From: Sent: To: Subject: Eric Danner - NOAA Federal <eric.danner@noaa.gov> Wednesday, November 28, 2018 8:47 AM Garwin Yip Re: ROC on LTO needs

Hi Garwin,

Any updates on this? If it is going to happen, it takes some time to move the funds from NOAA to UCSC.

Thanks, Eric

On Tue, Oct 30, 2018 at 4:09 PM Garwin Yip - NOAA Federal <<u>garwin.yip@noaa.gov</u>> wrote: OK, got it.

No action yet. We have an internal meeting next Monday to scope our staffing and funding needs, etc.

Sent from my iPhone

On Oct 30, 2018, at 2:52 PM, Eric Danner - NOAA Federal <<u>eric.danner@noaa.gov</u>> wrote:

Sorry if that was not clear - I meant with \$100k we would have most things covered (inSalmo, egg mort modeling), but we could use extra funds for the temperature modeling. I was not sure what you wanted, a scope of work, budget...what should I prepare?

On Tue, Oct 30, 2018 at 2:17 PM Garwin Yip - NOAA Federal <<u>garwin.yip@noaa.gov</u>> wrote: Eric,

Did you intend to send an attached file? I don't see any numbers/dollars or efforts.

Sent from my iPad

On Oct 30, 2018, at 10:18 AM, Eric Danner - NOAA Federal <<u>eric.danner@noaa.gov</u>> wrote:

Hi Garwin,

I think we have most things covered (though I am sure there will be some surprises) with the exception of the temperature modeling and computational costs (such as running scenarios on the Amazon cloud in order to meet deadlines). How should we proceed? Would you like a budget/justification or SOW?

Thanks, Eric

On Fri, Oct 26, 2018 at 2:46 PM Eric Danner - NOAA Federal <<u>eric.danner@noaa.gov</u>> wrote: Hi Garwin, Yes. My main concern is that we currently do not have any funding for the temperature analysis, beyond what we do directly for the LCM (which is pretty limited). There is a high likelihood that the ROC scenarios will include a suite of factors that we do not currently address, such as using the Anderson adaptation of the Martin model.

I will put some thought into this and get back to you on Monday.

Thanks, Eric

On Fri, Oct 26, 2018 at 2:24 PM Garwin Yip - NOAA Federal <<u>garwin.yip@noaa.gov</u>> wrote: Eric,

As you know, based on our earlier conversation, that we're trying to frame up resource needs for the ROC on LTO consultation.

We have written down \$50K for basic assistance, and \$100K for ...more realistic assistance.

Do you need additional funding in order to help us through the analyses, e.g., inSalmo, CVTemp/RAFT, temperature-dependent egg mortality model, etc.?

-Garwin-

Garwin Yip

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