

# Swan Falls Technical Working Group Update

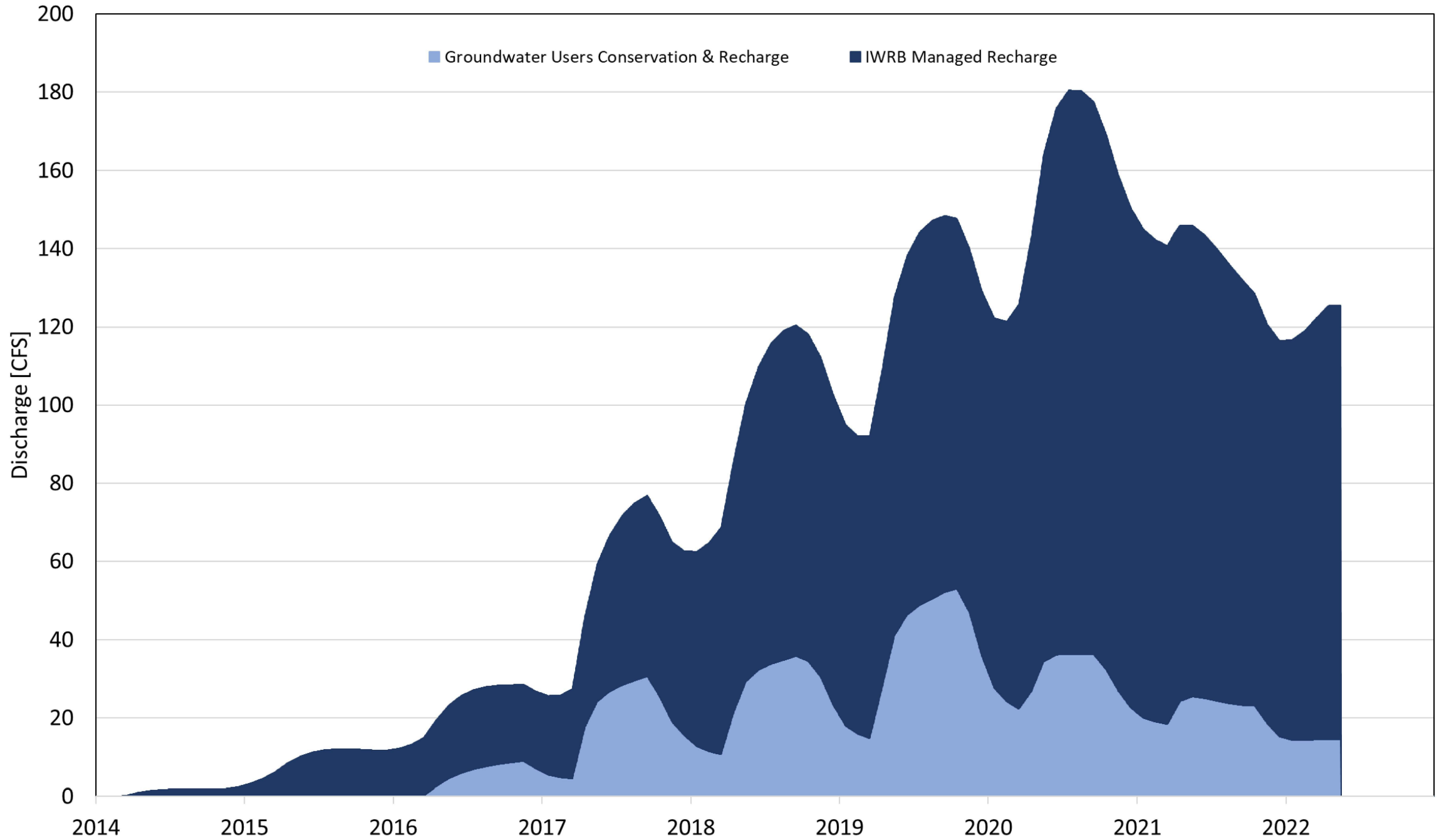
Presented by Ethan Geisler

October 13<sup>th</sup>, 2022

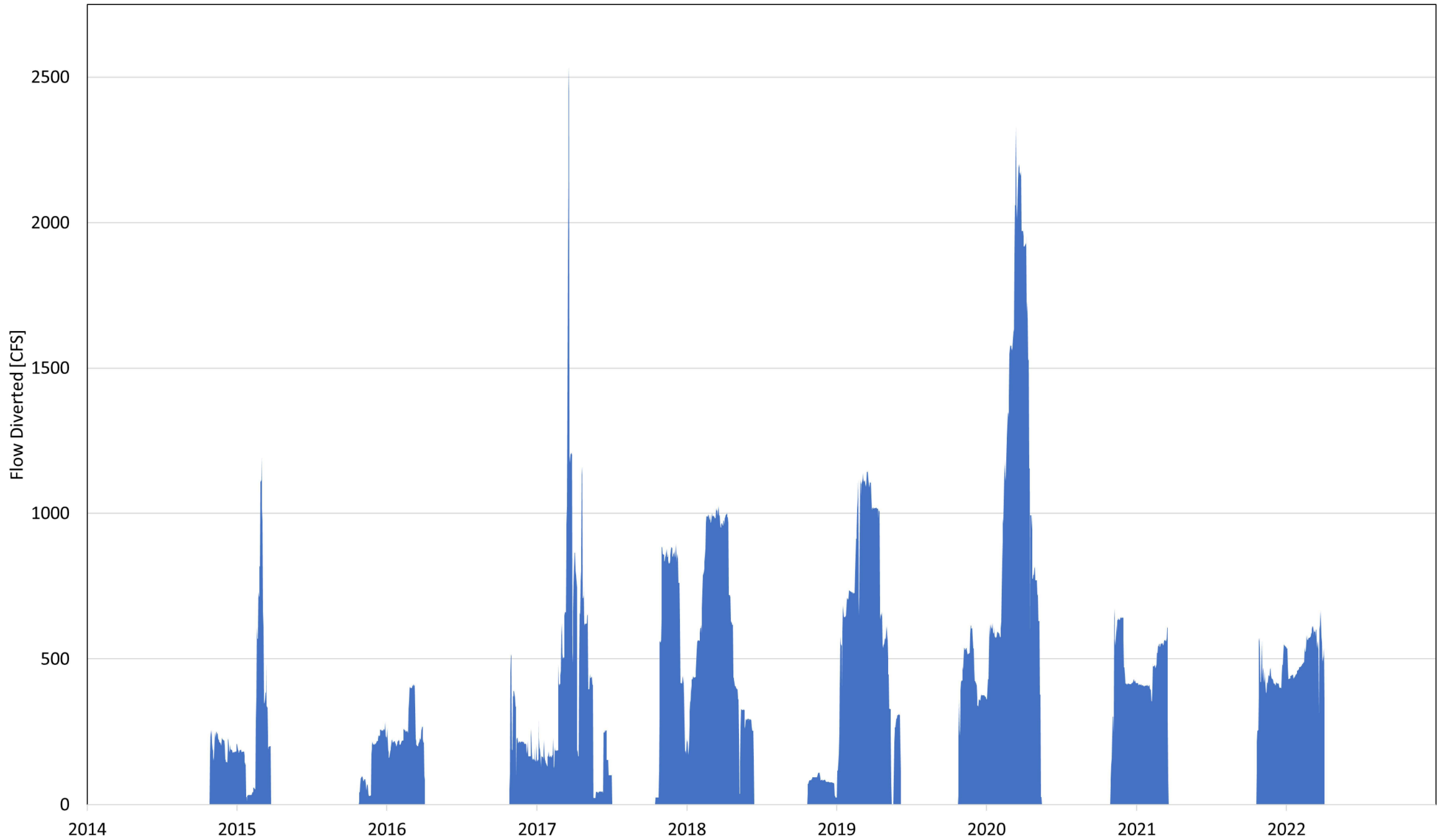


1. Technical analysis to determine if the Adjusted Average Daily Flow (AADF) at the Snake River near Murphy gage would have been below the minimums at any time since 2014, but for IGWA-SWC-Cities settlement and IWRB managed recharge activities.
