



— BUREAU OF —
RECLAMATION

Henrys Fork Watershed Council Meeting November 17, 2020

Upper Snake Reservoir Operations

Outline

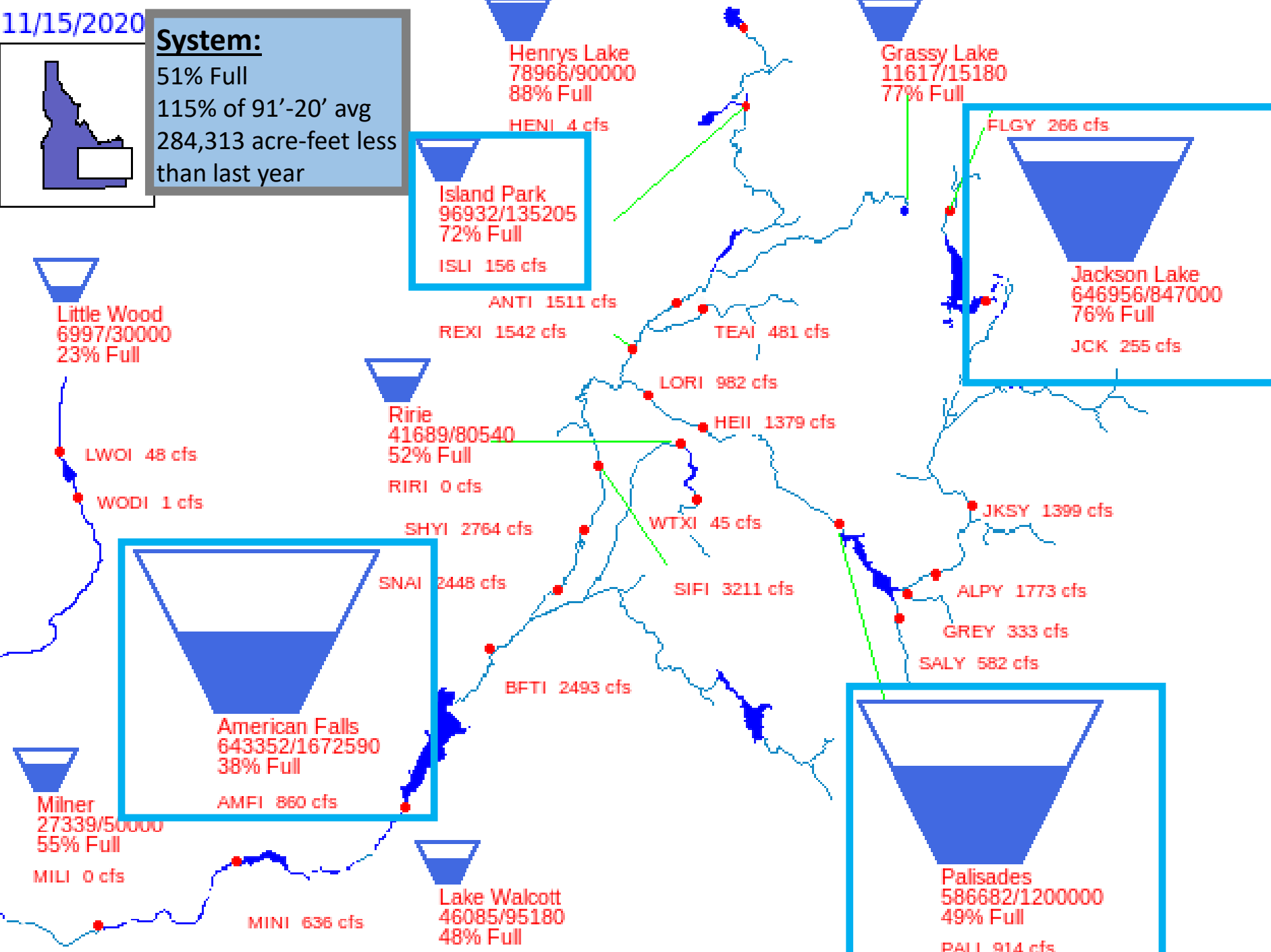
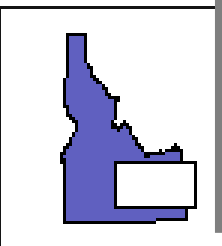
- Current Conditions
 - Water Year 2020/2021 Precipitation
 - Baseflows
 - Storage Conditions
 - Palisades Dam Winter Outflow
- Hydrologic Outlook
- Operational Outlook



11/15/2020

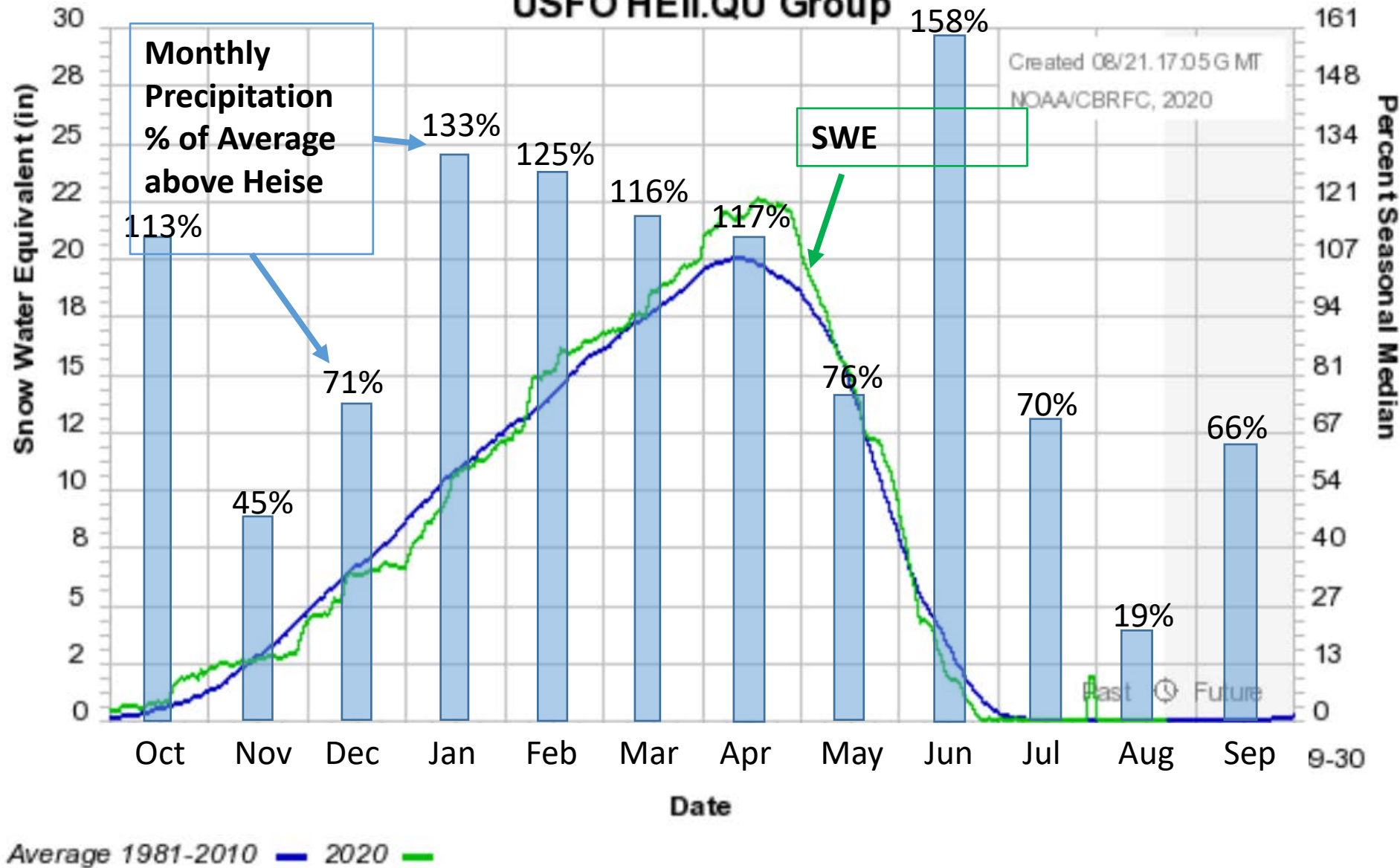
System:

