

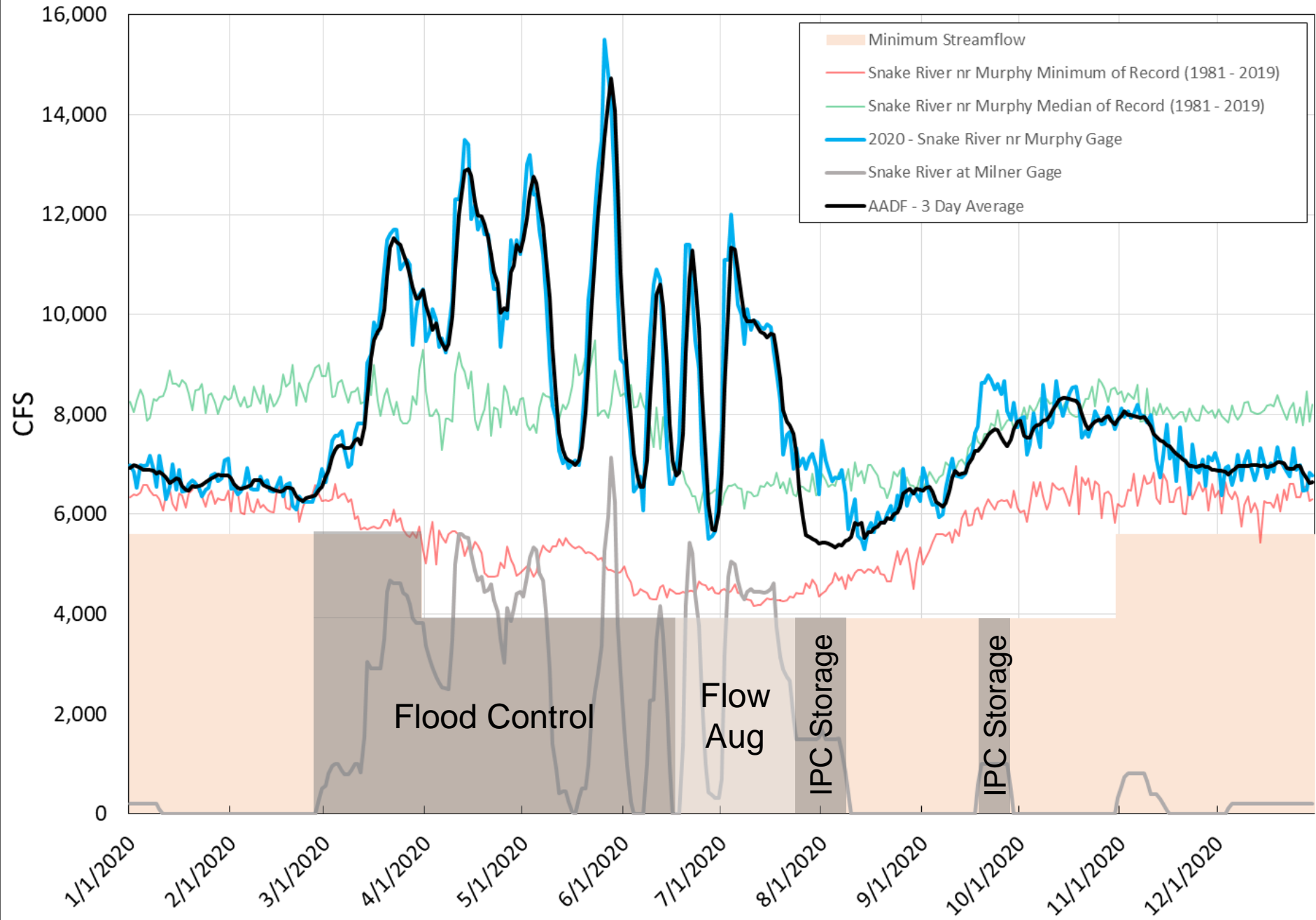
2021 Swan Falls Technical Working Group

Presented by Ethan Geisler

February 23, 2021



2020 Provisional AADF



Review of Changes to 2021 Swan Falls AADF

- Utilizing CJ Strike at Boat Dock nr CJ Strike Dam (13171495) instead of CJ Strike Dam Headwater data (13171550)
- Utilizing 15 minute data for all reservoir datasets now
 - CJ Strike Reservoir Data
 - CJ Strike Dam at Boat Dock nr CJ Strike Dam (13171495)
 - CJ Strike at Cottonwood Park nr Bruneau, ID (13170340)
 - Snake River at Loveridge Bridge nr Bruneau, ID (13157350)
 - Lower Salmon Falls Dam, Bliss Dam, and Swan Falls Dam are already 15 min datasets
- Swan Falls Dam Lag
 - Lag time changed from two hours to zero hours (no lag)
 - Lag times from other reservoirs have been kept the same at this time