  - ESPAM 2.2 was used to evaluate the benefit to the reach gains in the Milner to King Hill reach of the Snake River for:
    - Idaho Water Resources Board managed recharge program
      - Initiated in 2014
        - Natural Flow Recharge
        - Donated Storage Water Recharge
    - Surface Water Coalition Settlement Agreement
      - Implemented in 2016
        - Managed recharge
        - Reductions in diversions

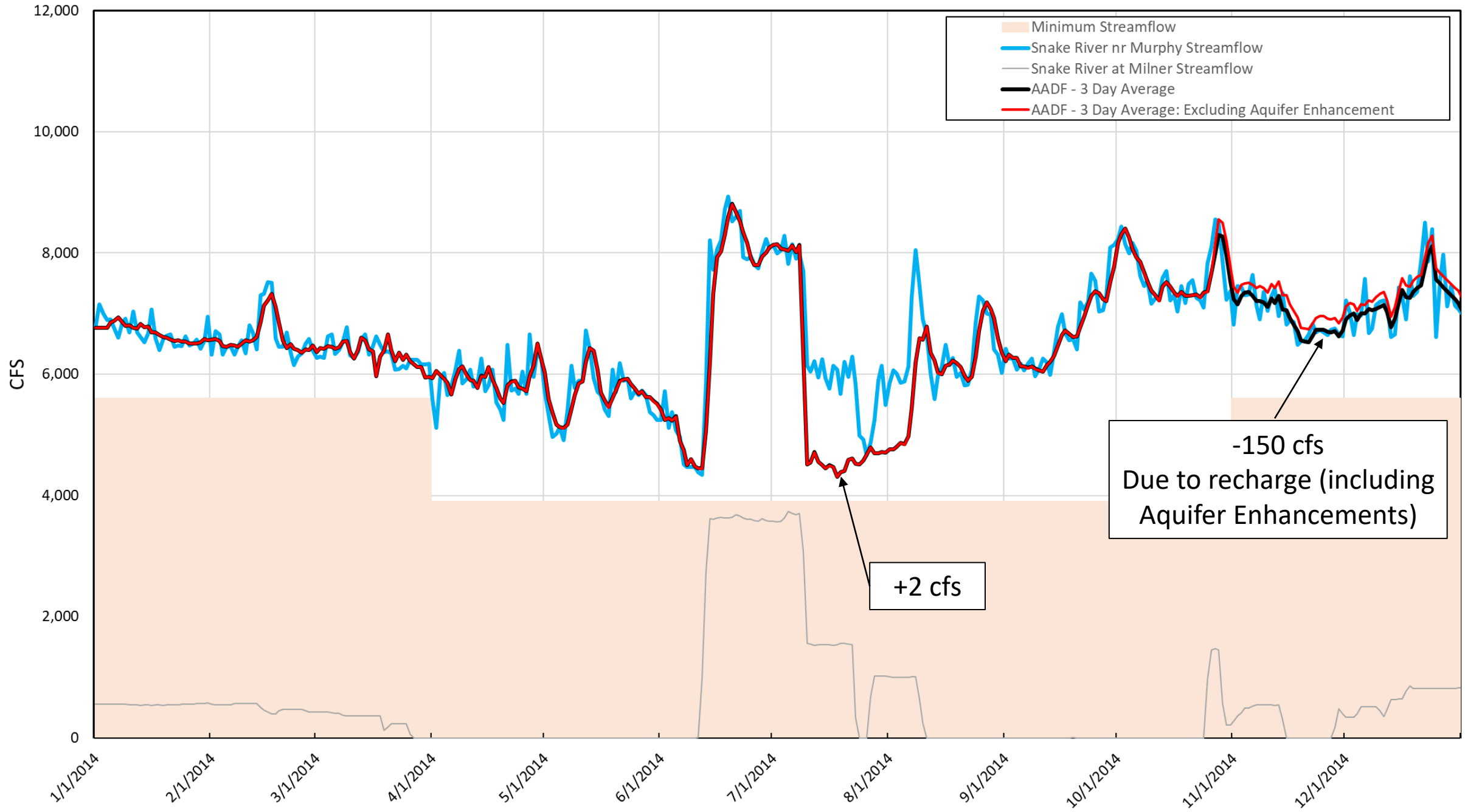
# Benefits of Aquifer Enhancement Activities



