

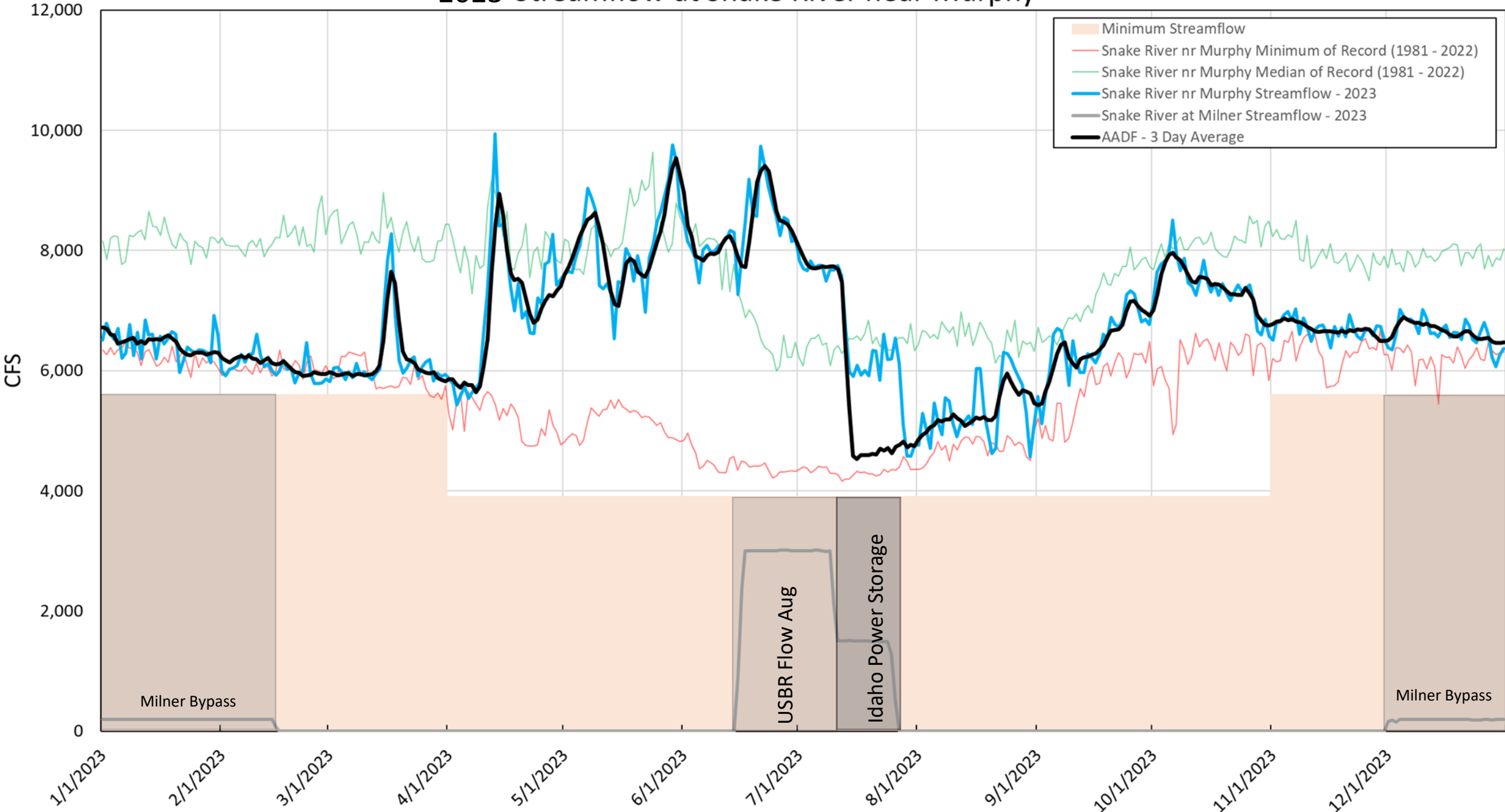
Swan Falls AADF Update

Ethan Geisler

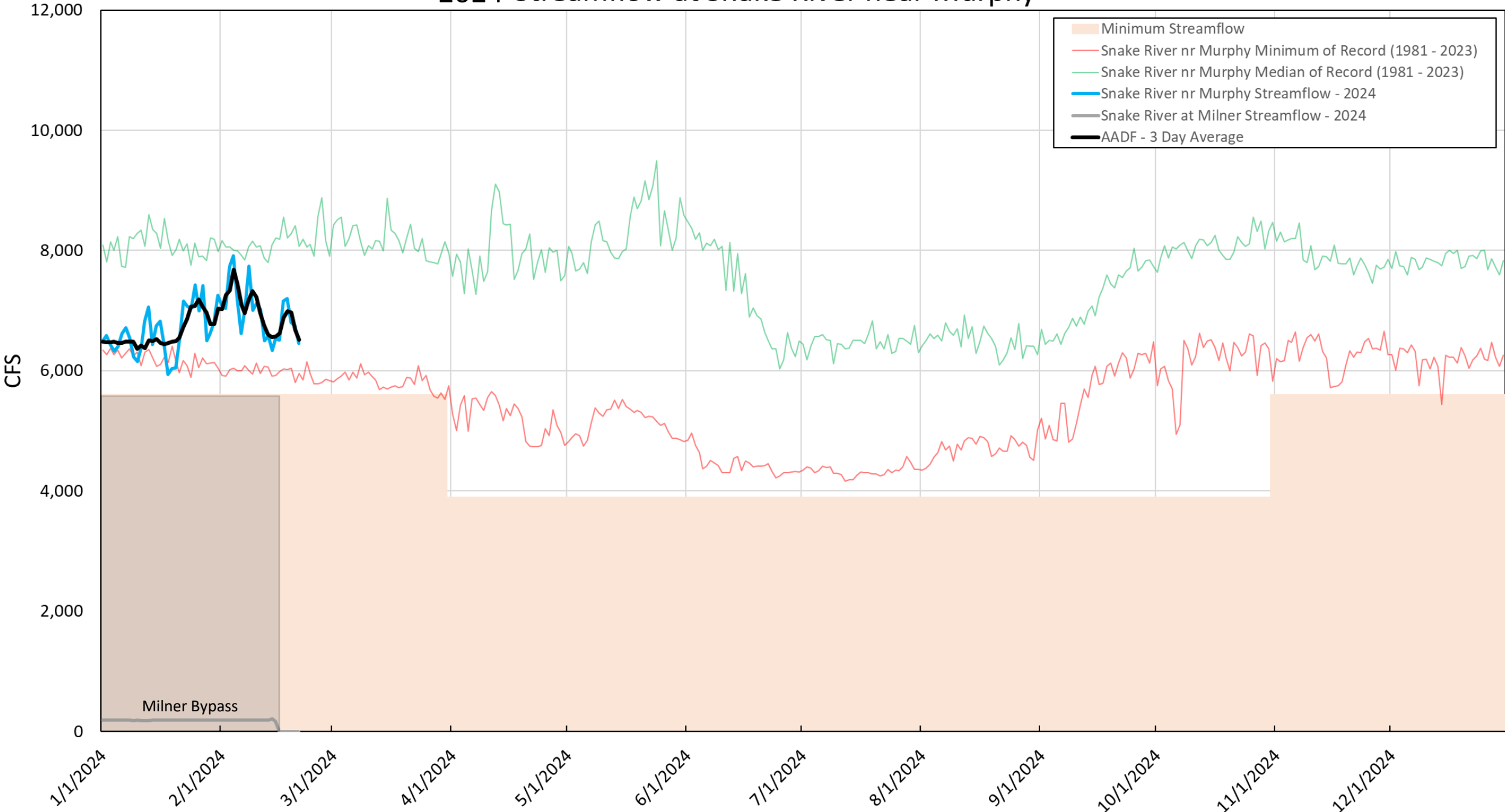