Idaho Power's Proposed Change to Data Collection

- AADF currently uses the CJ Strike 15 minute datasets
 - Current datasets sample every 5 minutes, average to the 15 minutes
- Idaho Power is proposing to change data collection from 5 minute sampling to 15 minute sampling
- CJ Strike datasets will still be available for the 15 minute time-step

13170340 Cottonwood Park

- Sampling Interval = 5 min
- Averaging Interval = 30 seconds (12 samples per second)
- Timeseries Available for AADF
 - Statistical computation performed in Aquarius that creates a 15min mean value from the 5min samples collected at the gage



13157350 Loveridge Bridge

- Sampling Interval = 5 min
- Averaging Interval = The bubbler is using an intelligent pumping strategy. How long and how often it is pumping depends on the measured pressure difference between the last cycle and how long it takes until the pressure will be stable. There is actually no average value output. The last valid value after the purge procedure will be the output value.
- Timeseries Available for AADF
 - Statistical computation performed in Aquarius that creates a 15min mean value from the 5min samples collected at the gage

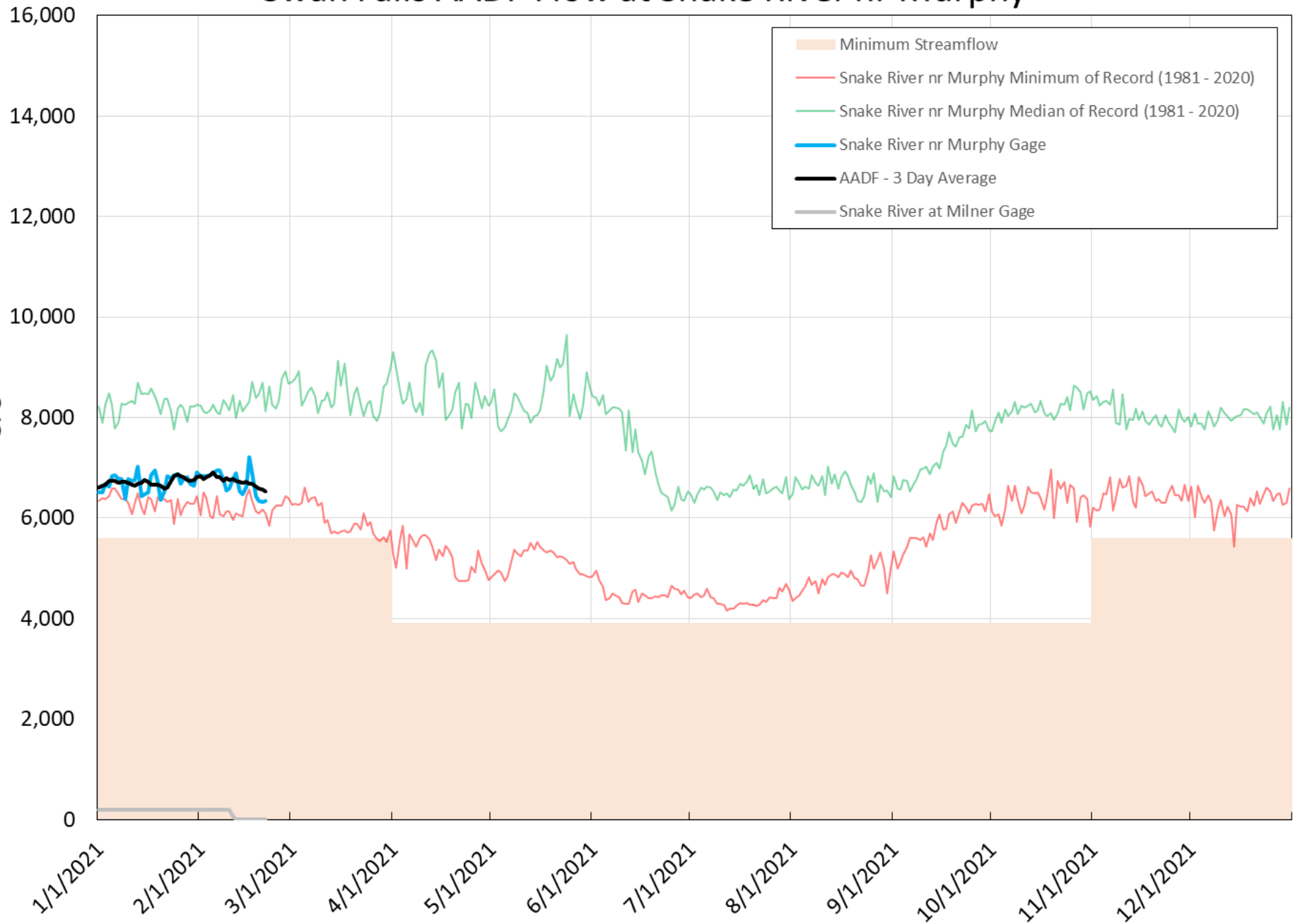


13171495 Boat Dock

- Sampling Interval = 5 min
- Averaging Interval = 30 seconds (12 samples per second)
- Timeseries Available for AADF
 - 5min samples are available in Aquarius



Swan Falls AADF Flow at Snake River nr Murphy



Swan Falls Settlement

Settlement Archive

Technical Working Group

Policy Group

AADF Calculations


Technical Archive

Media

ADJUSTED AVERAGE DAILY FLOW (AADF) CALCULATIONS

 Swan Falls Adjusted Average Daily Flow Calculation

 3-Day Average AADF

 AADF Graphs – Weekly Update

HISTORICAL AADF

 AADF Graph for 2019

 AADF Graph for 2018

 AADF Graph for 2017

 AADF Graph for 2016

 AADF Graph for 2015

 AADF Graph for 2014

<https://idwr.idaho.gov/legal-actions/settlements/swan-falls/AADF-calculations.html>

Questions on the AADF?