51% Full
115% of 91'-20' avg
284,313 acre-feet less
than last year



Water Year 2020 Colorado Basin River Forecast Center

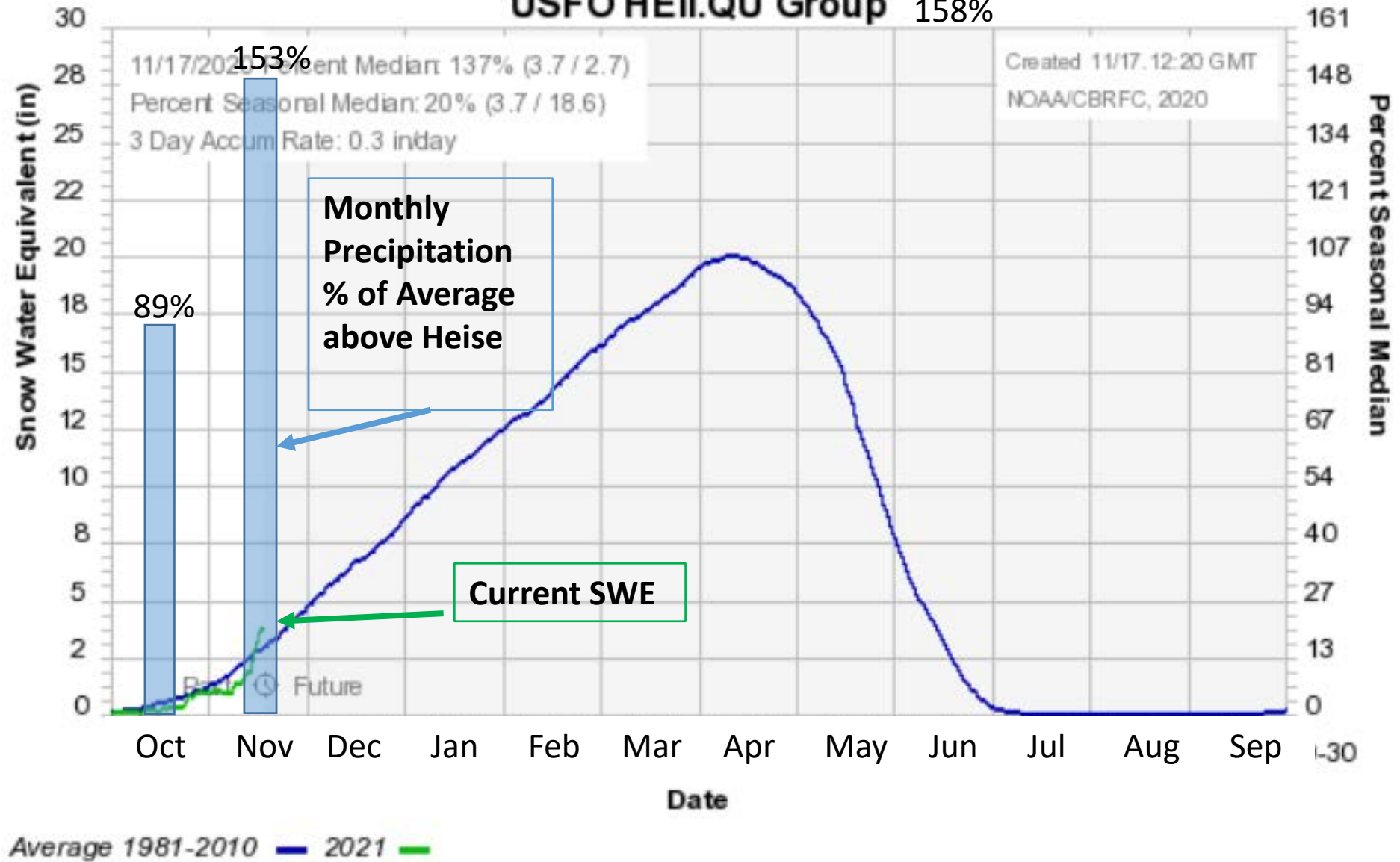
USFO HEILQU Group



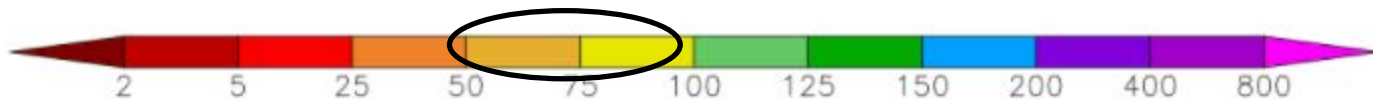
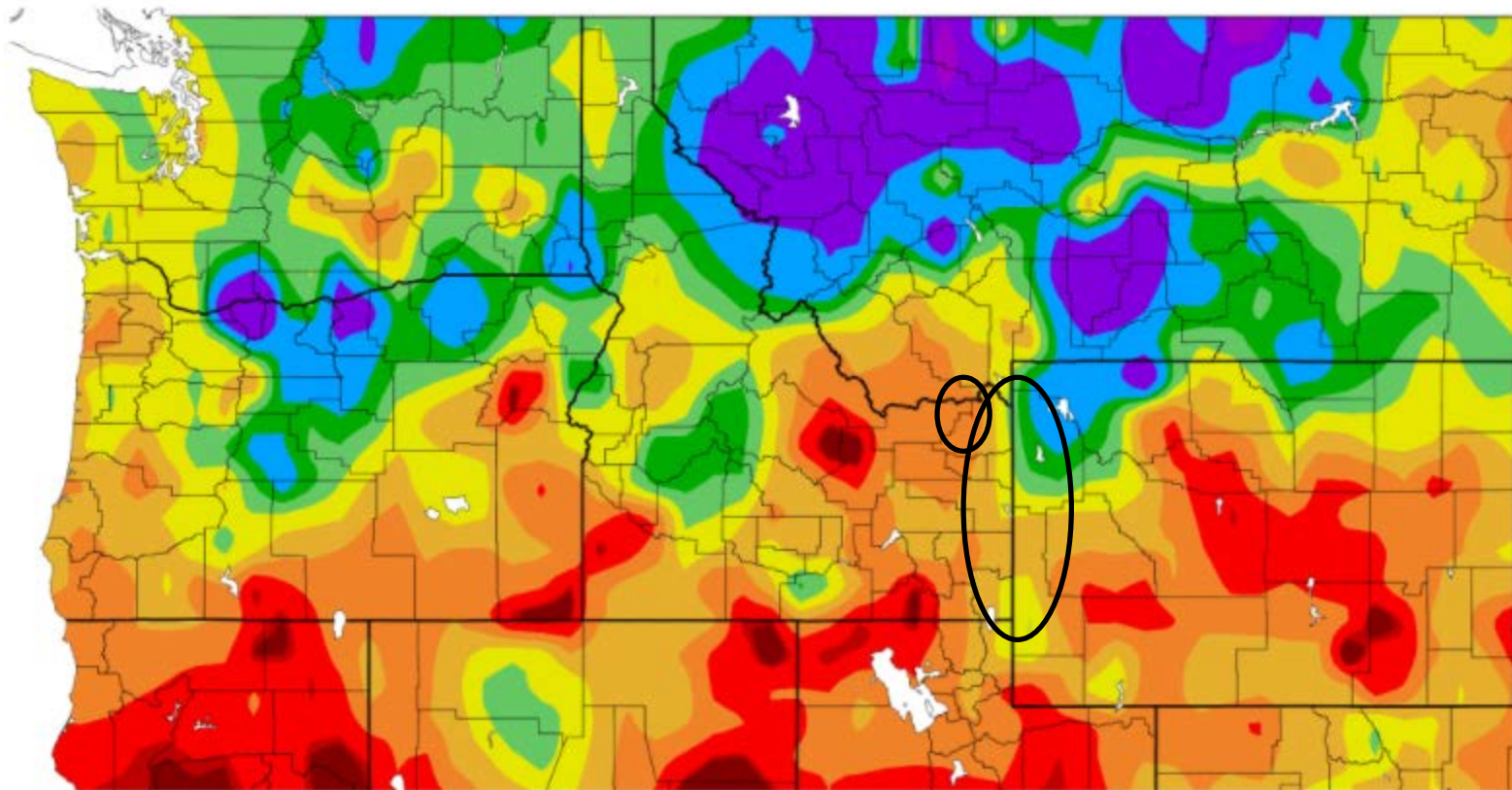
Water Year 2021