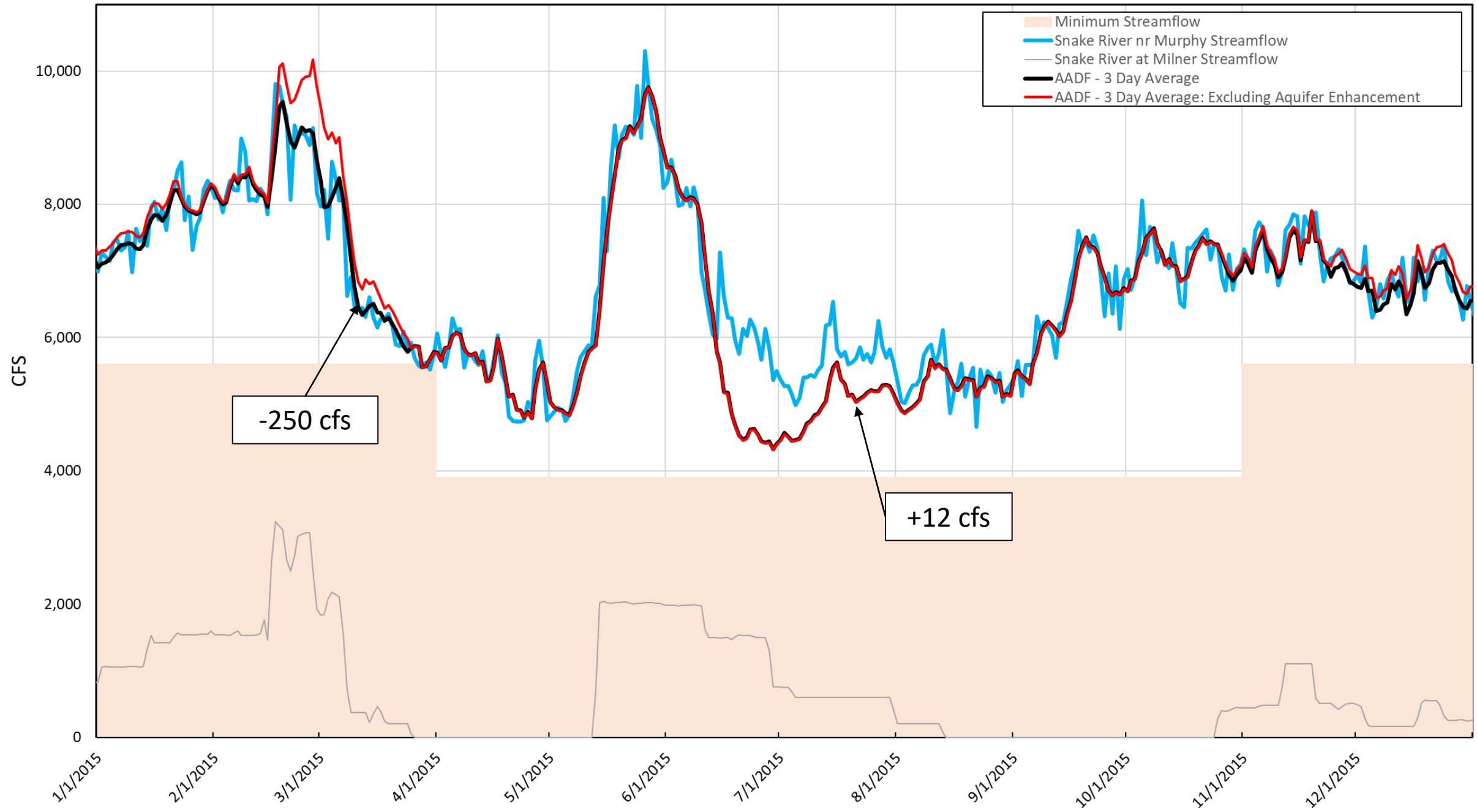
IWRB Lower Valley Recharge



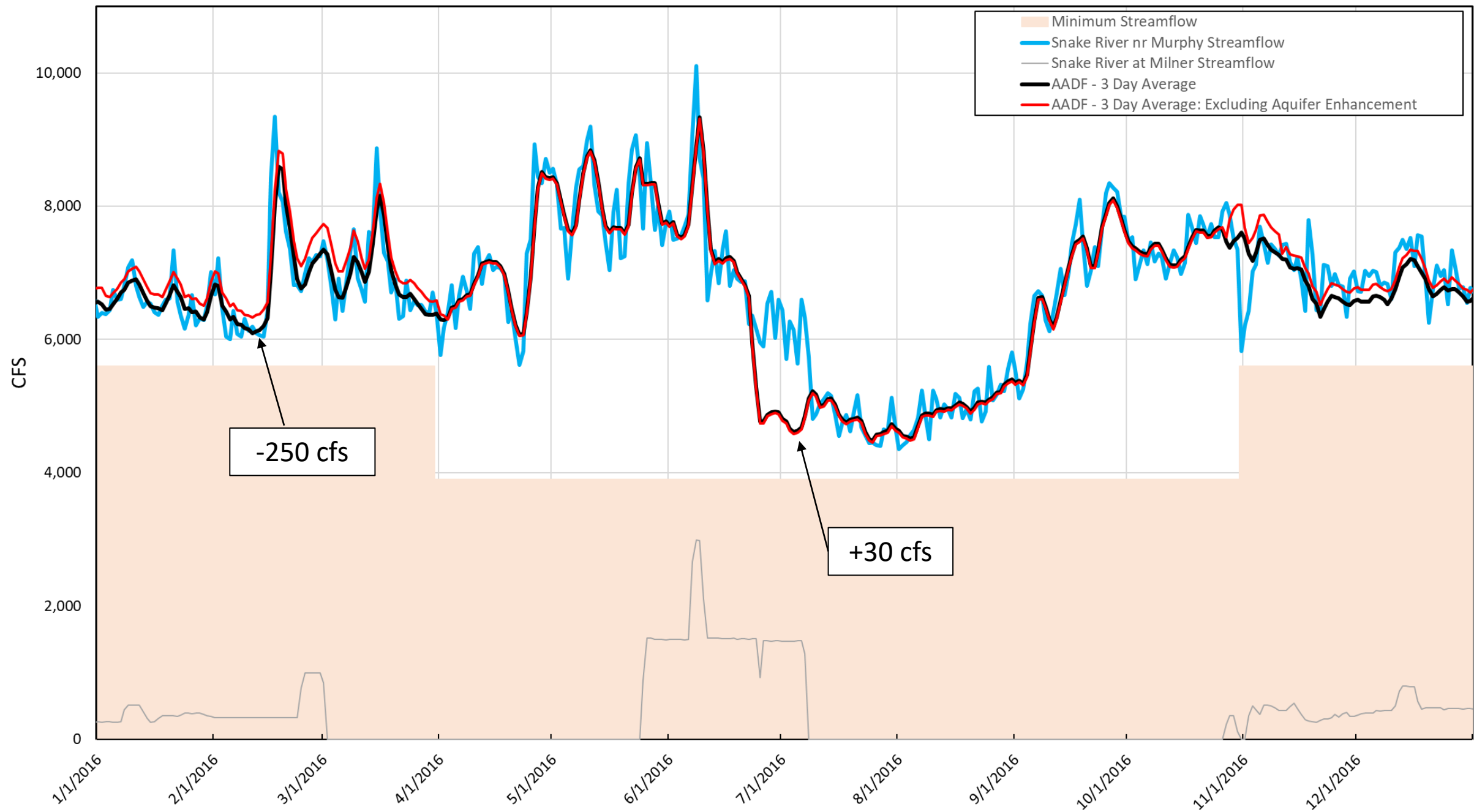
