From: Cathy Marcinkevage - NOAA Federal <cathy.marcinkevage@noaa.gov>
Sent: Tuesday, March 26, 2019 9:10 AM
To: kharrison@usbr.gov
Cc: barbara.byrne@noaa.gov; rcallejo@usbr.gov; howard.brown@noaa.gov; garwin.yip@noaa.gov
Subject: Fwd: Discrepancy in SJR yeartype in CALSIM trend reporting tool and SIT model floodplain analysis?
Attachments: Untitled attachment 00106.html; SJR WYT comparison_Calsim reporting tool vs Stan floodplain results.xlsx

Katrina --

Please see Barb's questions about a potential year type discrepancy below. This is an urgent need as it affects our key milestone for effects analysis drafting completion this week.

Thanks,
Cathy

Cathy Marcinkevage
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NOAA Fisheries West Coast Region
U.S. Department of Commerce
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Begin forwarded message:

> **From:** Barbara Byrne - NOAA Federal <barbara.byrne@noaa.gov>
> **Date:** March 26, 2019 at 8:57:53 AM PDT
> **To:** Cathy Marcinkevage <cathy.marcinkevage@noaa.gov>
> **Subject: Discrepancy in SJR yeartype in CALSIM trend reporting tool and SIT model floodplain analysis?**
>
> Cathy, Please share the concern/questions described below with Katrina for help.
>
> **********
> Attached is an excel sheet comparing what I believe to be the modeled SJR yeartype from two sources:
>
> **Columns A & B.**
> File:
> Reclamation_ROConLTO_Trend_Reporting_rev17cy_DV3_ELTQ5_CALSIM__WOA11_COS6_PA5(woVSA)_011519
> Specific place in file: Column G of the "Conv_Flags" tab
>
> **Columns D, E, and F.**

File: Flood_Habitat_Tables_and_Plots_Stanislaus 3.15.2019 - Copy (which I believe is the SIT model output)
Specific place in file: Columns A-C of the "WY Type" tab

The SJR yeartype is based only on hydrology, so should be the same in all scenarios and all modeling summaries. I assume the modeled yeartype differs (in some years) from historical SJR yeartypes because the modeling is all based on the ELT Q5 climate change scenario.

Concern: There are 21 discrepancies in yeartype designation between the two sources (see attached for details). For example, 2001 and 2001 show as 4 ("Dry") in the floodplain workbook but as 5 ("Critical") in the Calsim "trend reporting" workbook. Those years were "Dry" in the real world.

Questions: I wonder if the yeartypes in the floodplain analysis are actual SJR yeartypes, rather than ELT Q5 yeartypes? If so, the summaries aren't quite right. **Can you please flag this to Katrina and ask about this discrepancy, and whether it might be an issue for all the floodplain analyses (I haven't checked the other watersheds)?**

Next steps: If, in fact, the real-world rather than modeled yeartype was used with the modeled flows, **I think it might be possible to quickly re-summarize results by updating the WY Type lookup table to match the ELT Q5 yeartypes. At a quick glance, all the summaries are automated and should cascade correctly. Please ask Katrina to check with her folks if that's correct;** if so, I should be able to fix it myself. If not easily fixable, I want to understand the discrepancy so I can correctly capture it in the record and note why I didn't use those results.

--

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