Colorado Basin River Forecast Center

USFO HEILQU Group 158%



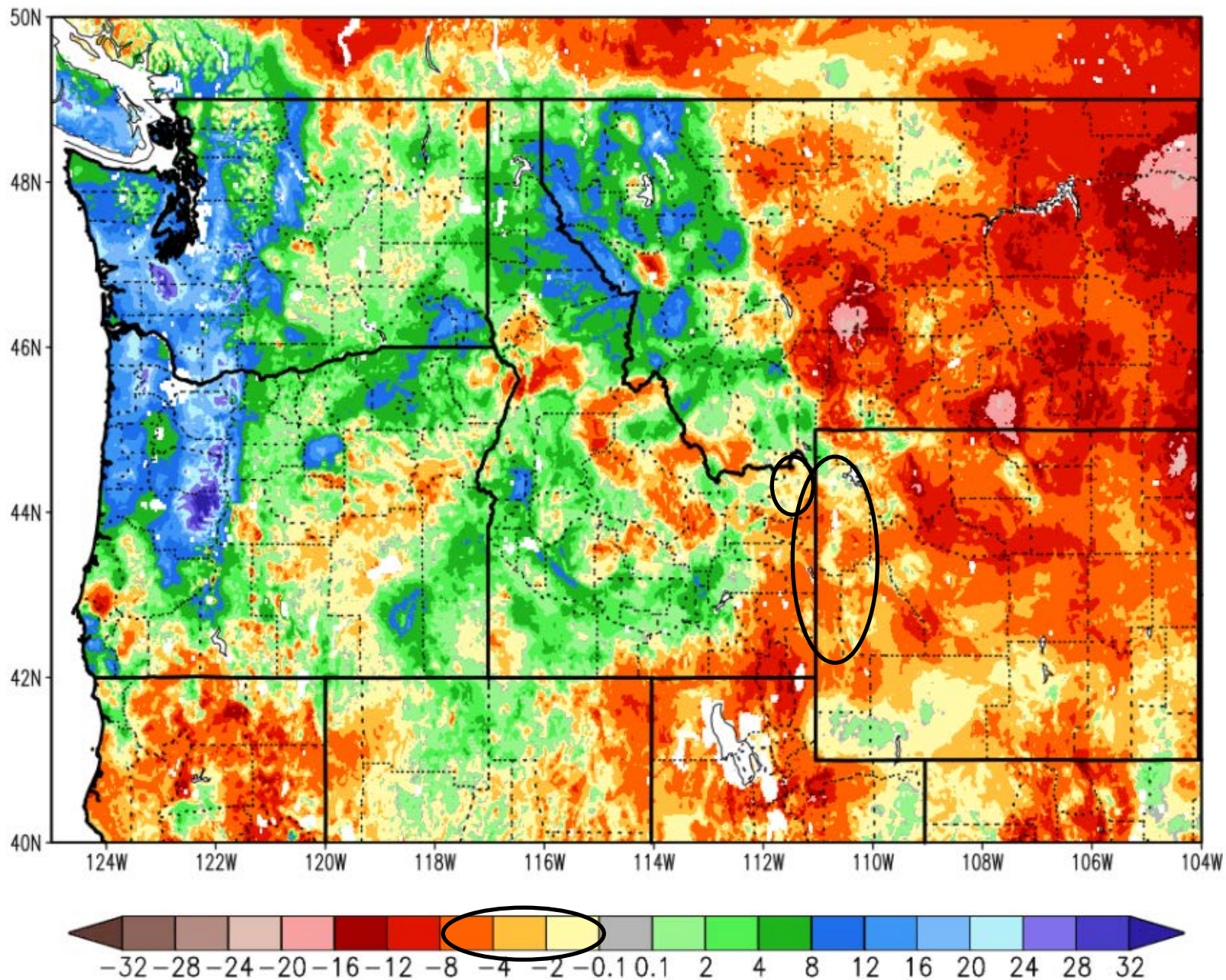
Percent of Normal Precipitation (%) 10/1/2020 – 11/15/2020



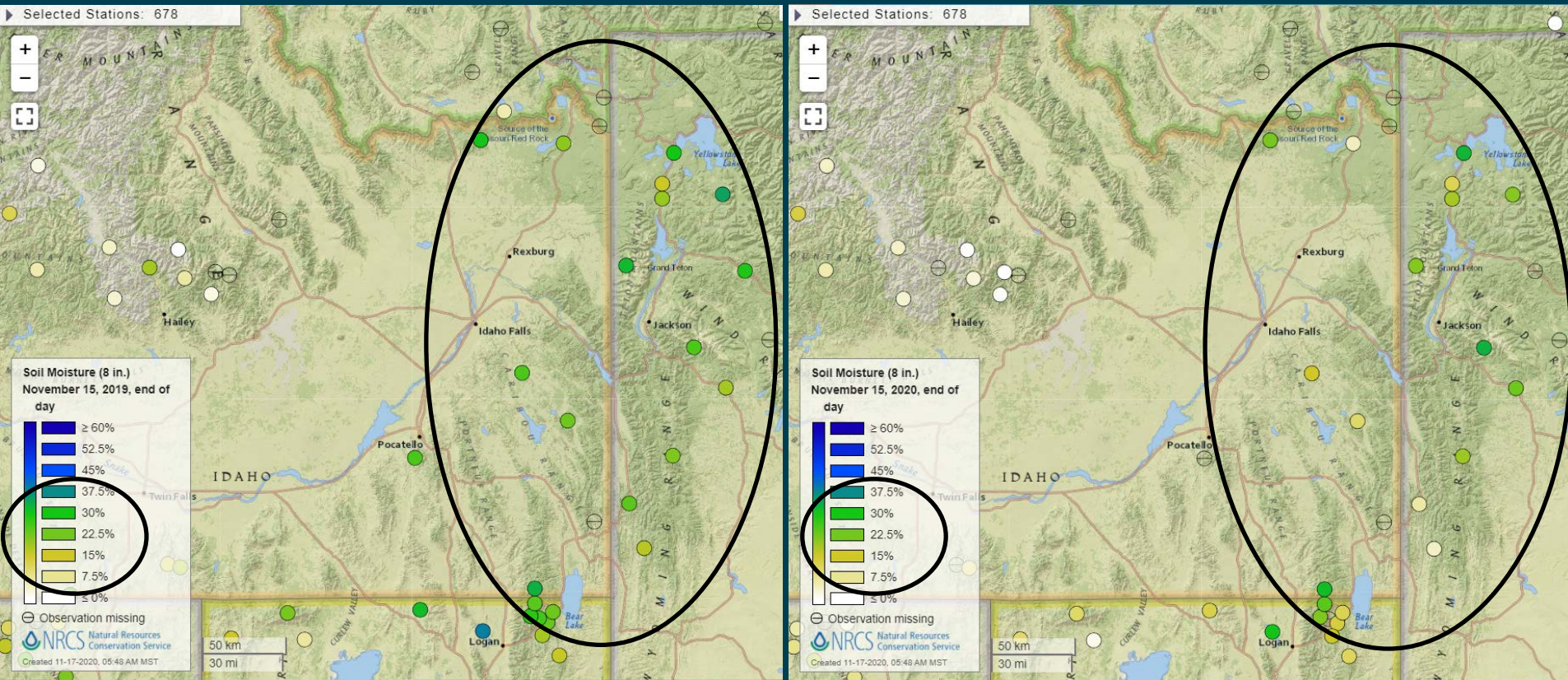
Generated 11/16/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