Manual for the Milner to Murphy
Reach Gain Forecast Tool
Version 1.1

DRAFT Final

October 2020

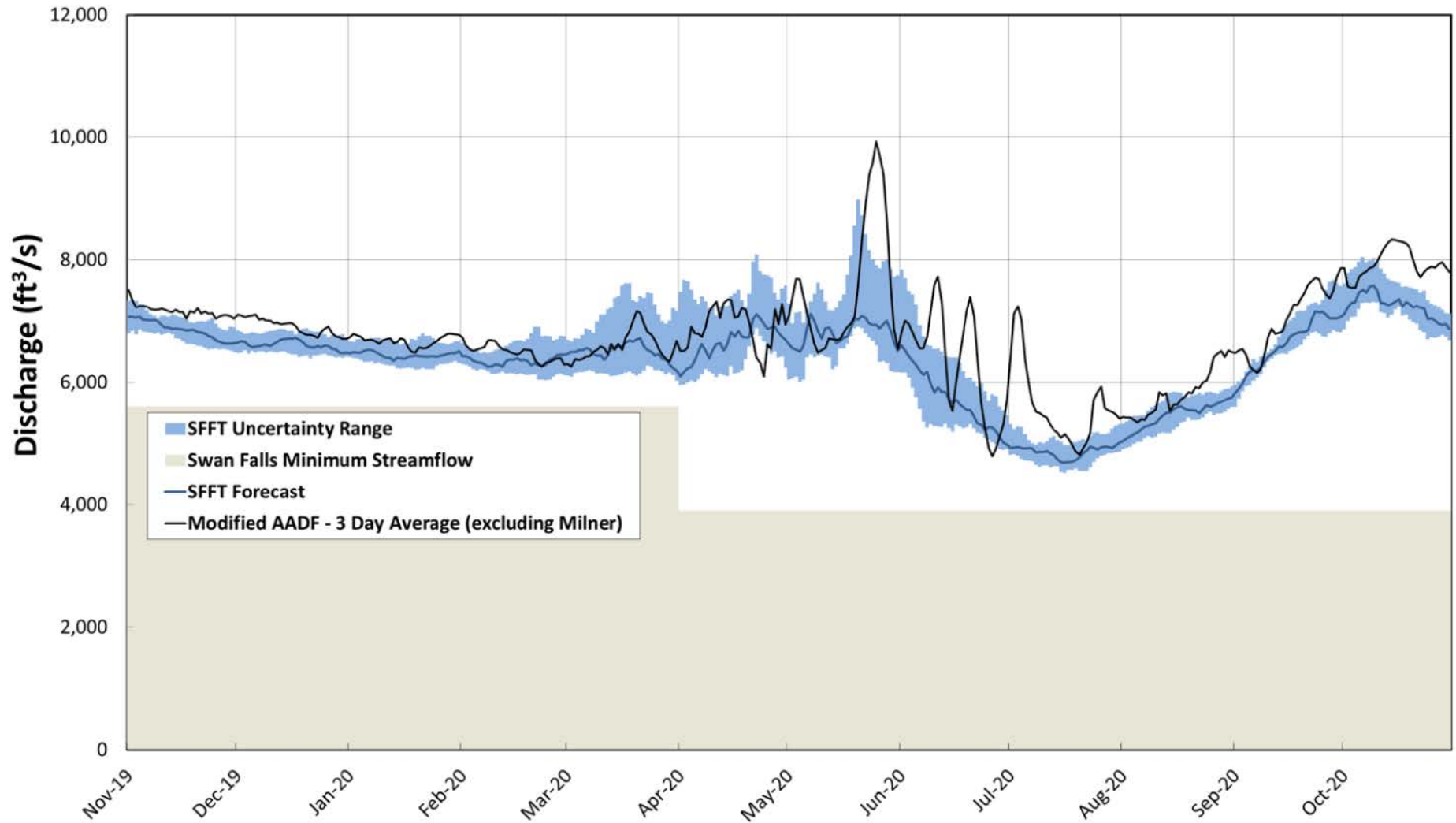
Idaho Department of Water Resources

