From: Wes Strasburger - NOAA Federal
To: Emily Fergusson - NOAA Federal

Cc: Piston, Andrew W (DFG); Fish, Teresa M (DFG); jim.murphy; Miller, Sara E (DFG); Priest, Justin T (DFG);

andrew.gray@noaa.gov; Howard, Kathrine G (DFG)

Subject: Re: 2024 SEAK pink salmon forecast

Date: Monday, September 11, 2023 3:06:24 PM

Attachments: <u>CombineData.R</u>

combined tide data.rds

**CAUTION:** This email originated from outside the State of Alaska mail system. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi All.

Attached is the R script I wrote to combine the time series of tidal data from Elfin Cove, as well as an rds file after the data had been combined. I looked at it a few different ways, but nothing has jumped out at me just yet.

## Wess

On Thu, Aug 31, 2023 at 1:01 PM Wes Strasburger - NOAA Federal <a href="mailto:wes.strasburger@noaa.gov">wes.strasburger@noaa.gov</a>> wrote:

The 13th works for me....

Correction, I had our new employee (Juliana Cornett) do the hard part of downloading the Elfin Cove tidal data (30 days at a time)... I did the much easier/quicker job of compiling all of it into one file... The Elfin Cove tidal station was the only one in Icy Strait with a long enough record to span all years from the SECM time series. Lucky for us, it is also in a pretty good spot to evaluate tidal movement in and out of Icy... I'll send a summary of what I've done so far in the near future so others have a chance to look at it. The two links I could see between the tidal data and juvenile salmon would be water flow and migratory dynamics and possibly changes to the mixed layer -> primary productivity with greater tidal movement?

Lastly, the purpose of investigating the tidal data is in response to a suggestion from an industry representative claiming they noticed a pattern in the tidal magnitude and pink salmon returns over time.

## Wess

On Thu, Aug 31, 2023 at 12:18 PM Emily Fergusson - NOAA Federal < <a href="mailto:emily.fergusson@noaa.gov">emily.fergusson@noaa.gov</a>> wrote:

Works for me.

On Thu, Aug 31, 2023 at 11:45 AM Piston, Andrew W (DFG) <a href="mailto:andrew.piston@alaska.gov">andrew.piston@alaska.gov</a> wrote:

That time works good for me.....

From: Fish, Teresa M (DFG) < teresa.fish@alaska.gov>

**Sent:** Thursday, August 31, 2023 11:43 AM

**To:** Piston, Andrew W (DFG) < <u>andrew.piston@alaska.gov</u>>; jim.murphy

<a href="mailto:sim.murphy@noaa.gov">; Wess Strasburger < wes.strasburger@noaa.gov">; Miller, Sara E (DFG) < sara.miller@alaska.gov</a>>; Emily Fergusson < <a href="mailto:emily.fergusson@noaa.gov">emily.fergusson@noaa.gov</a>>> Cc: Priest, Justin T (DFG) < <a href="mailto:justin.priest@alaska.gov">justin.priest@alaska.gov</a>>; <a href="mailto:andrew.gray@noaa.gov">andrew.gray@noaa.gov</a>;

Howard, Kathrine G (DFG) < <u>kathrine.howard@alaska.gov</u>>

Subject: 2024 SEAK pink salmon forecast

Hello Everyone,

It is time to get the ball rolling with this years SEAK pink salmon forecast. Would you all be available for a meeting September 13<sup>th</sup> at 3:30pm?

We would like to take some time to discuss to 2022 forecast and what may have contributed to the difference in observed forecast, as well as ways to move forward. Additionally, Wess has painstakingly compiled tidal data for the entire time series and we can discuss potential ways to incorporate and examine that variable in relation to the harvest.

Once we get critical mass (or determine a reschedule date) I can send out a Teams Meeting invite.

Thank you,

Teresa Fish | she/her

SEAK Pink and Chum Salmon Project Leader

Alaska Dept. of Fish and Game

2030 Sea Level Drive, Suite 205, Ketchikan, AK 99901

907-225-9677

## Emily Fergusson (she/her/hers)

Fishery Research Biologist Auke Bay Laboratories Alaska Fisheries Science Center, NOAA Fisheries 17109 Point Lena Loop Road Juneau, AK 99801 TEL 907-789-6613

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Wesley Strasburger, (he/him/his) Fishery Research Biologist Ecosystem Monitoring & Assessment

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Wesley Strasburger, (he/him/his) Fishery Research Biologist Ecosystem Monitoring & Assessment

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