1-Year Difference in Column Relative Soil Moisture (%) valid 12z 16 Nov 2020



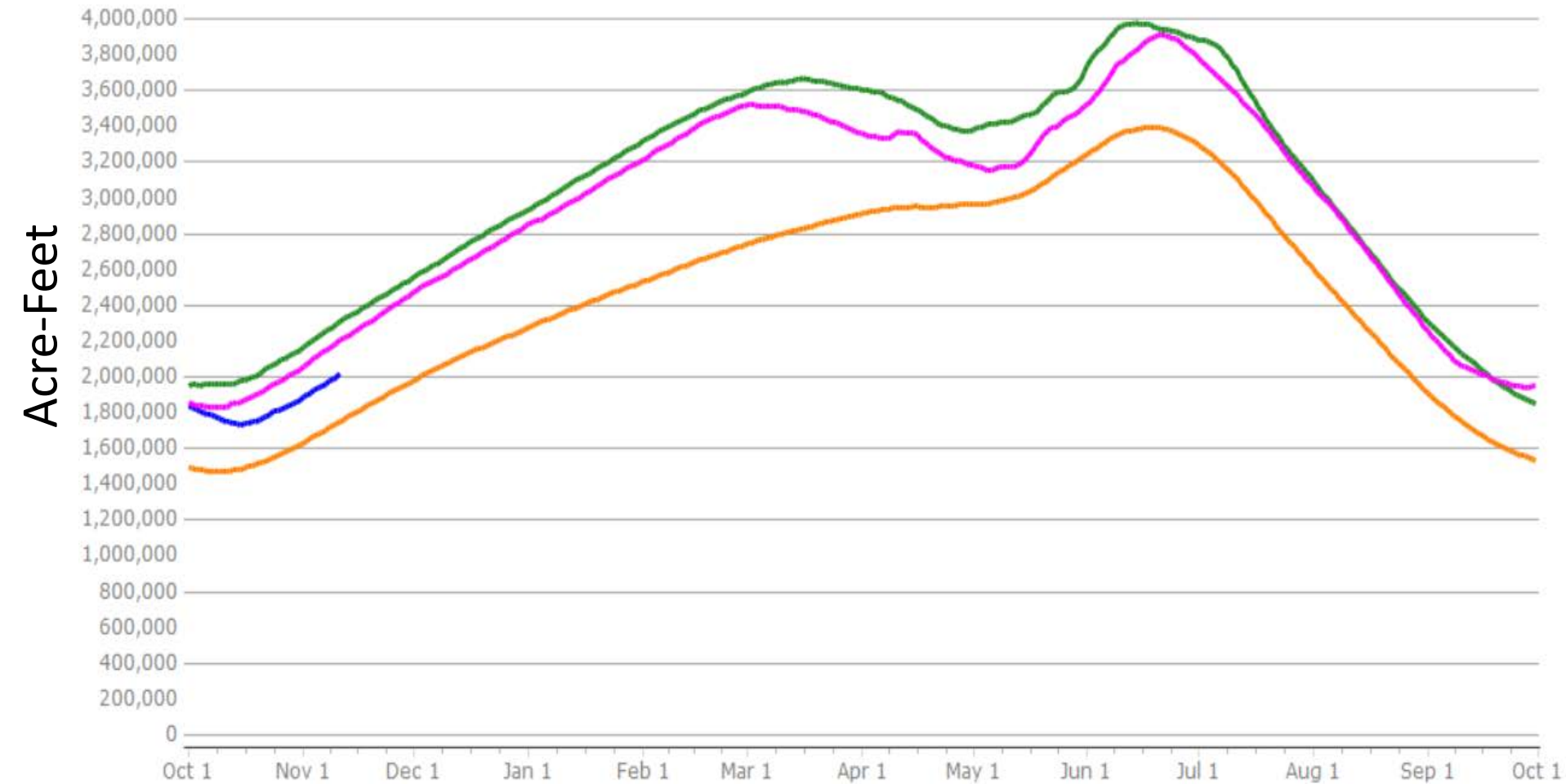
Basin Soil Moisture



avg-06-27 3347206.36266667

Upper Snake Total System Storage

— 2021 — 2020 — 2019 — avg