February 22nd, 2024



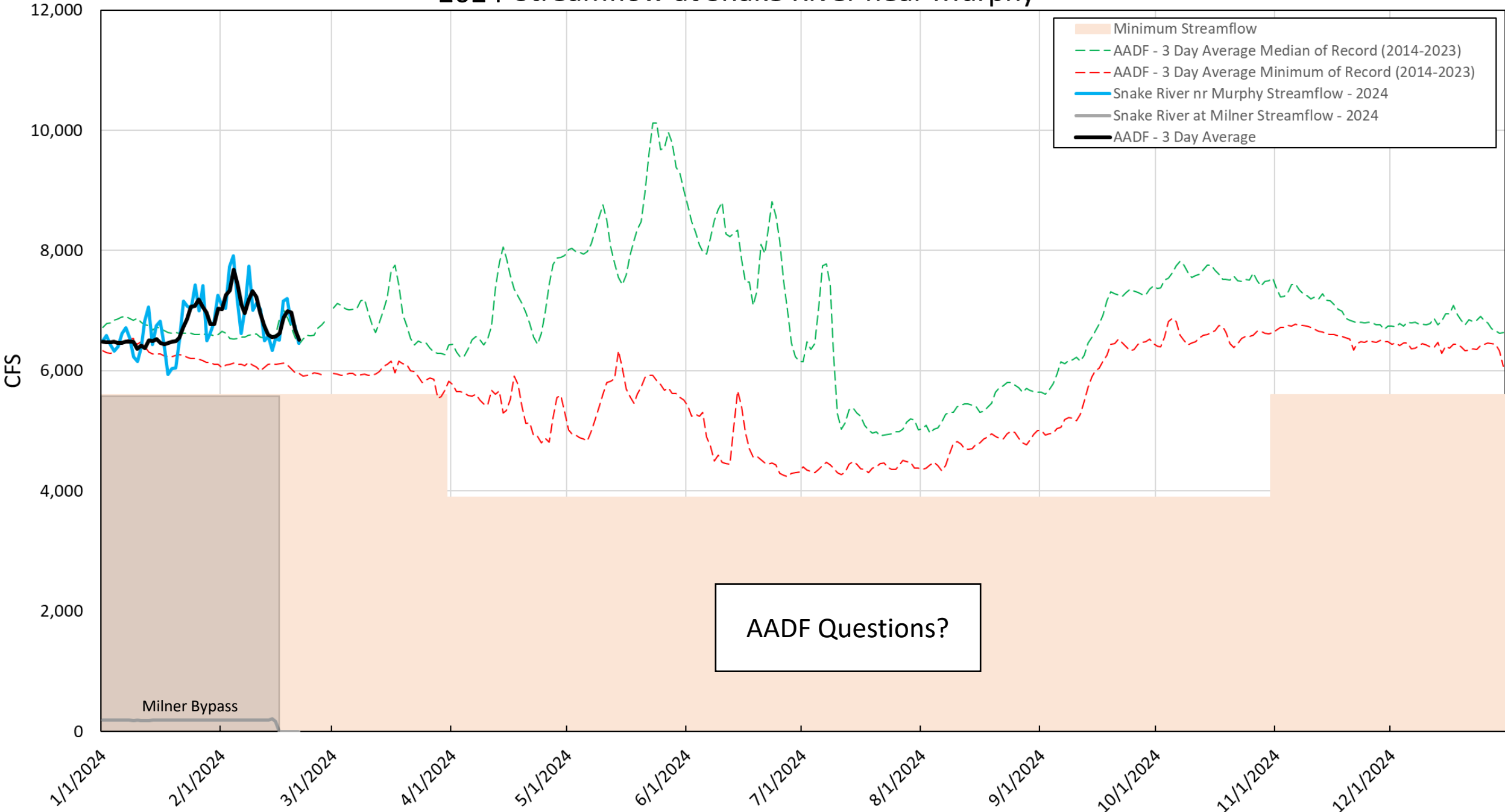
2023 Streamflow at Snake River near Murphy



