From: Cathy Marcinkevage - NOAA Federal <cathy.marcinkevage@noaa.gov>

Sent: Friday, April 19, 2019 4:56 PM **To:** Sarah Gallagher - NOAA Federal

Cc: Garwin Yip - NOAA Federal; Howard Brown - NOAA Federal; Evan Sawyer - NOAA

Federal

Subject: Re: Location of Stressor Intro Review and comments

Thanks, Sarah!

I'm good with you continuing, at least until any items specific to your section come up. Evan is working on the LCM writeup so he's off the books for this for now. But Stephen will have some time I think and it would be great to get him engaged in helping out. I like the structure idea too. I'll try to take a look, but I say carry on!!

Cathy Marcinkevage

California Central Valley Office NOAA Fisheries West Coast Region U.S. Department of Commerce

Office: (916) 930-5648 Cell: (562) 537-8734

cathy.marcinkevage@noaa.gov

On Apr 19, 2019, at 4:39 PM, Sarah Gallagher - NOAA Federal < sarah.gallagher@noaa.gov > wrote:

I have completed my review of Kate and Stephen's stressor intro, and it is located here:

R:\Draft BiOp\2 ESA\Stressor materials\Stressor Intro Review

There are three documents. One each for Kate and Stephen's sections, and a document with some ideas and notes for the hatchery stressor section. Everything is in track changes.

I attempted to delete sections that had too much information, or were not pertainent, and noted or added information for ones that needed more.

After my review, I think the section would be more clear if for each stressor, we focused on this layout: 1) define the stressor; 2) identfy what causes it -either note specific examples or include everything from the divisions, and 3) state how it affects spring run, winter run, steelhead, sturgeon, where appropriate. It seems simpler to leave out information from baseline or status of species, and I tried to note those sections or delete. Also, it seems important to make sure we address stressors for all the species.

I can continue to work on this, and and make things more final-incorporate my edits or suggestions. Cathy/Evan, let me know after you take a look or need to discuss.

Sarah Gallagher | Fish Biologist

NOAA Fisheries | West Coast Region U.S. Department of Commerce 650 Capitol Mall, Suite 5-100, Sacramento, CA 95814 916-930-3712 | Sarah.Gallagher@noaa.gov