# 2014: Streamflow at Snake River near Murphy



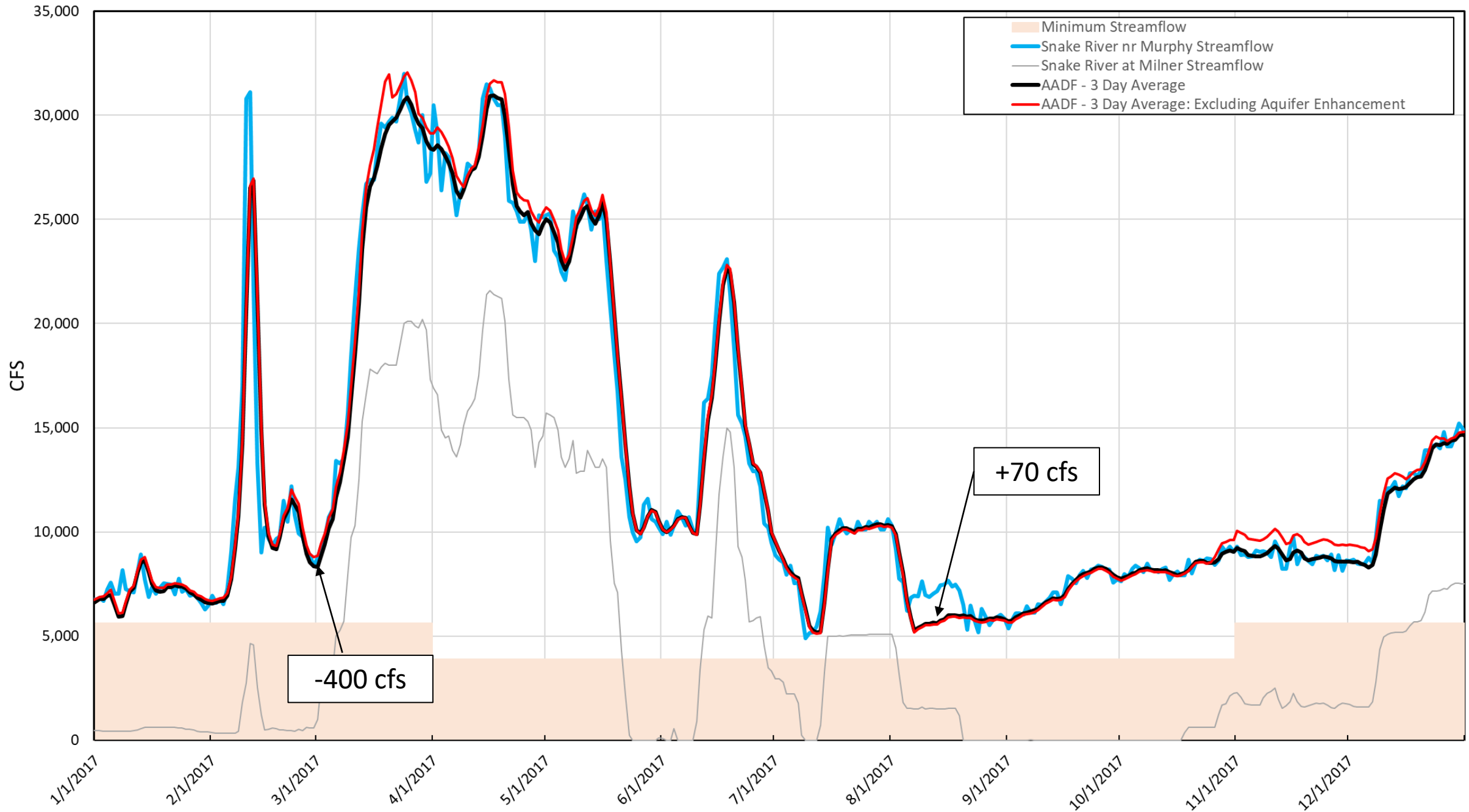
2015: Streamflow at Snake River near Murphy