2024 Streamflow at Snake River near Murphy



2024 Streamflow at Snake River near Murphy



Swan Falls Forecast Tool Update

Ethan Geisler

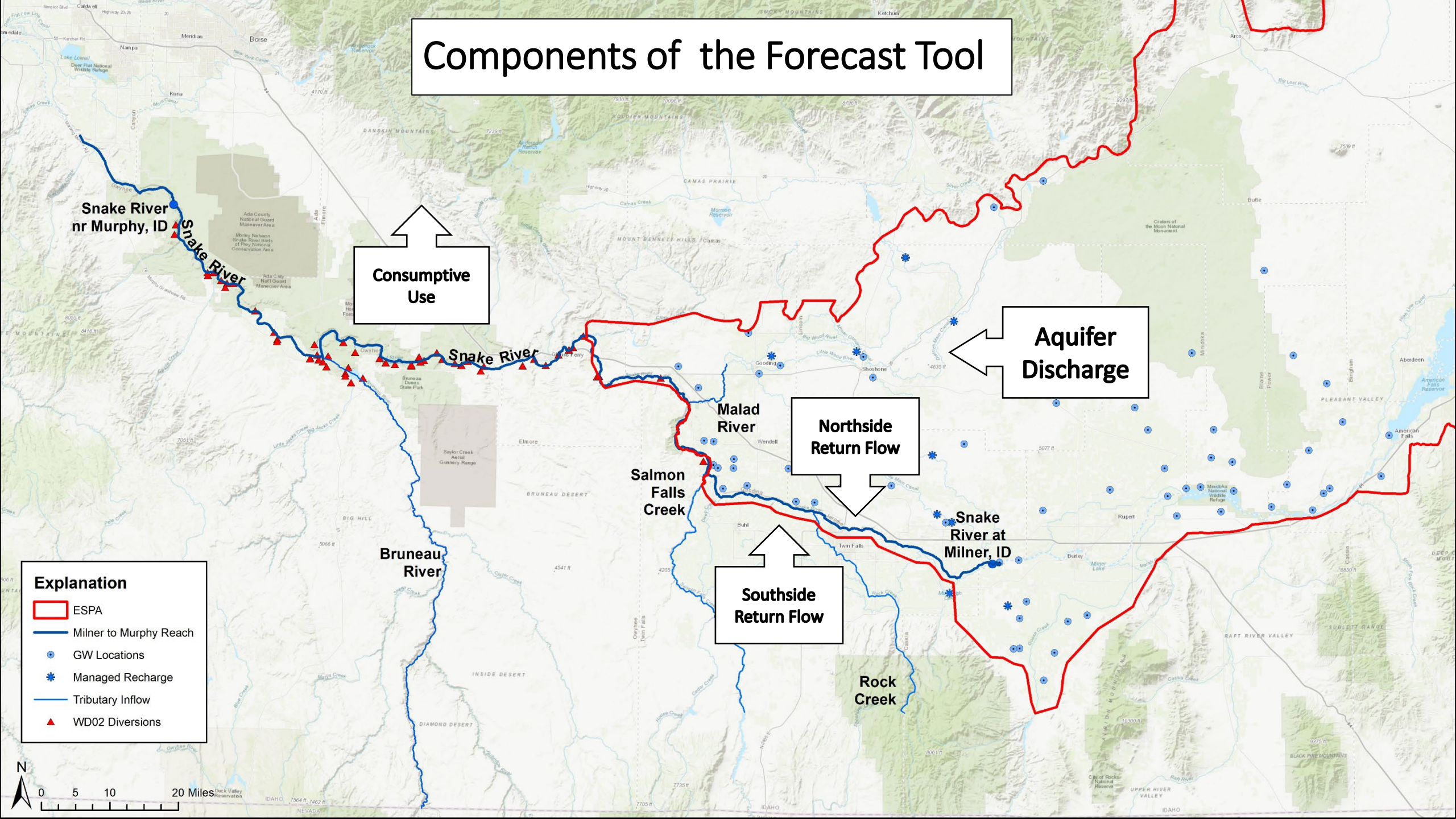
February 22nd, 2023



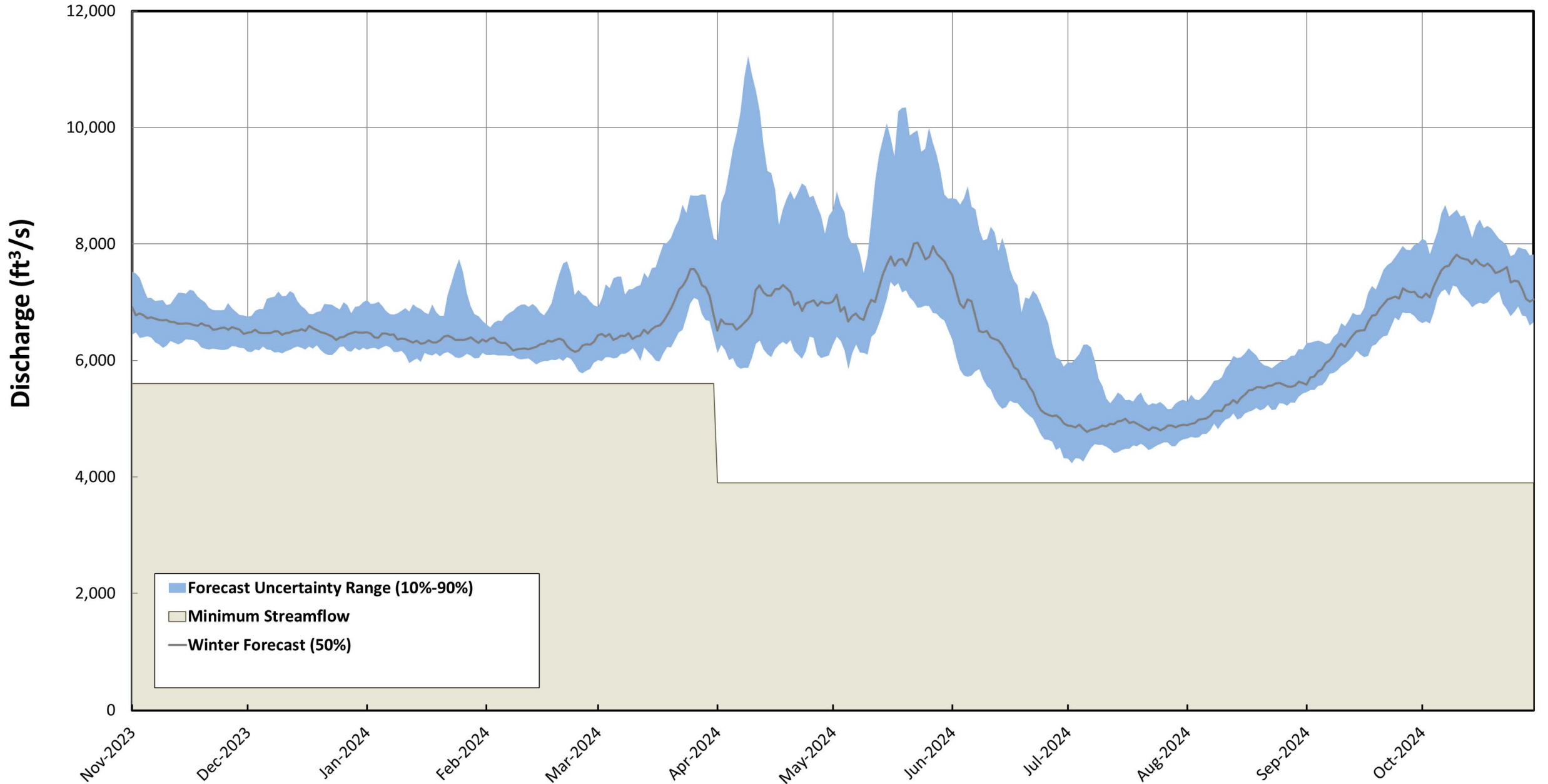
Swan Falls Forecast Tool

- Spreadsheet-based tool developed by CH2M Hill (Jacobs Engineering) in cooperation with IDWR and stakeholders
- Tool is used to forecast the reach gain for the Milner to Murphy reach during the low flow period in the summer
 - June through August
 - ESPA discharge is the main contributor to the reach during this time of year
- Winter and Spring forecasts – run twice a year