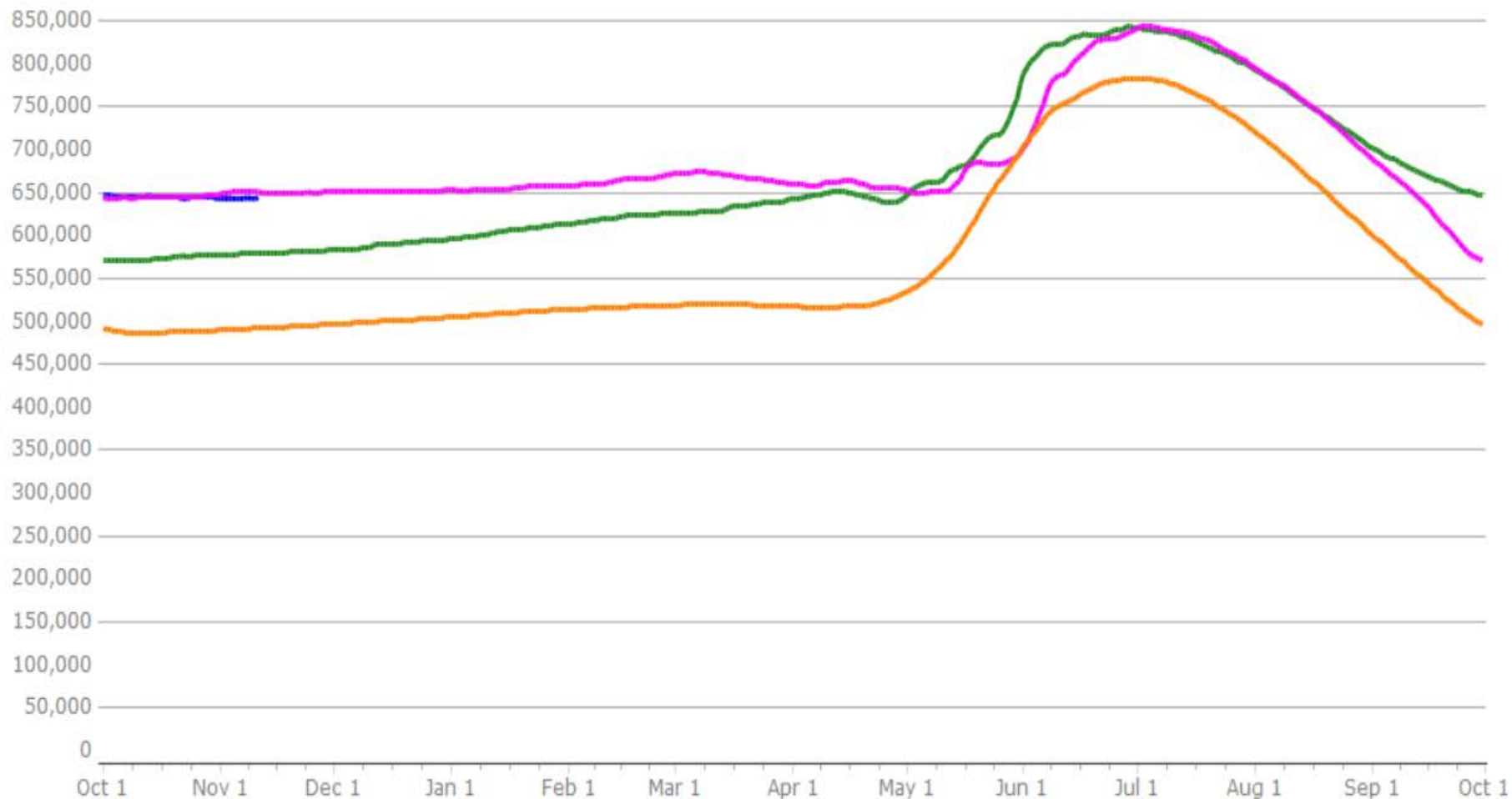


2020-08-08 773935

Jackson Lake

2021 2020 2019 avg

Acre-Feet

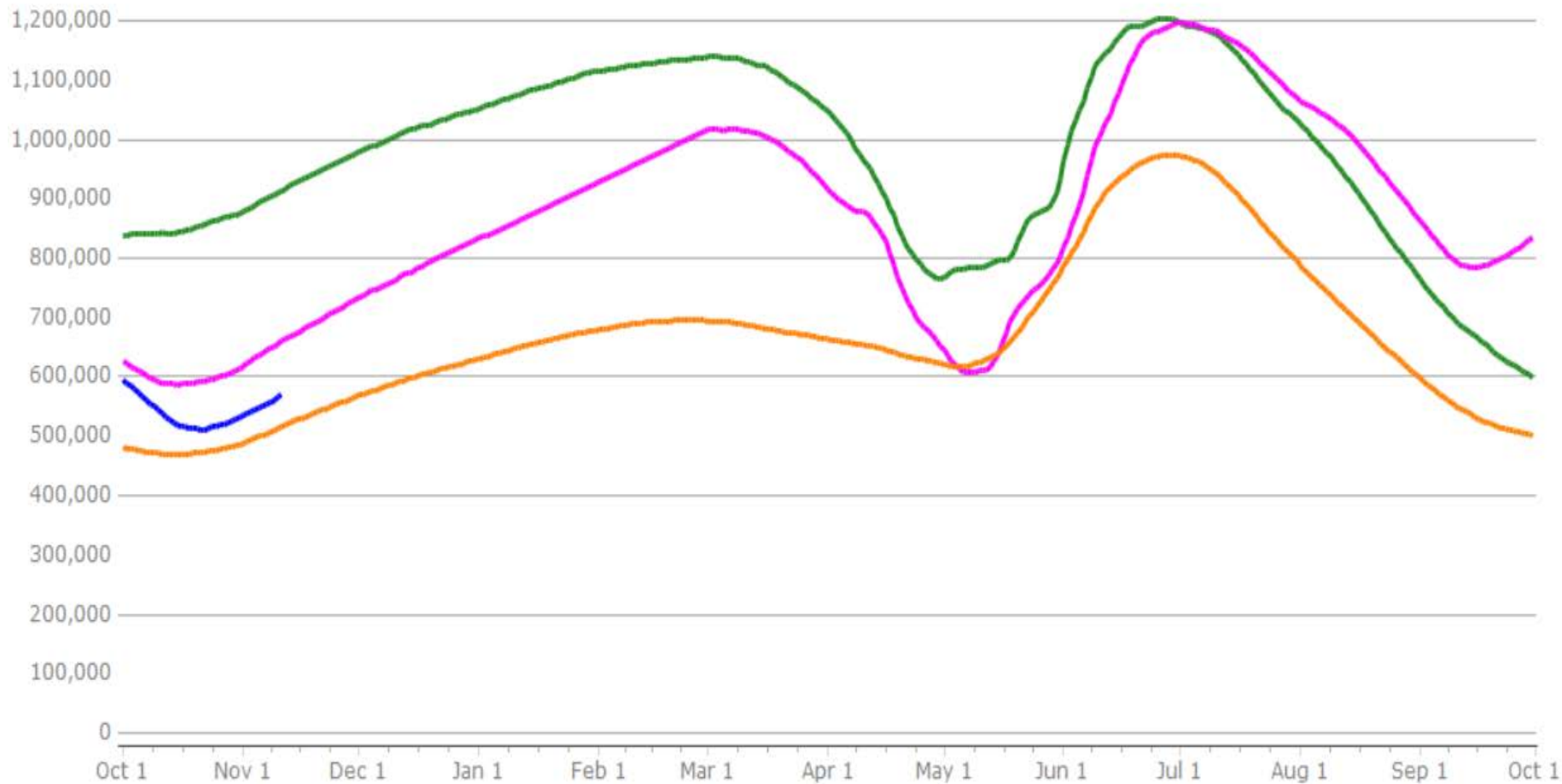


avg-06-27 3347206.36266667

Palisades Reservoir

— 2021 — 2020 — 2019 — avg

Acre-Feet

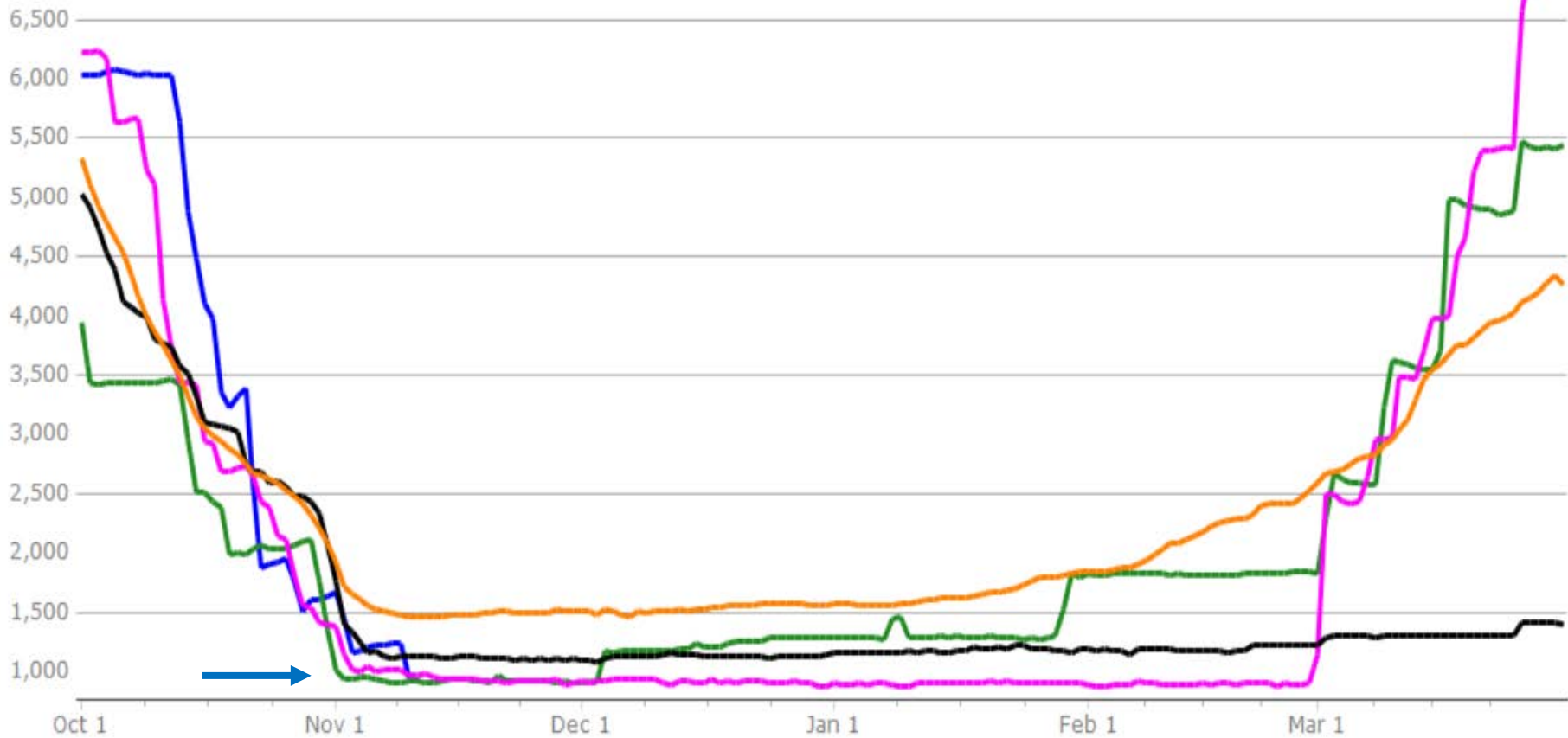