2016: Streamflow at Snake River near Murphy

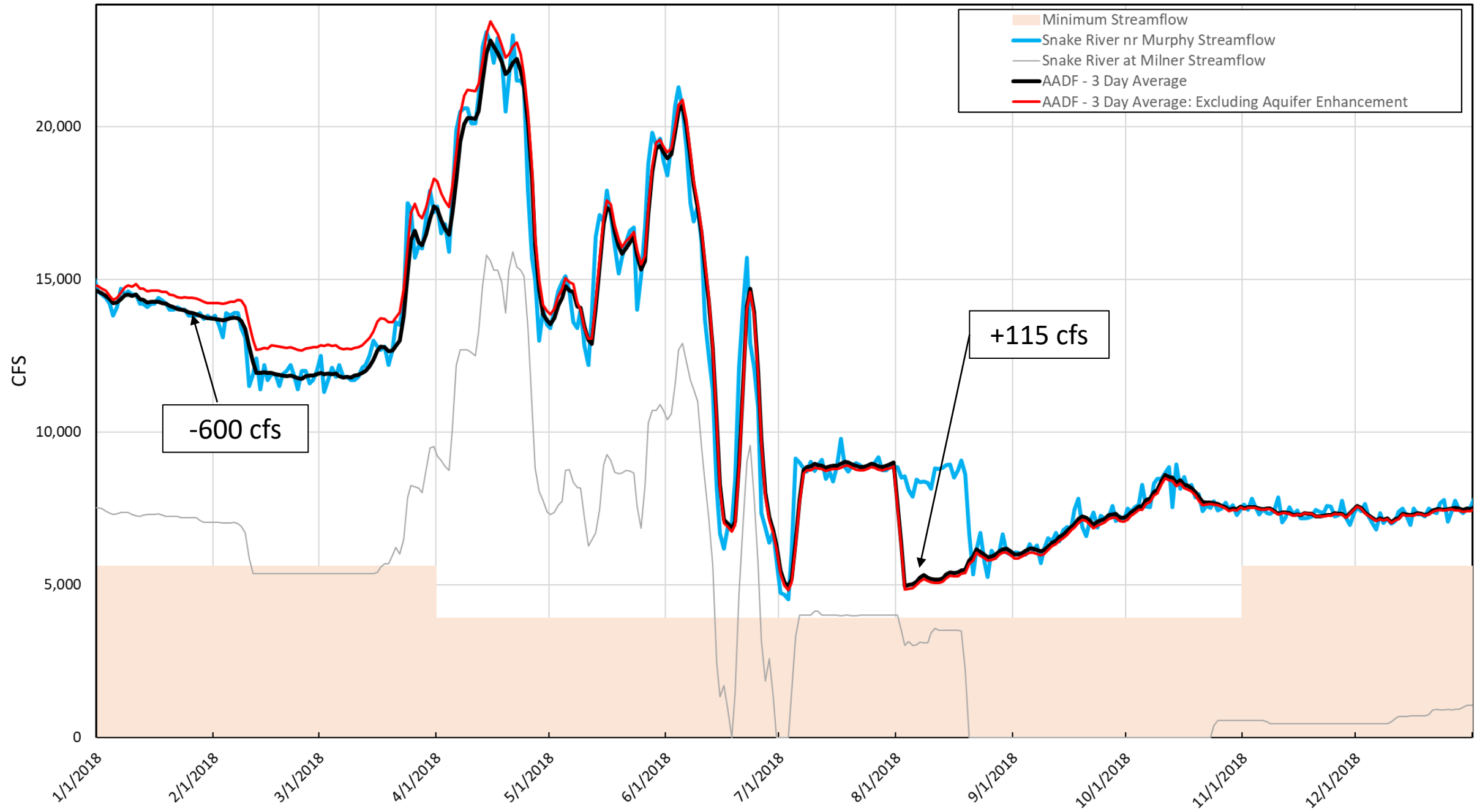


# 2017: Streamflow at Snake River near Murphy

