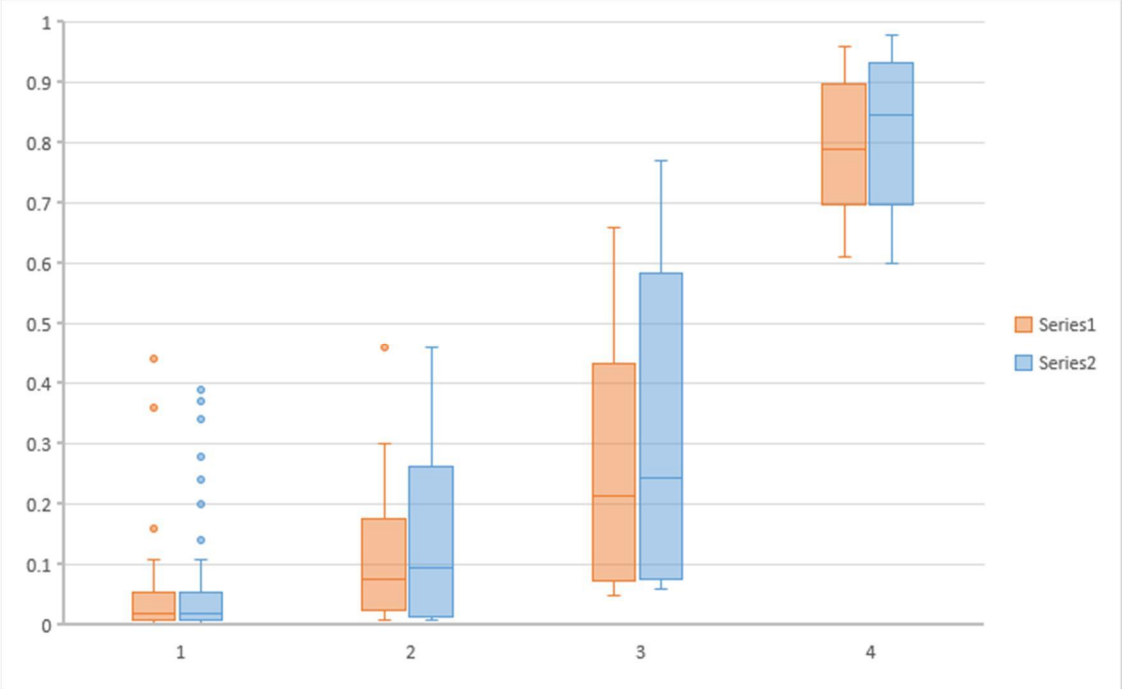
From: Evan Sawyer - NOAA Federal <evan.sawyer@noaa.gov>
Sent: Tuesday, April 23, 2019 9:23 AM
To: Cathy Marcinkevage - NOAA Federal
Subject: Re: Sac WUA Curves and Other Shasta Things

for what it's worth Miles provided the data for the TDM results and it's easy to produce figures like this:



that's weird(?), the data labels didn't copy and paste with the figure? Just says series 1 & 2? Well, orange is PA_Anderson and blue is PA_Martin. I still think this would be "easy" to produce.

Evan

On Tue, Apr 23, 2019 at 9:05 AM Cathy Marcinkevage - NOAA Federal <cathy.marcinkevage@noaa.gov> wrote:

> Awesome, thank you!!!!!
>
>
> > On Apr 23, 2019, at 7:56 AM, Evan Sawyer - NOAA Federal <evan.sawyer@noaa.gov> wrote:
> >
> > Hi Cathy,
> >
> > I think I've answered your questions or provided the relevant information.
> > (In the royal PURPLE!)
> >
> > Evan
> >
> > On Mon, Apr 22, 2019 at 11:51 PM Cathy Marcinkevage - NOAA Federal <

> cathy.marcinkevage@noaa.gov> wrote:
>
>> Evan --
>>
>> A few things that I could use your help in managing while you continue on
>> the LCM writeup:
>>
>> 1. Can you pull for me the WUA curve plots that should go into the Shasta
>> section? Your latest draft referred to one for fall-run (as SR proxy) and
>> steelhead, both for rearing.
>> See the first attached file. I consolidated the files that reclamation
>> sent to us with the revised WUA analysis (3/26/19) the available figures
>> are there.
>>
>
>
>> Also, for the WR plot that's already in the draft, it has:
>> Segment 6 w/ ACID boards
>> Segment 6 w/o ACID boards
>> Reach 5
>> Reach 4
>>
>> Any idea why there is reach AND segment? Are they supposed to be the same,
>> so we could pick one and be consistent? I want to assume that Segment 6
>> abuts reach 5, but with different names, that's not so clear.
>> I believe it should be segment (in earlier versions they were all
>> segments). I went and modified the figures accordingly.
>>
>
>
>> 2. Garwin and I had a brilliant idea. The Tier figure from Rec is soooooo
>> not to scale. We think someone should make one. So, for instance, to take
>> an example year and find the date of first redd and date of last redd and
>> adjust the plot to show when the lifestage-specific target would be
>> implemented. that I think should be *at least* 67 days. And unless the last
>> redd is observed by mid August, that 67 days woudl put them managing until
>> the end of Oct....which is what is typically called for anyhow..... Not
>> sure that that is how Reclamation is proposing to operate? Anyhow, we
>> thought this would be a good visual, and I thought that you could get
>> Stephen on this to help out. Garwin forwarded the following to me, we
>> thought that 2014 could be a good year to use.
>> Haven't looked at the files but sure I'll talk to Stephen about putting
>> this together.
>> PPT showing 2014 WR spawning, hatching, and incubation timing that we can
>> use as an actual example implementation of the Anderson model: M:\OCAP
>> related\OCAP briefing PPTs and presentations\2014-11-18 Fish Agency
>> presentation to the SWRCB
>>
>> 3. Can you point me to "Brycen's Memo to the record"?
>>
> There are two that I've been using:

> M:\WATER OPS & DELTA BRANCH\Brycen Swart\CVP and SWP Water Ops\Real Time
> Opss and RPAs\SRTTG\WY 2016\02 Sac River Temp Planning 2016\Shasta
> Operation Temperature Compliance Memo 03.18.2016.pdf
> or
> M:\WATER OPS & DELTA BRANCH\Brycen Swart\CVP and SWP Water Ops\RPA
> Amendment\2017-01-19 Enclosure 3--Shasta RPA Adjustment Admin Memo.pdf
>
> 4. Miles' work regarding spring pulses. I don't have his IEP presentation
>> to know what that it talking about. Can you send me that? And I was cc'd on
>> several email exchanges, but I'm not sure if on all. Can you check to see
>> if there was anything between him/you that I wasn't on that would be useful
>> for me to see? I'm trying to see how we best frame up that section and
>> knowing what we are trying to incorporate will help with that.
>> Yes. Attached. I looked through my emails and didn't find anything you
>> weren't included on but I went ahead and put the email chain in a pdf and
>> attached for your convenience(?).
>>
>
>
>> 5. In Table 2.5.2-12, for instance, we have Anderson and Martin results
>> for WR (a 6% increase in mortality for Anderson, and 9% for martin). Can
>> you point me to where those numbers come from (the BA?), and any other info
>> we have that provides the range around those numbers? Garwin made this
>> comment and I'm following up.
>> These numbers were provided by Miles/Eric after they were able to
>> "replicate" Reclamation's analysis and then identify TDM by Tier. I've
>> attached the summary analysis that Miles put together which has the numbers.
>>
>
>
>> 6. Similarly, Garwin had the following comment for Table 2.5.2-13:
>>
>> *Is the range of temperature-dependent mortality for a single operational
>> scenario within Tier 2, or based on the worst (or best) case scenario of
>> operations within that range of temperatures?*
>> No. The range is for Anderson (hatch) to Martin (emerge) models. The
>> numbers represent the mean for each model. Mile provided the range of each
>> model (graphically) in the attached PNG file, He also provided the data so
>> it would be easy to provide a range for each but I don't know what makes
>> sense, quartiles?
>> *Same question for the Tier 3 table.*
>>
>> Same answer but if the question is asking whether the number or range
> reflects different shutter configuration "within Tier 2 or Tier 3" I
> believe the answer is NO. The TDM results are based on the CalSim results
> and HEC5Q modeling but not the 5 example years where HEC5Q results were
> revised and which were presented on 3/12/19. I only point this out because
> Reclamation is proposing differing operations within a Tier but those are
> not presented.
>
>> Can you answer these for me, so that we can identify the assumptions going

>> into the model results reflected in this table?
>>
>> All for now.....
>> Thanks!
>> Cathy
>>
>> PS If you need to do mid-year prep, you can do it before this.
>> I haven't done anything related to my mid-year review.
>>
>>
>>
>
> --
> Evan Bing Sawyer,
> Natural Resource Management Specialist
>
> NOAA Fisheries West Coast Region
>
> U.S. Department of Commerce
>
> Office: (916) 930-3656
>
> Evan.Sawyer@noaa.gov <first.last@noaa.gov>
>
> www.westcoast.fisheries.noaa.gov
> <Day_Above_53_Summary_ROC_LTO_by_TIER.png>
> <WUA plots 3-26-19.xlsx>
> <Daniels_Miles_IEP_2019_For_USBR_K_Harrison.pdf>
> <Daniels_Sawyer discussion on spring pulse 4_10 - 4_19.pdf>
> <Summary_Stats_Days_Redd_53F_3_22_19.xlsx>

--
Evan Bing Sawyer,
Natural Resource Management Specialist
NOAA Fisheries West Coast Region
U.S. Department of Commerce
Office: (916) 930-3656
Evan.Sawyer@noaa.gov
www.westcoast.fisheries.noaa.gov