8-12-19 919

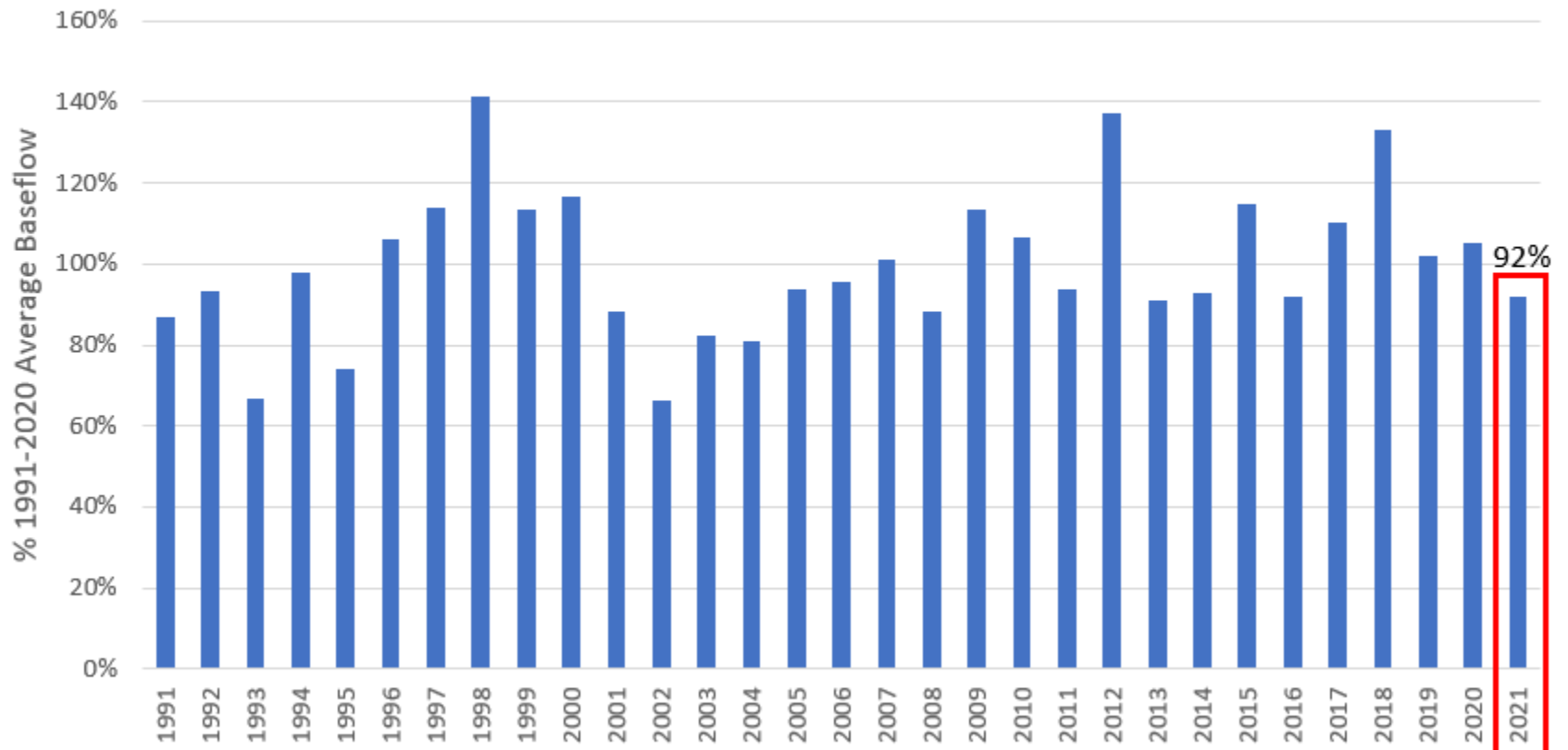
Palisades Dam Outflow

2021 2020 2019 50% avg

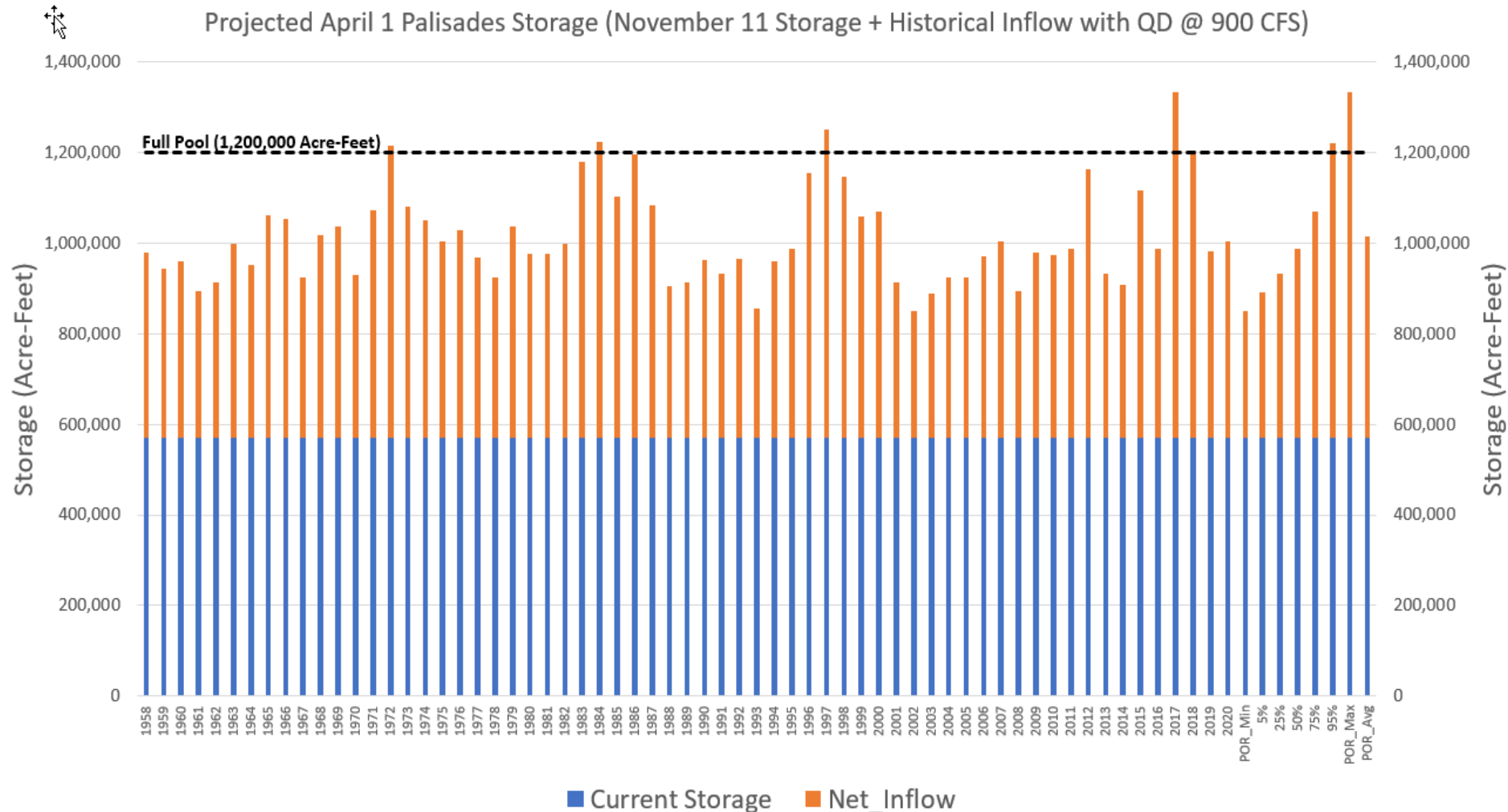
CFS



South Fork Snake River Baseflows September 1 to November 5 HEII QU - % 1991-2020 Average



