From: Rosalie del Rosario - NOAA Federal <rosalie.delrosario@noaa.gov>

**Sent:** Friday, April 26, 2019 10:33 AM

**To:** Joe Heublein

**Subject:** Fwd: ROC LTO - draft winter-run I&S

fyi, here's my review on winter run draft...

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

From: Rosalie del Rosario - NOAA Federal < rosalie.delrosario@noaa.gov >

Date: Fri, Apr 26, 2019 at 9:33 AM

Subject: Re: ROC LTO - draft winter-run I&S

To: Brian Ellrott - NOAA Federal < <a href="mailto:brian.ellrott@noaa.gov">brian.ellrott@noaa.gov</a>>

Cc: Brown, Howard < Howard. Brown@noaa.gov >, Cathy Marcinkevage - NOAA Federal

<<u>cathy.marcinkevage@noaa.gov</u>>, Yip, Garwin <<u>garwin.yip@noaa.gov</u>>, <u>Susan\_Boring@fws.gov</u>< <<u>Susan\_Boring@fws.gov</u>>, <u>Barbara Byrne - NOAA F... (Google Drive) <barbara.byrne@noaa.gov</u>>

## Hi Brian,

Thanks for the draft. I offer preliminary comments on the draft winter run I&S section for your consideration. Main comments:

- 1) use regulatory language of "likelihood of survival" and "likelihood of recovery" (rather than extinction) in the risk to ESU section. I offer some suggestions for your consdieration.
- 2) how to present effects that are "uncertain" in the I&S tables. Probably shouldn't have uncertainty in the I&S tables given our effects analyses are based on assumptions we had to make in absence of information. For uncertainties with programmatic actions, we can describe our assumptions and note the uncertainties with programmatic actions may introduce additional risk to species.
- 3) double check in Tables that response of individuals and probable change in fitness are compatible.
- 4) suggest more explicit analyses of PBFs in the CH section.

Please let me know if you have any questions.

Thanks,

Rosalie

On Mon, Apr 22, 2019 at 2:03 PM Brian Ellrott - NOAA Federal < brian.ellrott@noaa.gov > wrote:

Hi Rosalie,

Here's a draft of the subject doc for your review. You'll see there is still a bit of a placeholder/text to incorporate related to Shasta Reservoir temperature management, but otherwise it is ready for review.

It's also saved here:

R:\Draft BiOp\2\_ESA\2.8-2.9 Integration and Synthesis and Conclusion

Thanks,

Brian

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## **Brian Ellrott**

Central Valley Salmonid Recovery Coordinator NOAA Fisheries West Coast Region U.S. Department of Commerce

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