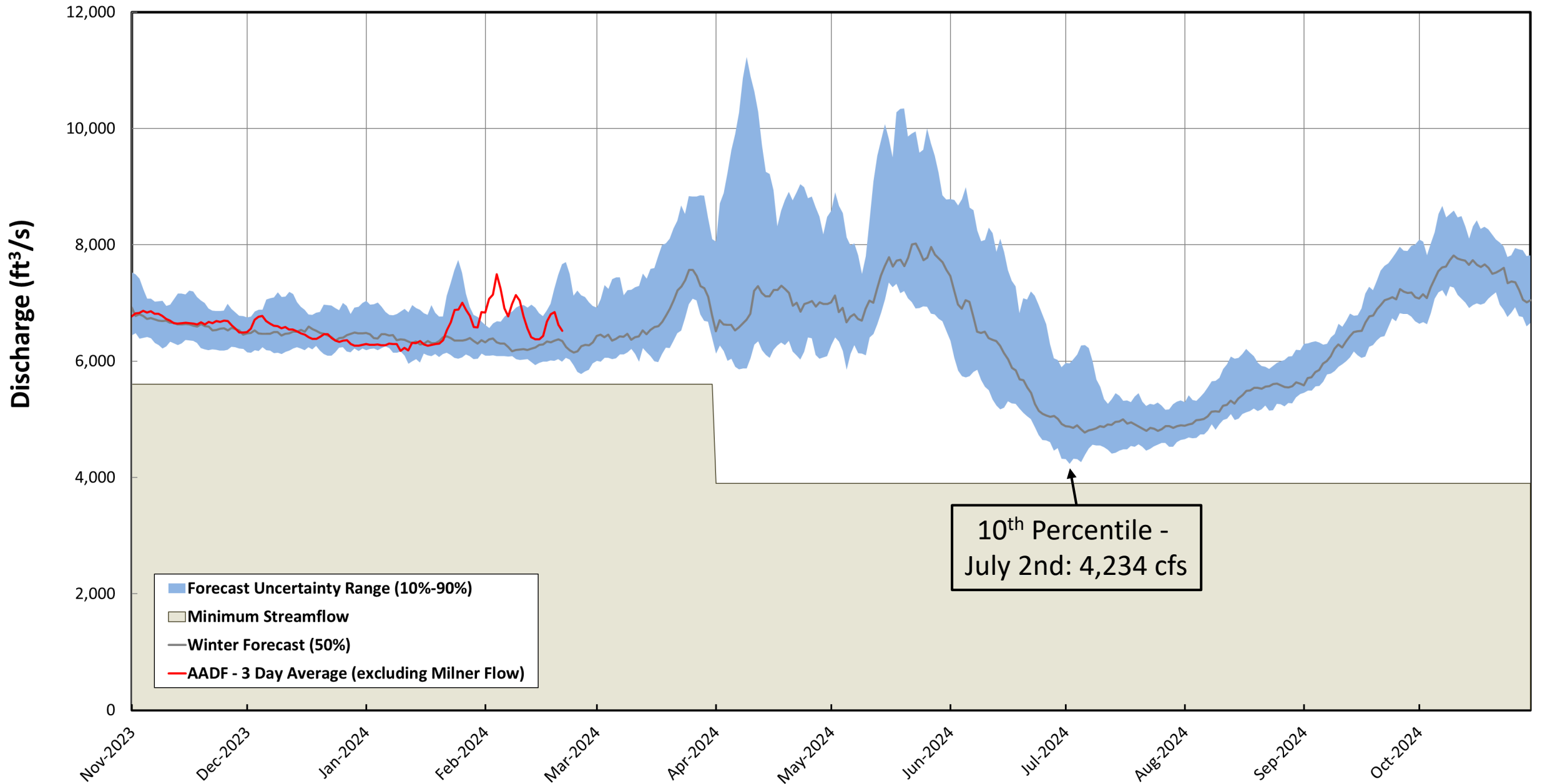
Components of the Forecast Tool



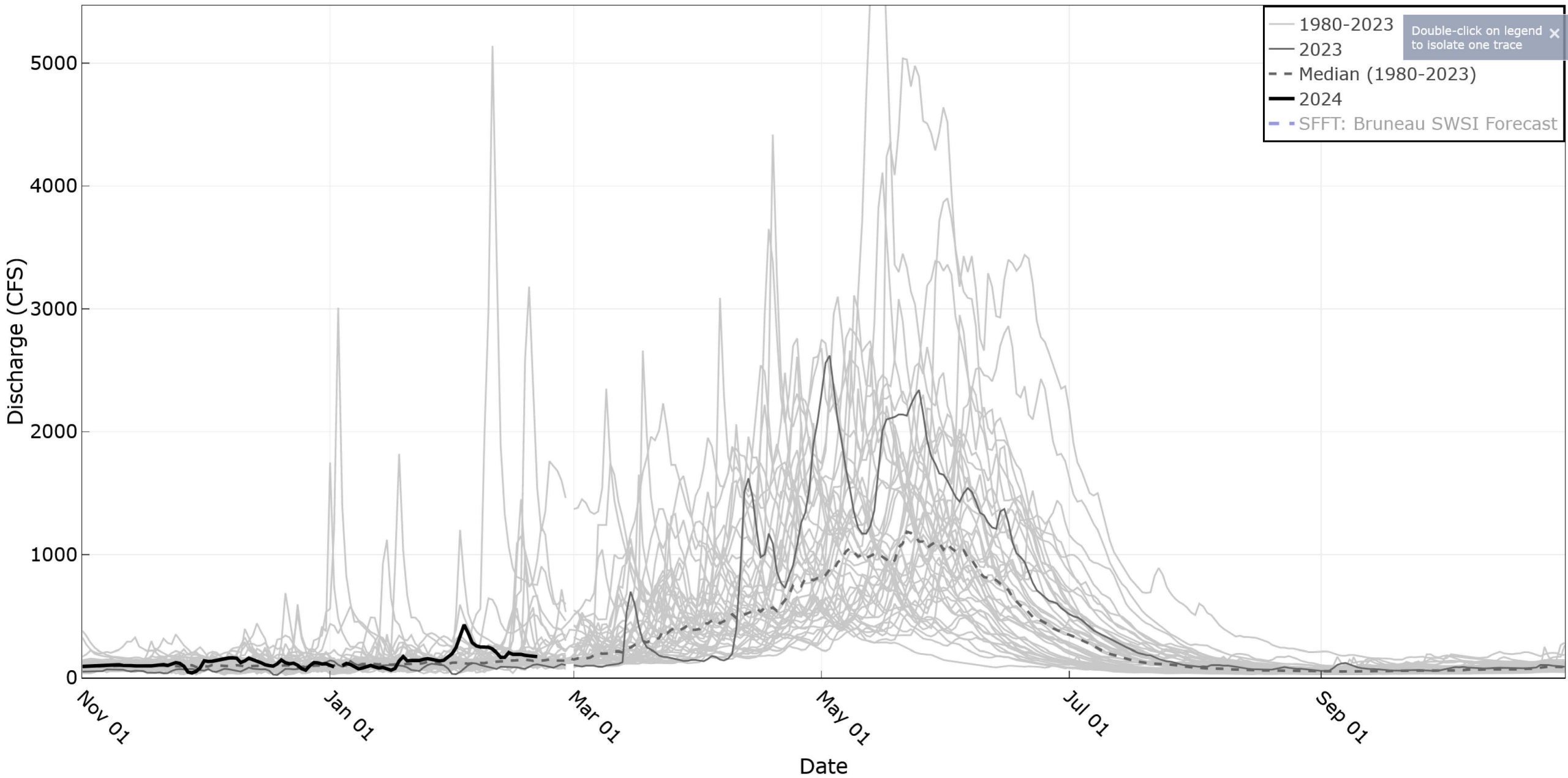
2024 Winter Forecast



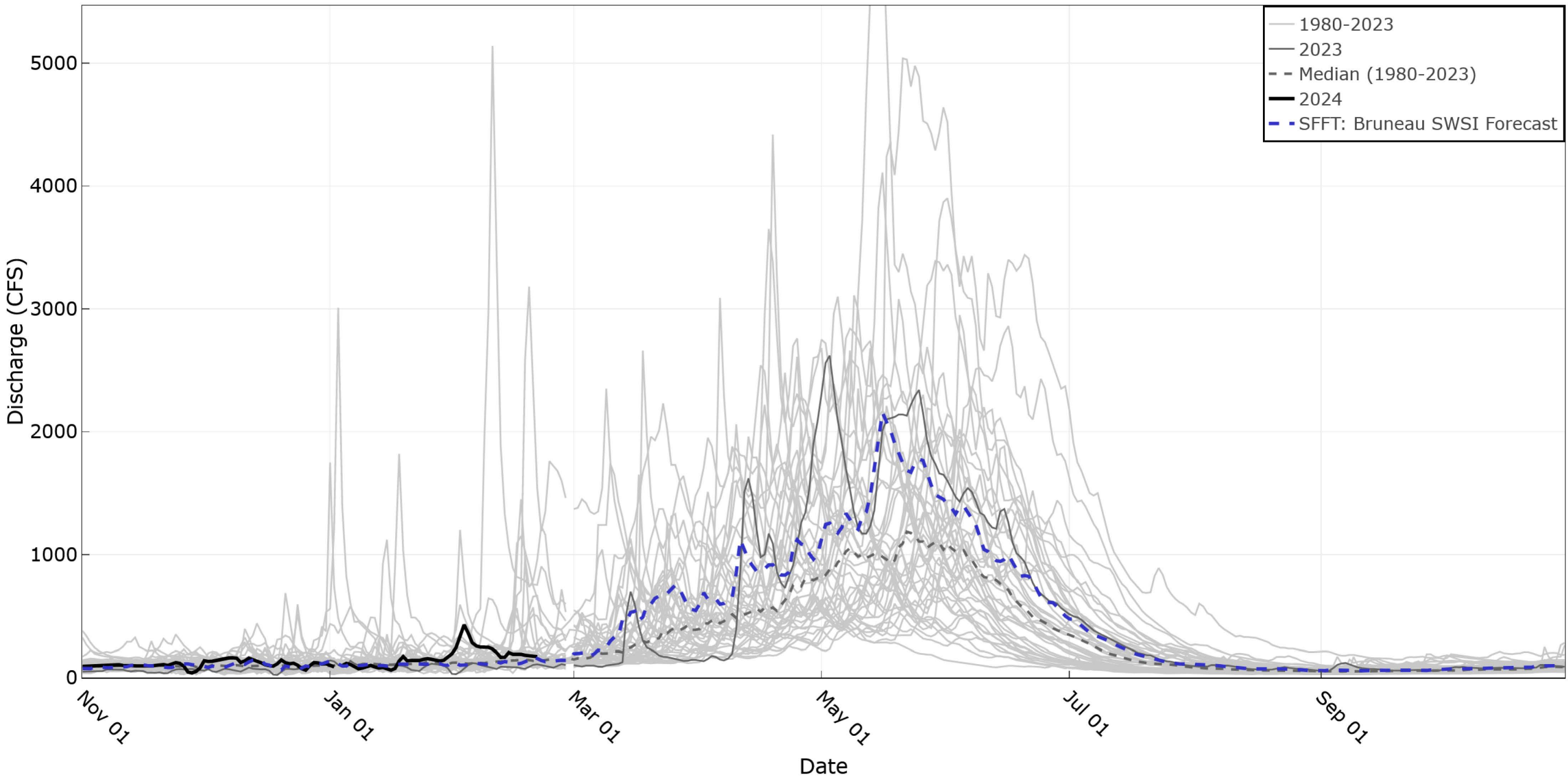
2024 Winter Forecast



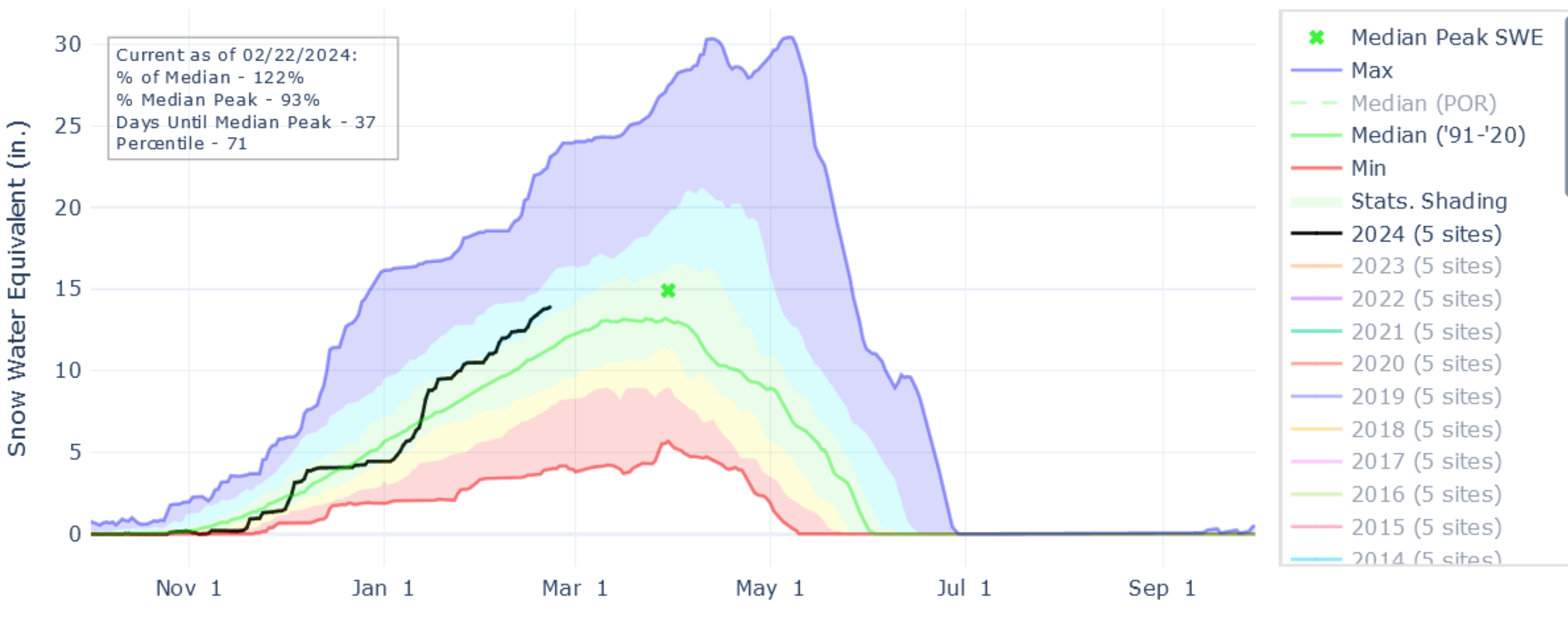
Bruneau River nr Hot Springs



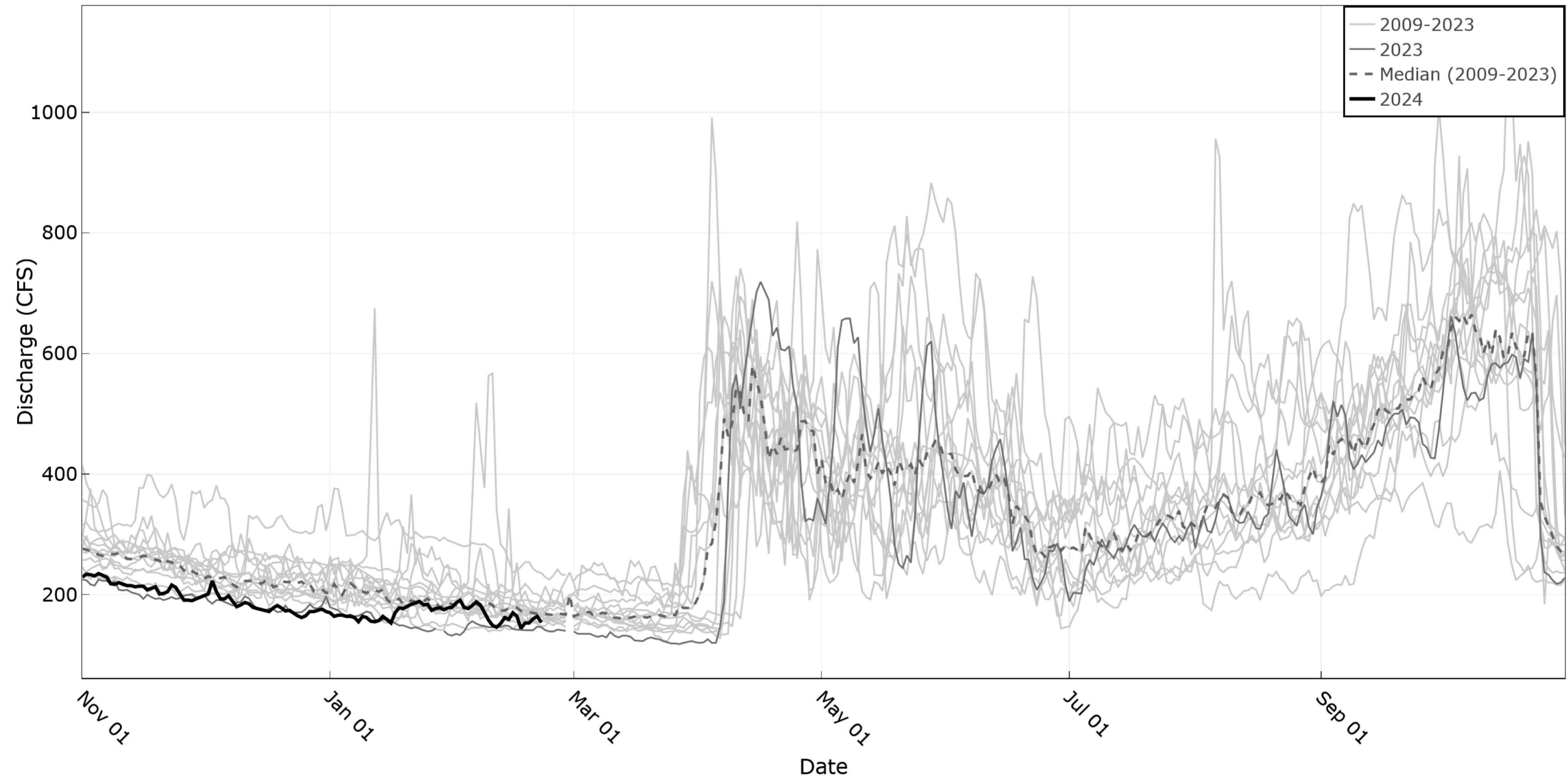
Bruneau River nr Hot Springs



