From: Sent: To: Subject: Eric Danner - NOAA Federal <eric.danner@noaa.gov> Thursday, February 7, 2019 10:37 AM Harrison, Katrina Re: ROC on LTO Models

Hi Katrina,

Yes, it has been a while. I am guessing you have been very busy!

Lets talk about your ePTM needs. We ares still working on the ePTM revisions (the govt shutdown put us back quite a bit), so there would be some decisions regarding which version of the model to use.

And yes, please get the scenarios to us as soon as possible.

Thanks, Eric

On Wed, Feb 6, 2019 at 7:52 PM Harrison, Katrina <<u>kharrison@usbr.gov</u>> wrote: Hello Eric -

Long time no talk! I hope you are doing well.

We have completed CalSim, DSM2, and HEC-5Q modeling of the ROC on LTO proposed action, current operations, and without action scenarios. You can read more about them in our Biological Assessment, here: <u>https://www.usbr.gov/mp/bdo/lto.html</u>. I am going to be sending you the results and model files for all of these models hopefully tomorrow so that you can make sure the LCM has capability to model currently considered scenarios (i.e. for your information).

Separately, under our UCSC Life-Cycle Model contract Reclamation has with you, I believe (confirmation will come tomorrow) we'd like you to run the ePTM model for our proposed action and the current operations scenario. I believe we'll need to work on some more specific scenarios / hypotheses to work through with it, possibly also with Cathy, but I would be interested in your thoughts here. Our proposed action no longer has density dependent triggers, and instead operates to cumulative salvage thresholds at the end of the OMR season. We are slightly tweaking Delta Cross Channel gate operation to allow predictions of water quality exceedances, but as it is nearly the same as the current NMFS RPA we have it modeled in DSM2 the same as current. Despite the workshops (or maybe I'm just tired), I'm not sure exactly what we would want to use to do a comparison of current operations and our proposed action for Delta survival and salvage risk.

Thank you,

Katrina Harrison Bay-Delta Office Bureau of Reclamation Office: (916) 414-2425 Cell: (916) 606-8793 --Eric Danner, Ph.D. Supervisory Research Ecologist Fisheries Ecology Division, Southwest Fisheries Science Center 110 McAllister Way Santa Cruz, CA 95060 831-420-3917 http://swfsc.noaa.gov/