Adapted from CH2M Hill's Final Signed Document (May 31, 2017)

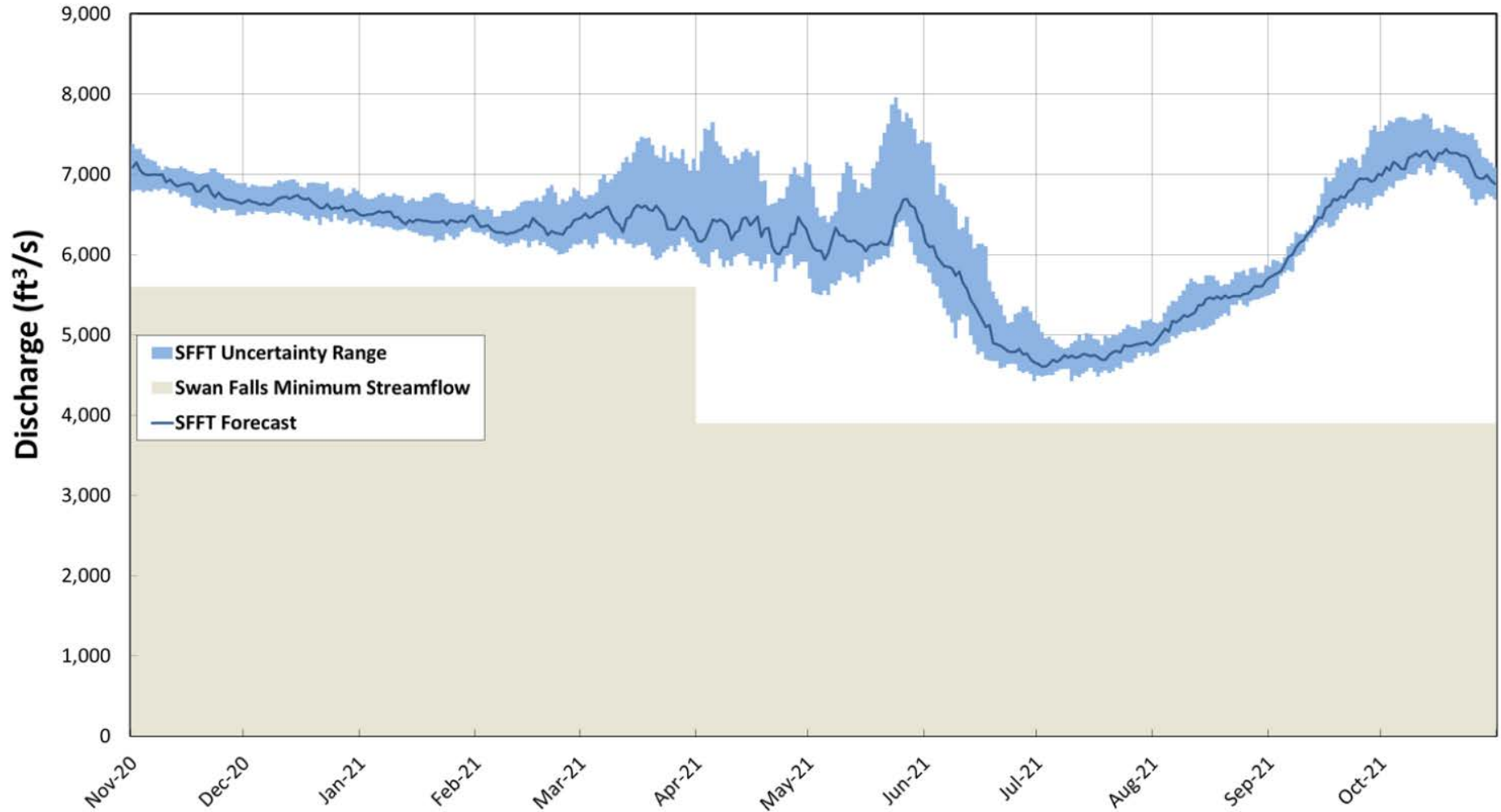


- DRAFT Final is posted online
- Approved by Technical Working Group at October 21, 2020 meeting