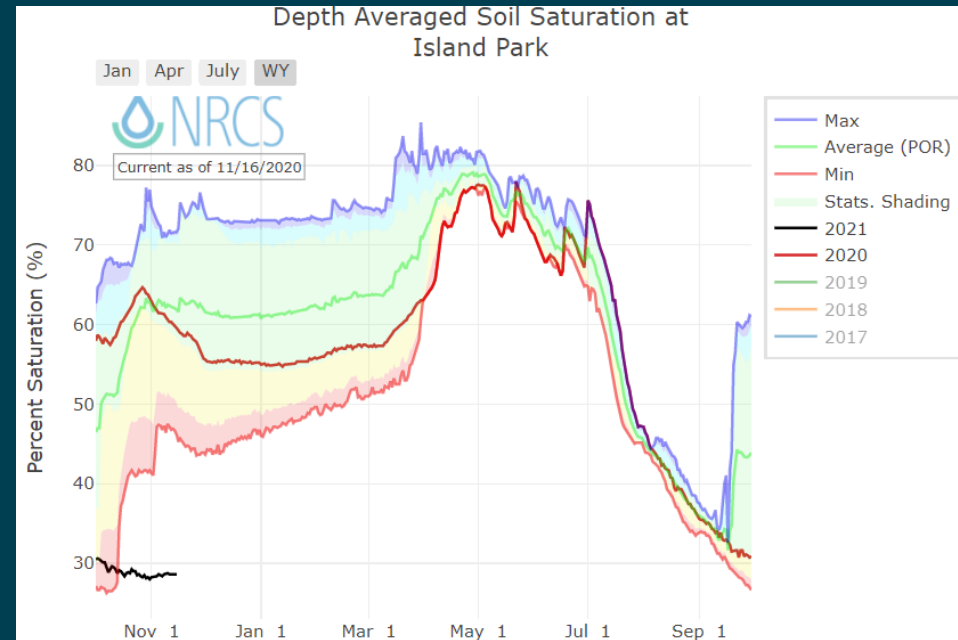
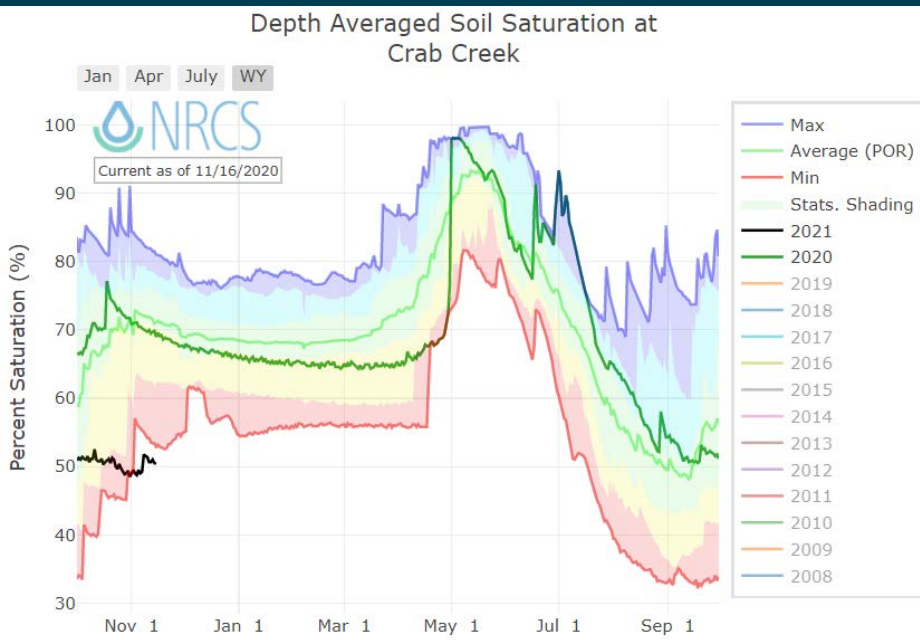
Palisades Outlook



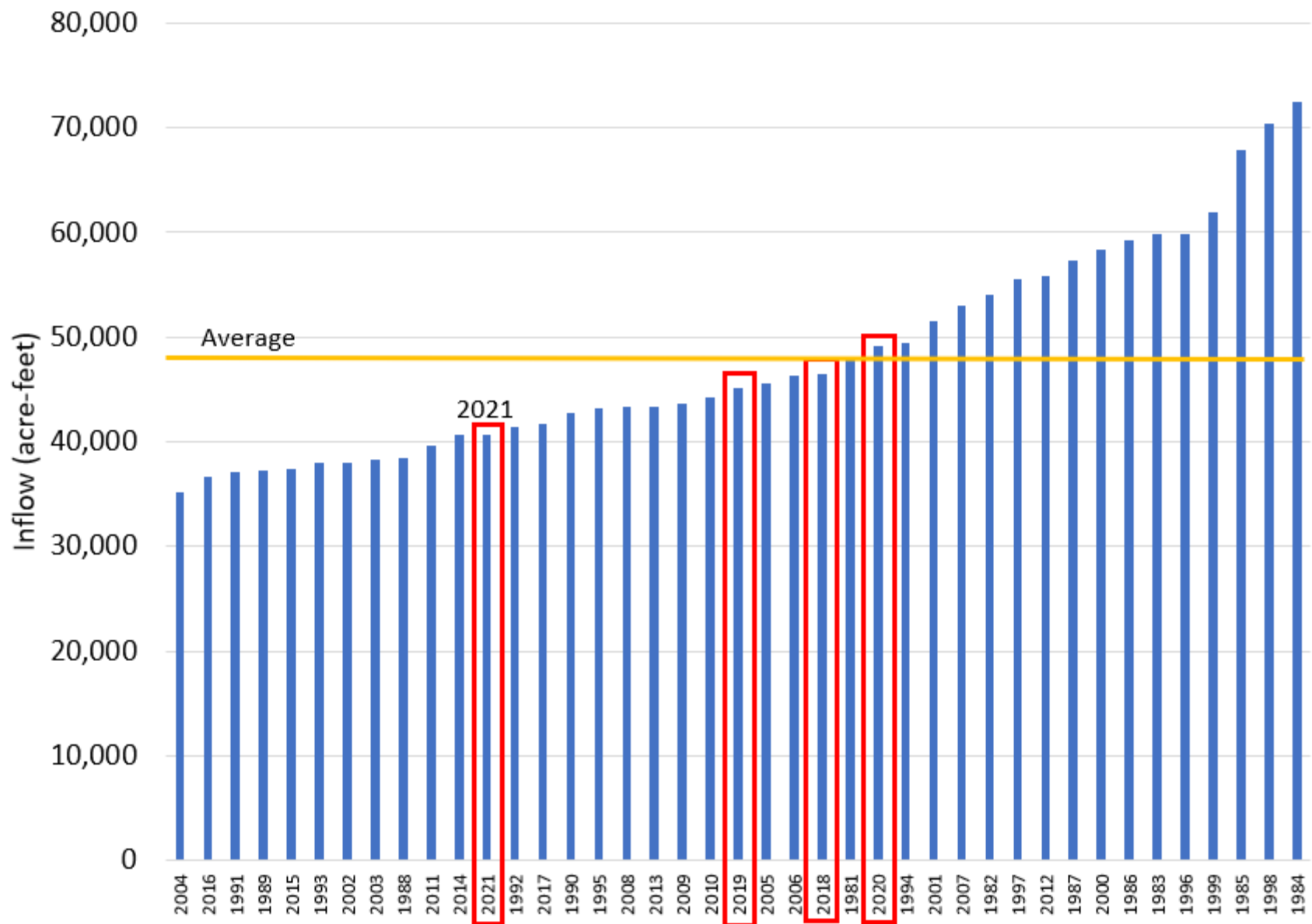
- 142% of average net inflow needed to exceed April 1 soft-targets (Inflow – Outflow)
- 130% of average Palisades gains needed with Jck @ 280 cfs.
- Water year to date gains are ~96% of average
- Projecting April 1 storage between 925-1,050 KAF



