From: Hannon, John < jhannon@usbr.gov>
Sent: Thursday, March 14, 2019 2:28 PM
To: Cathy Marcinkevage - NOAA Federal

Cc: Barbara Byrne

Subject: Re: [EXTERNAL] Salmon Analysis Tools for ROC LTO

Thank you Cathy. Regarding the NMFS life cycle and IOS models, I'd like to use one or the other, at least initially, and not sure which. If the talk with the science center will help figure that out then I'd like to listen in. Or if you all have a preference then I'd go with what you recommend.

The format of the output in the IOS spreadsheet works great and if I use that my plan for winter-run would be to look at the change in preharvest ocean adults for each year between scenarios and then use that proportional change to apply to an estimate of annual ocean abundance over the 2001-2018 period (that's the period over which the records seem decent). The result would be the range of change in winter-run available to killer whale based on current fish numbers and amount of change from IOS. Steve Zeug says they can come up with ocean abundance but it will take a couple days of work or I'll calculate it myself using the escapement output.

The other runs, which are the bulk of the whale food, will take more steps...

John Hannon, Fisheries Biologist U.S. Bureau of Reclamation 801 I Street, Suite 140 Sacramento, CA 95814-2536 jhannon@usbr.gov 916-414-2413 office 916-206-4187 mobile

On Thu, Mar 14, 2019 at 11:58 AM Cathy Marcinkevage - NOAA Federal <<u>cathy.marcinkevage@noaa.gov</u>> wrote:

John --

Here are the results for DPM and IOS. We'll have results for the NMFS winter-run Chinook life cycle model on Monday. Actually, we'll be discussing with the science center on Monday at noon if you'd like to join -- let me know.

The SIT work is still outstanding, I found an issue in the DCC and HORB characterization in the time series files.

Hope this helps, let me know if you have any questions or need anything else --

Thanks,

Cathy

On Wed, Mar 13, 2019 at 6:58 AM Hannon, John < <u>jhannon@usbr.gov</u>> wrote:

Cathy,

Great thanks for this! Yes, here's what I'd like to get:

South Delta Survival if it gets usable.

Delta Passage Model Excel file.

Winter-run Chinook life cycle model (will use IOS instead for now or whichever you recommend)

I've already requested from the modelers to get excel files of the SacSalMort and Salmod results.

Thanks

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On Tue, Mar 12, 2019 at 5:04 PM Cathy Marcinkevage - NOAA Federal < cathy.marcinkevage@noaa.gov> wrote:

John --

Attached is a compilation of the different analytical tools that we have (or very soon will have) to support the ROC LTO analysis. We can provide you with any of these if you'd like a closer look as you move forward with the salmon analysis for support of SRKW effects analysis.

Hope this helps --

Thanks!

Cathy