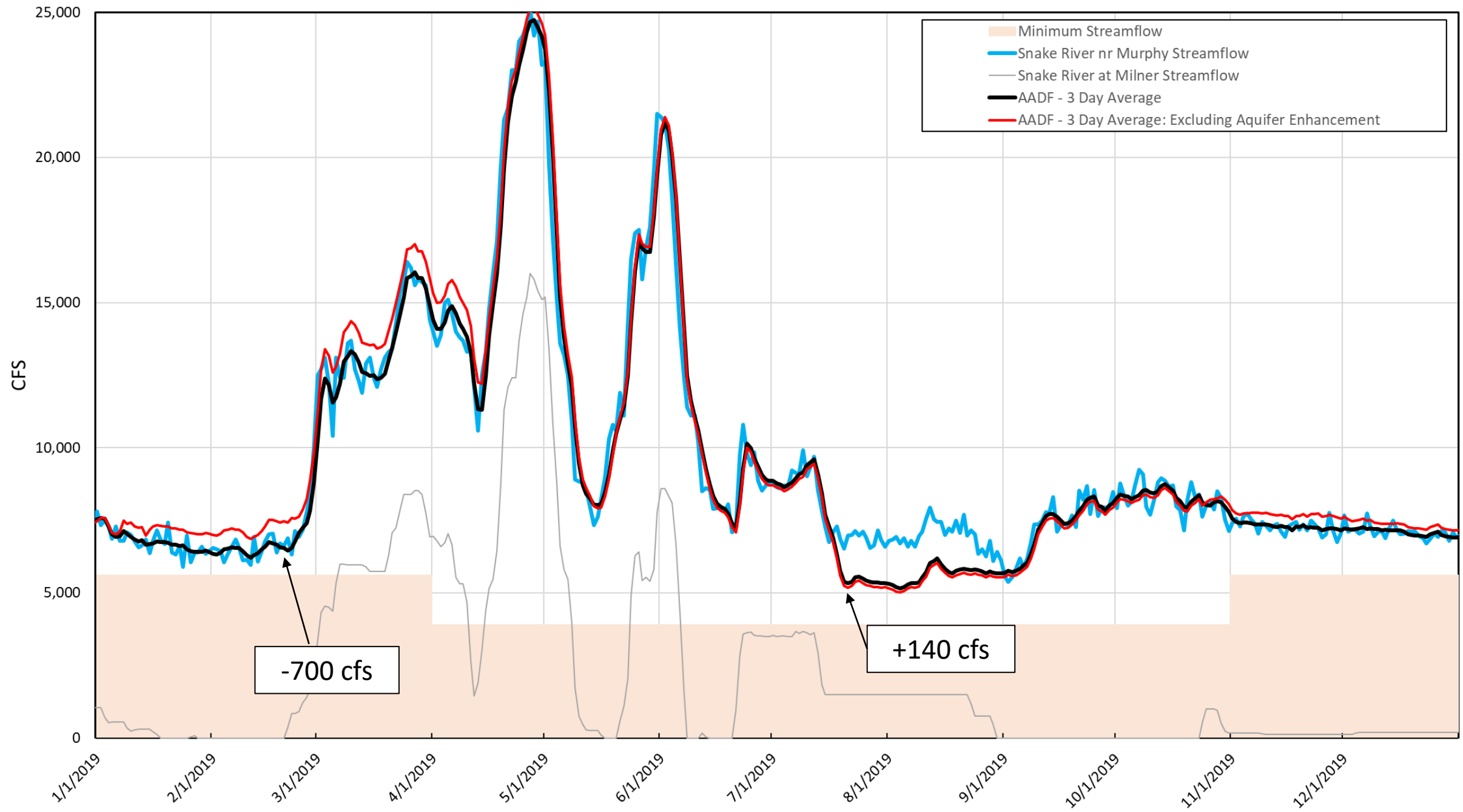




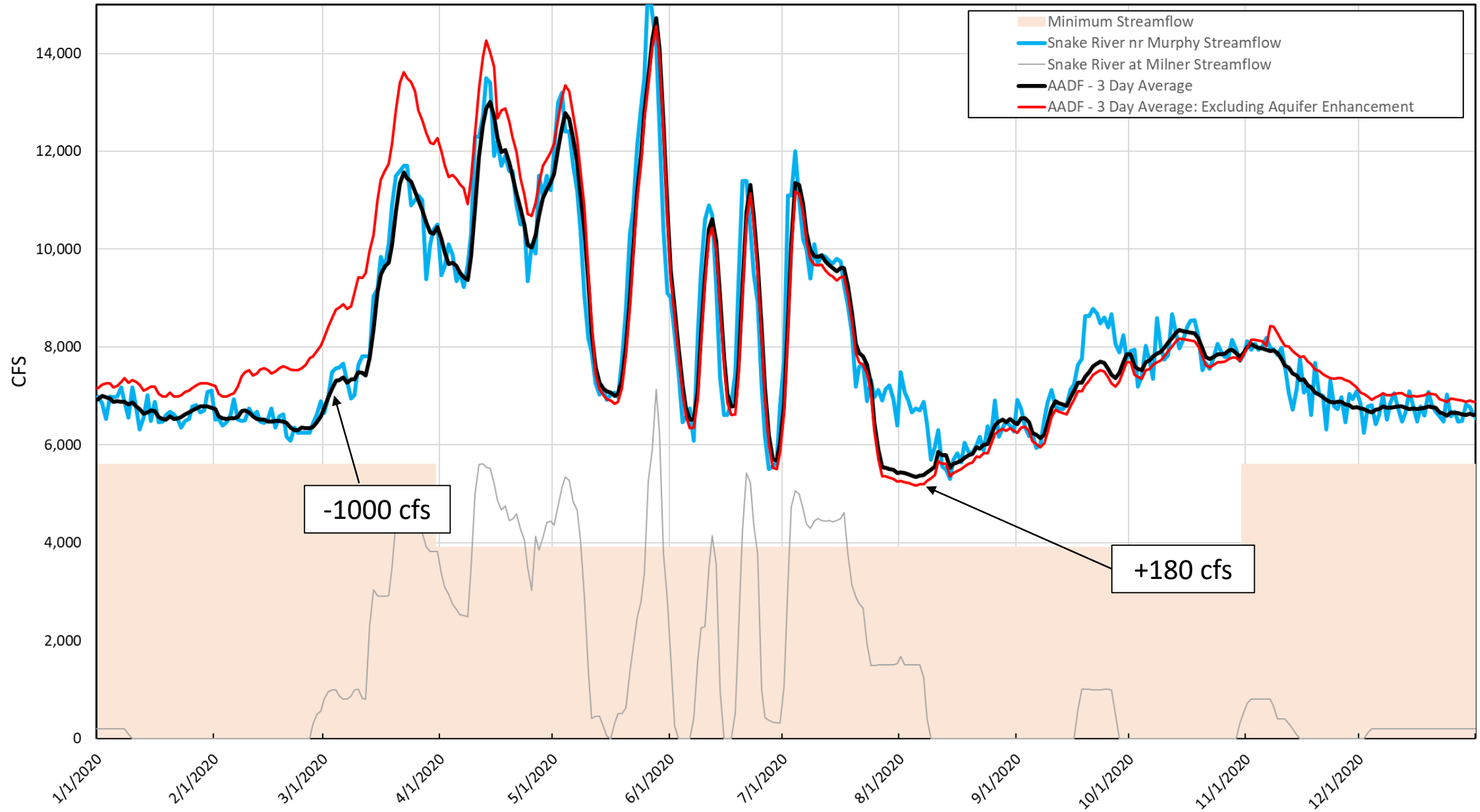
# 2018: Streamflow at Snake River near Murphy



