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

Sent:Thursday, April 18, 2019 11:25 AMTo:Sarah Gallagher - NOAA FederalCc:Garwin Yip - NOAA FederalSubject:Re: ROC LTO Stressor Intros

Yep, that sounds good. Thanks for jumping on it!

On Thu, Apr 18, 2019 at 11:07 AM Sarah Gallagher - NOAA Federal < sarah.gallagher@noaa.gov > wrote: Sounds good Cathy, my recap:

- review Kate and Stephen's stressor intros and address what I can
- send ideas for where to get info for stressor intros that don't have write-ups
- look in SOS for hatchery effects that we can use
- check in with you tomorrow afternoon

Sarah Gallagher | Fish Biologist

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On Thu, Apr 18, 2019 at 10:45 AM Cathy Marcinkevage - NOAA Federal <<u>cathy.marcinkevage@noaa.gov</u>> wrote:

Sarah --

Stephen and Kate divided the existing stressor intros, and here is the first cut of Stephen's part. Please take a look as a first review and feel free to address what you can (knowing that some things are out of your purview and that is fine). I won't be able to get to them until later Friday so this works great on timing!

Also note that he identifed a few that we don't have anything written up for (we combed CWF and the recovery plans as as start) so if you have ideas of where we could pull info from those, let's hear it!

I'll send Kate's, too.

Check in with me on progress tomorrow afternoon so that we can coordinate and don't have version control issues.

Sound good? Thanks! Cathy

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

From: **Stephen Maurano - NOAA Federal** <<u>stephen.maurano@noaa.gov</u>>

Date: Wed, Apr 17, 2019 at 12:21 PM Subject: Re: ROC LTO Stressor Intros

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

Cc: Kathryn Spear - NOAA Federal < kathryn.spear@noaa.gov >

Hi Cathy,

Here's a draft of the write up for the first half of the stressors: M:\Future Ops and Adaptive Mgmt\ROC_Temp\Stressor_Intros\Write Ups\ROC LTO Stressors 20190417 Stephen.docx

There were a couple of my sections that didn't have suggested language to draw from (flow / hydrologic alteration, loss of floodplain habitats). I didn't want to invest too much time writing new language before getting your feedback so those sections are both short, but I can easily expand or refocus them if you'd recommend it. Naseem might also reply with some suggestions for additional language to reuse regarding floodplains. There's also WaterFix language flagged that I thought wasn't necessarily relevant to ROC LTO, but you'd be a better judge.

I thought this was a good check in point, because everything is at least addressed at a basic level. If you have a chance to look at it, just let me know which sections you'd like added to, deleted, refocused, etc.

Thanks!

--Stephen

On Thu, Apr 11, 2019 at 11:44 PM Cathy Marcinkevage - NOAA Federal < cathy.marcinkevage@noaa.gov> wrote:

Hi guys --

Here's some info regarding the ROC LTO "Stressor Intros" that I'd like to have you help out with.

1. First, to see an example, go to the CWF BiOp and look at (not necessarily read!) pages 194-198, which is the start of section 2.5.1.1.3 Contaminant Exposure.

M:\CWF\FINAL BiOp\CWF Final BiOp.pdf

For each kind of "stressor" that may be caused by the project, we wrote up the latest science on the effects to and response of fish/the species as an introduction to that particular part of the analysis of effects of the project. After this intro, you'll see that it goes into the analysis of effects of project actions in terms of the exposure and risk posed to each species (in this case, first the potential contaminant-related effects of pile driving on p. 198, then barge traffic on p. 202, then geotechnical analysis on p. 206, etc.).

We need to get similar "stressor intros" together for the effects pathways/stressors that we identified for the ROC LTO. Good thing -- we have several from CWF! Bad thing -- we still need some more, I think.

2. We decided to use the stressors that have been identified in the recovery plans for CV salmonids and green sturgeon. I have a table of those here:

M:\Future Ops and Adaptive Mgmt\ROC Temp\Stressor Intros\Stressor Intros.xlsx

And you can see a list/some descriptions that Naseem/Barb put together at these locations: M:\Future Ops and Adaptive Mgmt\ROC_Temp\Stressor_Intros\Table-List of RP stressors - affected by ROConLTO.docx

M:\Future Ops and Adaptive Mgmt\ROC_Temp\Stressor_Intros\The primary stressor categories defined in the NMFS recovery plan.docx

3. The ROC LTO is split into geographic divisions, with a lead drafter for each. Each division is to have a table indicating which stressors they evaluated in their section (some are relevant, some aren't). I've put the current draft of each division in the directory below. Part of what I need you to do is check across all divisions to see which stressors we do and don't evaluate.

M:\Future Ops and Adaptive Mgmt\ROC Temp\Stressor Intros\Draft Effects Analysis Sections

4. We have some, and can pull some from other places. An initial excerpt from the CWF BiOp is here: M:\Future Ops and Adaptive Mgmt\ROC Temp\Stressor Intros\Stressor descriptions from CWF biop.docx

In the Excel table I created, I have noted some recon and possible other places to get info, including the CWF BiOp and the Green Sturgeon Recovery Plan.

Here's the recovery plan:

M:\Recovery Planning\FINAL GS Recovery Plan

5. What do we need? Your best shot at getting these checked against the tables, separated out into different files to be workable however you need, identified for what we need yet to write, perhaps reviewed for some currency (and i can help to funnel them to "specialists" in the office if we need), overall cleanup, insertion of references from EndNote, and general prepping!

I've set some time to check in on this, so take a scan through the docs, and we can talk through it. And of course feel free to ping me with questions at any point!

Thanks, and welcome to the ROC team! Free snacks.... Cathy

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Stephen Maurano

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