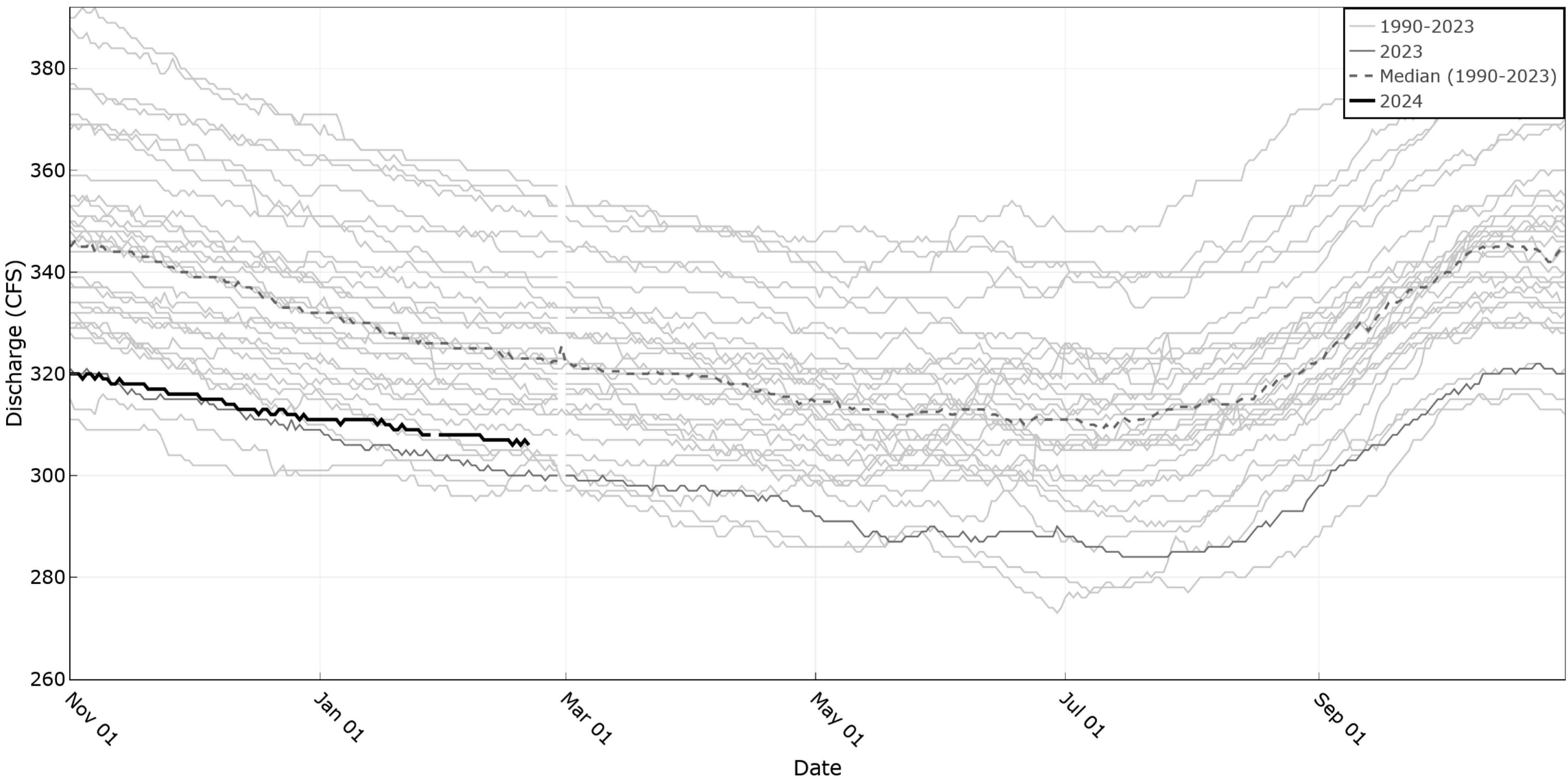
Bruneau Snow Water Equivalent (SWE)



Snake River Southside Return Flows



Box Canyon Spring nr Wendell



Swan Falls Technical Working Group Updates

- *Question 5: “Analysis of the necessary ESPA levels required to maintain the minimum flow rate at the Snake River nr Murphy Gage during the low flow period”*
- Proposed method: Subset of groundwater wells to produce a regression-based model to analyze necessary ESPA levels to maintain minimum flow at the Snake River nr Murphy gage
- Working on Memo and additional analysis:
 - Nov 1st, 2023 – IDWR provided a technical analysis presentation and files to the Technical Working Group (TWG)
 - Feb 16th, 2024 – IDWR received feedback at the TWG meeting and agreed to write a memo with some additional analysis on the proposed method.
 - The memo will provide additional opportunities for the TWG to review and comment on the proposed method.
- Next TWG meetings are set for:
 - March 20th, 2024 (tentative)
 - May 7th, 2024