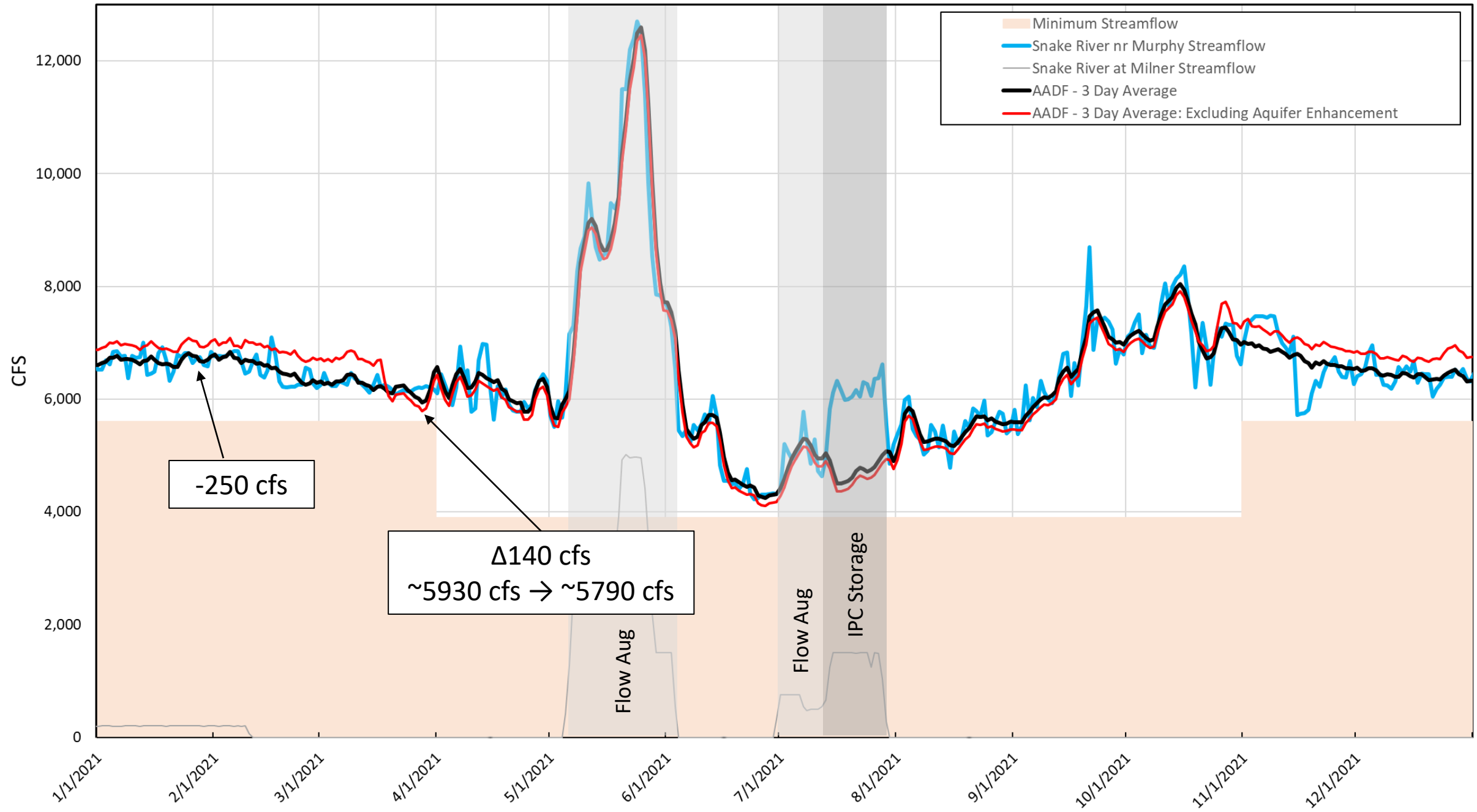
2019: Streamflow at Snake River near Murphy



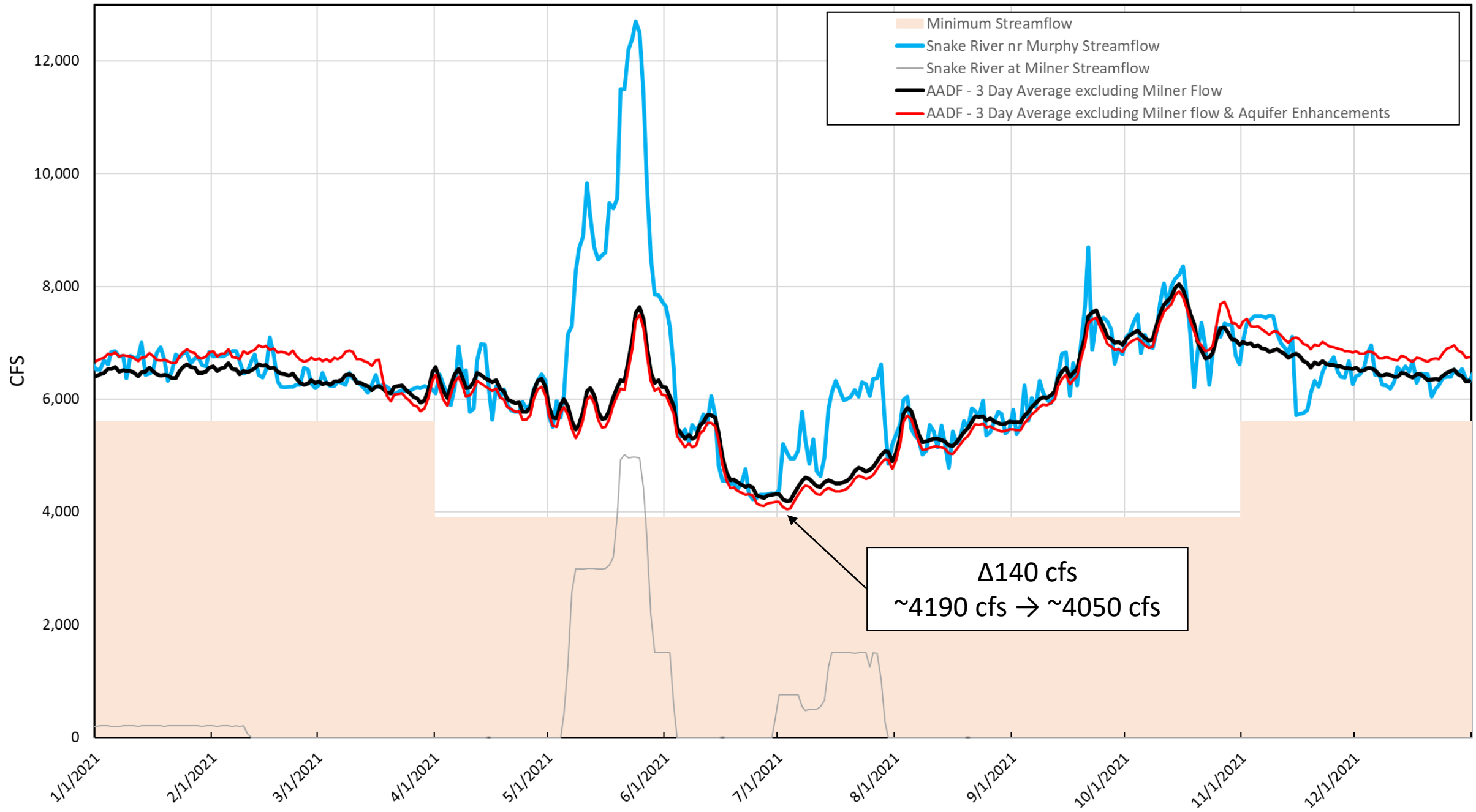
2020: Streamflow at Snake River near Murphy



