, sharper, initiating peak and longer tail compared to the "step" pulse that would be created by ramping up to and down from a peak flow held steady for three days.

The proposed pulse (attached):
1. provides flows of at least 400cfs for at least three days,
2. meets the ramping rates summarized on page 784-785 of the NMFS OCAP BO,
3. is a closer representation of natural hydrographic variability associated with winter storm events, and
4. is able to provide the ecological benefits (hydrologic variability that may promote nutrient mobilization and provide cues that may promote anadromy in older juvenile Oncorhyncus mykiss) intended by this action in the RPA.

NMFS determines that the reshaped pulse is consistent with the RPA and we request that Reclamation operate to achieve the reshaped February pulse flow described in the attached spreadsheet.


Proposed Goodwin Release
Flow (CFS)
1000
900
800
700
600
500
400
300
200
100
0
1/31/10 0:00
2/1/10 0:00
2/2/10 0:00
2/3/10 0:00
2/4/10 0:00
2/5/10 0:00
2/6/10 0:00
2/7/10 0:00
2/8/10 0:00
2/9/10 0:00
2/10/10 0:00
Date