From: J. Stuart - NOAA Federal <j.stuart@noaa.gov>

Sent:Tuesday, April 16, 2019 1:31 PMTo:Joe Heublein - NOAA FederalSubject:Re: CV steelhead I&S review

Got it Joe. Working on it right now. I have a few suggestions, such as being a little more explicit on the cumulative effects for each action region/section (PA stressors + baseline + cumulative effects = cumulative impact for each tributary, then roll it up with the additional impacts from migrating down the Sac or SJ rivers, then at the end add in the Delta effects to get the whole package). My logic is that we have tributary issues (Clear Creek, American River and other tributaries that must use the Sac river to get to the Delta) then we have issues with moving down the Sac River, then finally we have all of these fish hitting the Delta with its own set of issues. Same thing with the SJ River - Then if you are lucky (like winning the lottery) you make it alive to the ocean! I will send you a copy of the edited section in a separate document. I haven't added it to the ROC on LTO folders in case you don't agree with my edits or comments.

Jeff

On Tue, Apr 16, 2019 at 1:19 PM Joe Heublein - NOAA Federal < <u>joe.heublein@noaa.gov</u>> wrote: Hi Jeff,

Please add content wherever you see fit in the CV steelhead I&S review. I was in a major time crunch to get that done last Friday and it could probably use more detail especially in the critical habitat portion.

Also, I was thinking about discussing CV steelhead population trajectory since OCAP and no major beneficial operational changes in the PA as support for our conclusions. Not entirely sure how of if the hatchery populations in the DPS should be included. If you have anything to add on that topic it would be much appreciated.

Thanks

Joe

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Joe Heublein California Central Valley Office 650 Capitol Mall, Suite 5-100 Sacramento, CA 95814

Office: 916-930-3719 FAX: 916-930-3629 joe.heublein@noaa.gov

www.westcoast.fisheries.noaa.gov



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Jeffrey S. Stuart, M.S. *Fishery Biologist*

NOAA Fisheries West Coast Region U.S. Department of Commerce California Central Valley Office 650 Capitol Mall, Suite 5-100 Sacramento, CA 95814-4706

Office: 916-930-3607 J.Stuart@noaa.gov



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