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**From:** Amanda Cranford - NOAA Federal <amanda.cranford@noaa.gov>  
**Sent:** Thursday, April 25, 2019 9:32 AM  
**To:** Marcinkevage, Cathy  
**Subject:** Fwd: PulseFlowProposal\_NMFS\_2018\_V3(1) (1)\_USBR edits - Invitation to edit  
**Attachments:** PulseFlowProposal\_NMFS\_2018\_V3(1) (1)\_TLB & DV edits\_jai.docx

Sorry the last attempt didn't work - spotty service up in Red Bluff... let me know if you need anything else.

----- Forwarded message -----

**From:** **Amanda Cranford - NOAA Federal** <[amanda.cranford@noaa.gov](mailto:amanda.cranford@noaa.gov)>  
**Date:** Thu, Mar 28, 2019 at 1:44 PM  
**Subject:** Fwd: PulseFlowProposal\_NMFS\_2018\_V3(1) (1)\_USBR edits - Invitation to edit  
**To:** Garwin Yip <[garwin.yip@noaa.gov](mailto:garwin.yip@noaa.gov)>

I believe this is the latest proposal - with Thad's suggested edits.

----- Forwarded message -----

**From:** **Thad Bettner** <[tbettner@gcid.net](mailto:tbettner@gcid.net)>  
**Date:** Wed, Mar 6, 2019 at 11:52 AM  
**Subject:** RE: PulseFlowProposal\_NMFS\_2018\_V3(1) (1)\_USBR edits - Invitation to edit  
**To:** Flora Cordoleani Malka... <[fcordole@ucsc.edu](mailto:fcordole@ucsc.edu)>  
**Cc:** [matt.johnson@wildlife.ca.gov](mailto:matt.johnson@wildlife.ca.gov) <[matt.johnson@wildlife.ca.gov](mailto:matt.johnson@wildlife.ca.gov)>, [jahnava.duryea@noaa.gov](mailto:jahnava.duryea@noaa.gov) <[jahnava.duryea@noaa.gov](mailto:jahnava.duryea@noaa.gov)>, [amanda.cranford@noaa.gov](mailto:amanda.cranford@noaa.gov) <[amanda.cranford@noaa.gov](mailto:amanda.cranford@noaa.gov)>, [cyril.michel@noaa.gov](mailto:cyril.michel@noaa.gov) <[cyril.michel@noaa.gov](mailto:cyril.michel@noaa.gov)>, [jeremy.notch@noaa.gov](mailto:jeremy.notch@noaa.gov) <[jeremy.notch@noaa.gov](mailto:jeremy.notch@noaa.gov)>, [jaisrael@usbr.gov](mailto:jaisrael@usbr.gov) <[jaisrael@usbr.gov](mailto:jaisrael@usbr.gov)>, [dvogel@resourcescientists.com](mailto:dvogel@resourcescientists.com) <[dvogel@resourcescientists.com](mailto:dvogel@resourcescientists.com)>, [ebuttermore@usbr.gov](mailto:ebuttermore@usbr.gov) <[ebuttermore@usbr.gov](mailto:ebuttermore@usbr.gov)>, johnson, [rachel@noaa.gov](mailto:rachel@noaa.gov) ([rachel.johnson@noaa.gov](mailto:rachel.johnson@noaa.gov)) <[rachel.johnson@noaa.gov](mailto:rachel.johnson@noaa.gov)>, Lewis Bair <[lbair@rd108.org](mailto:lbair@rd108.org)>

Hi Flora,

Thank you again for your willingness to share and consider our comments to your proposal. I have included comments from myself, Dave Vogel, and Josh Israel.

MBK is currently also looking at the water cost and should have something in the next couple of weeks.

I'm also including Rachel on the email since we discussed a presentation at the upcoming Sac Science workshop on spring pulses which relates to your proposal.

Lastly, we should discuss the need for the pulse this year given the high tributary and main stem Sac flows and the presence of spring run in the system into May. I'm guessing the high flows this year will meet the flow requirements or at least will move the fish out of the system in March and April.

Thanks,

Thad.

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Thaddeus L Bettner

Glenn-Colusa Irrigation District

PO Box 150

Willows, CA 95988

530.934.8881 (office)

530.588.3450 (cell)



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**From:** Flora Cordoleani Malka... (via Google Docs) [mailto:[drive-shares-noreply@google.com](mailto:drive-shares-noreply@google.com)]

**Sent:** Wednesday, February 13, 2019 3:58 PM

**To:** Thad Bettner

**Cc:** [matt.johnson@wildlife.ca.gov](mailto:matt.johnson@wildlife.ca.gov); [jahnava.duryea@noaa.gov](mailto:jahnava.duryea@noaa.gov); [amanda.cranford@noaa.gov](mailto:amanda.cranford@noaa.gov); [cyril.michel@noaa.gov](mailto:cyril.michel@noaa.gov); [jeremy.notch@noaa.gov](mailto:jeremy.notch@noaa.gov); [jaisrael@usbr.gov](mailto:jaisrael@usbr.gov); [dvoegel@resourcescientists.com](mailto:dvogel@resourcescientists.com); [ebuttermore@usbr.gov](mailto:ebuttermore@usbr.gov)

**Subject:** PulseFlowProposal\_NMFS\_2018\_V3(1) (1)\_USBR edits - Invitation to edit

[Flora Cordoleani Malkassian](#) has invited you to **edit** the following document:



## PulseFlowProposal\_NMFS\_2018\_V3(1) (1)\_USBR edits

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**Amanda Cranford**  
Acting Sacramento River Basin Branch Chief  
**NOAA Fisheries West Coast Region**  
California Central Valley Office  
650 Capitol Mall, Suite 5-100  
Sacramento, CA 95814  
Office: (916) 930-3706  
Cell: (916) 600-5410



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**Amanda Cranford**  
Acting Sacramento River Basin Branch Chief  
**NOAA Fisheries West Coast Region**  
California Central Valley Office  
650 Capitol Mall, Suite 5-100  
Sacramento, CA 95814  
Office: (916) 930-3706  
Cell: (916) 600-5410



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