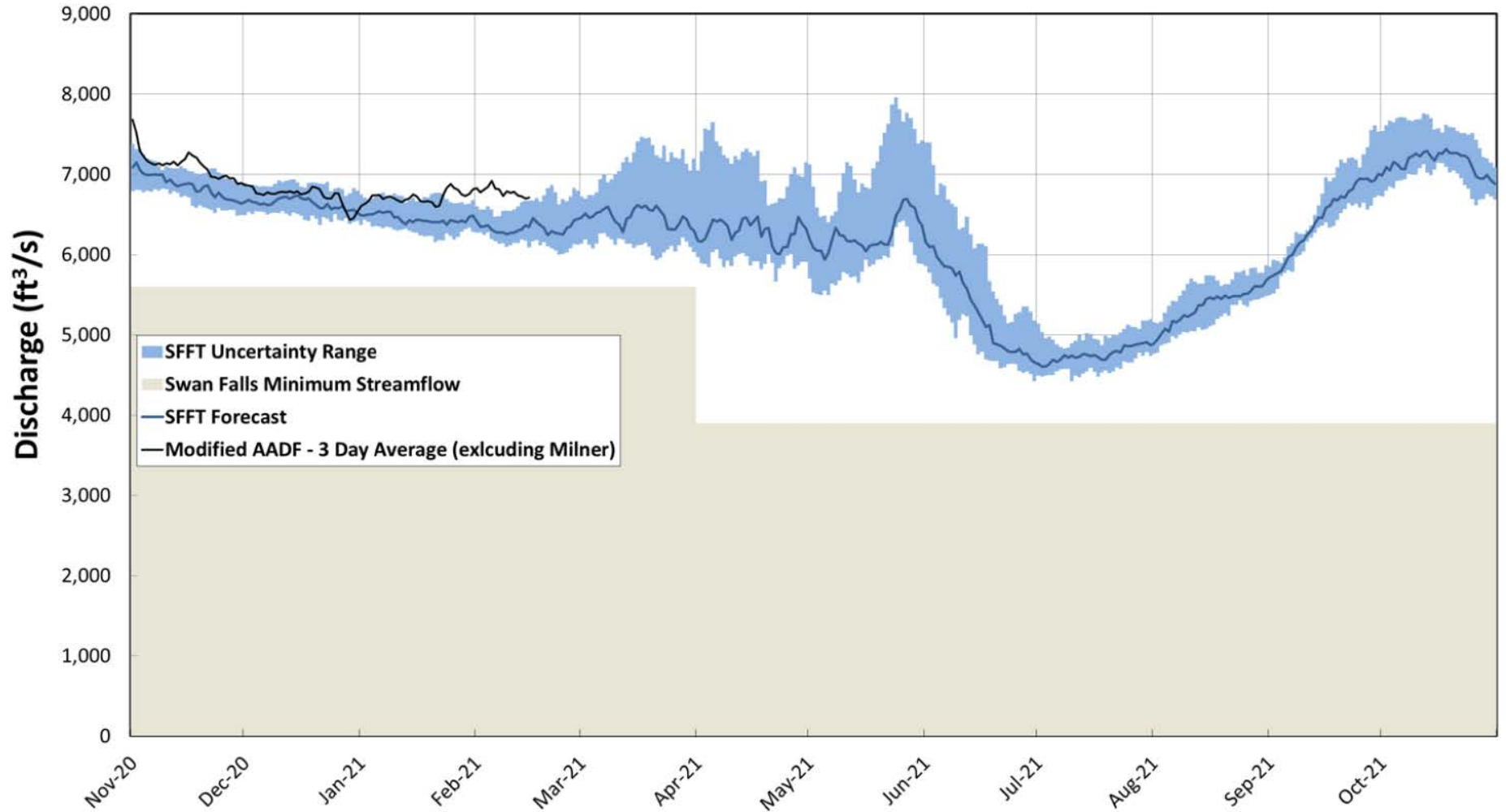
Swan Falls Forecast Tool - January 2020 Forecast



Swan Falls Forecast Tool - January 2021 Forecast



Swan Falls Forecast Tool - January 2021 Forecast



Questions?