2021: Streamflow at Snake River near Murphy



# 2021: Streamflow at Snake River near Murphy



1. Technical analysis to determine if the Adjusted Average Daily Flow (AADF) at the Snake River near Murphy gage would have been below the minimums at any time since 2014, but for IGWA-SWC-Cities settlement and IWRB managed recharge activities.

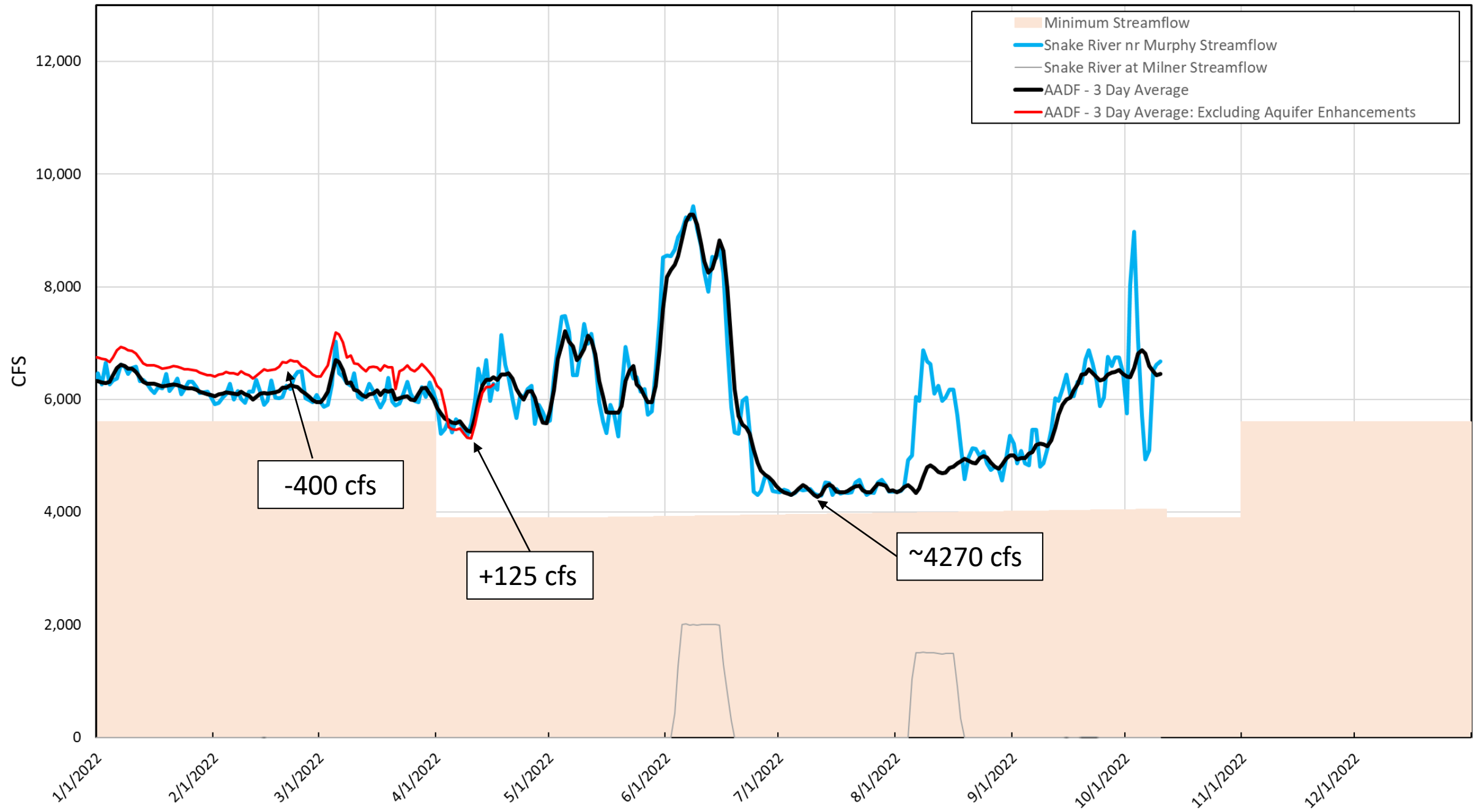
- 2014 – 2016: Very little benefit to make a difference
- 2017 – 2019: Good water years & begin to see a noticeable difference.
- 2020 – 2021: Noticeable difference in low water years
  - March 2021: ~5790 cfs (5600 cfs minimum)
  - July 2021: ~4,050 cfs without flow augmentation (3,900 cfs minimum)

**AADF would be above the minimums (5,600 cfs & 3,900 cfs) even without IWRB Managed Recharge and Settlement Activities**

Questions?



2022: Streamflow at Snake River near Murphy





# AVERAGE JULY (2012-2021)