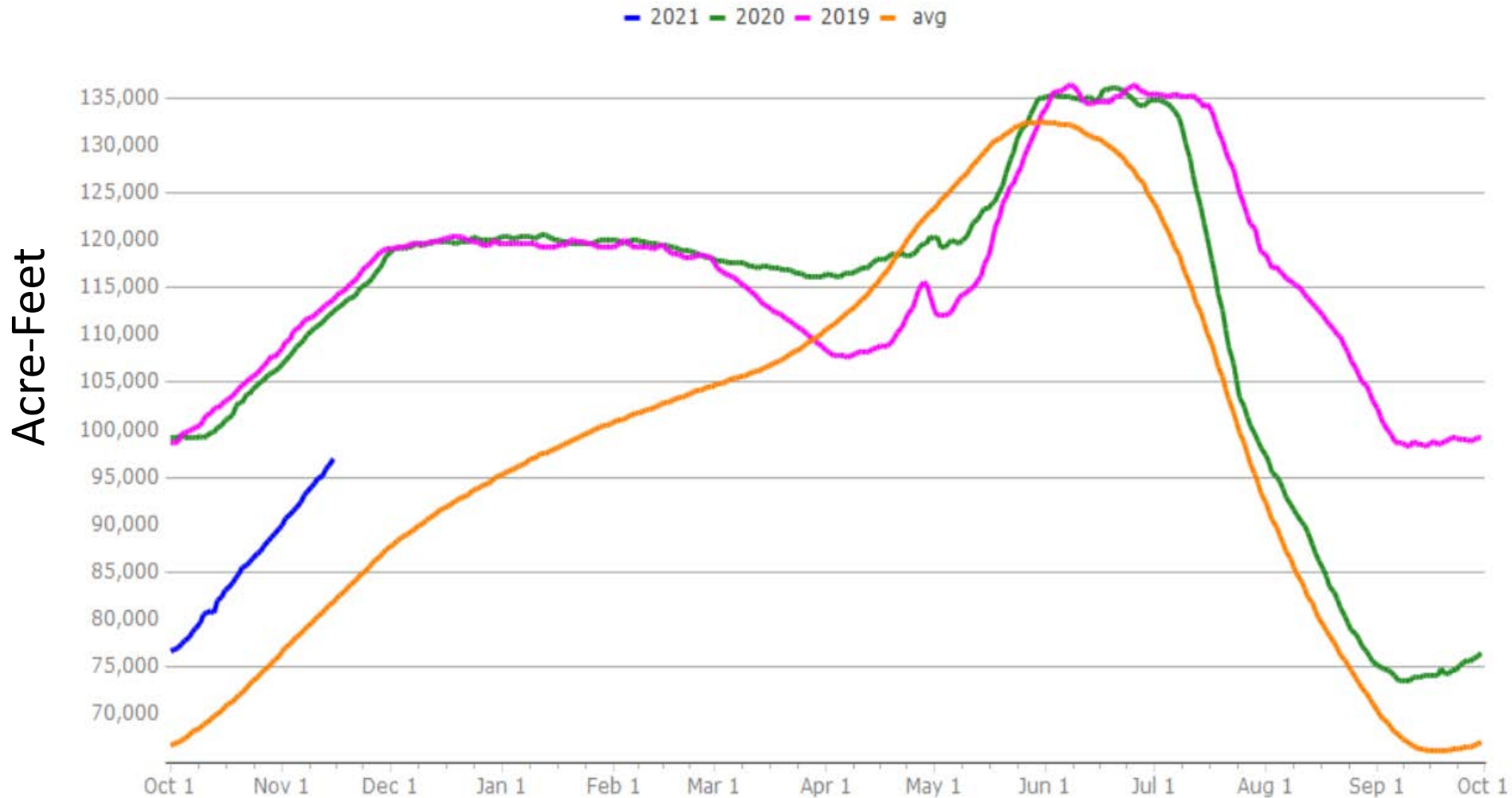
Island Park Basin Soil Moisture



Henrys Fork at Island Park Dam Basin Baseflows, Water Year To 11/15



Island Park Dam and Reservoir, ID Elevation:6302.000



- Discharge currently 212 cfs
- Average storage gain of 460 acre-feet per day since October 5th
- Will reach winter pool level of ~120,000 acre-feet in December, then pass inflow

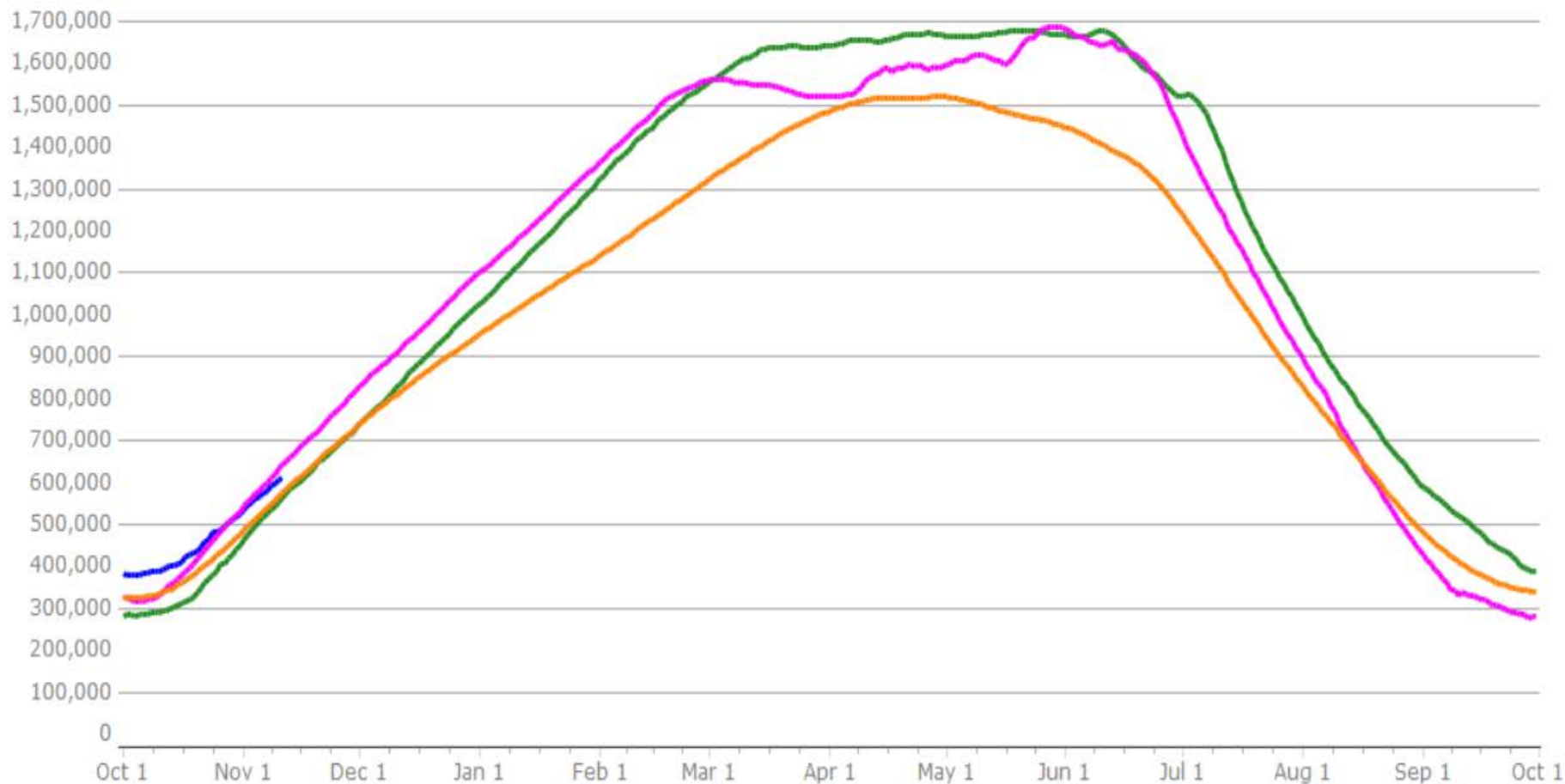


avg-01-26 1107944.27033333

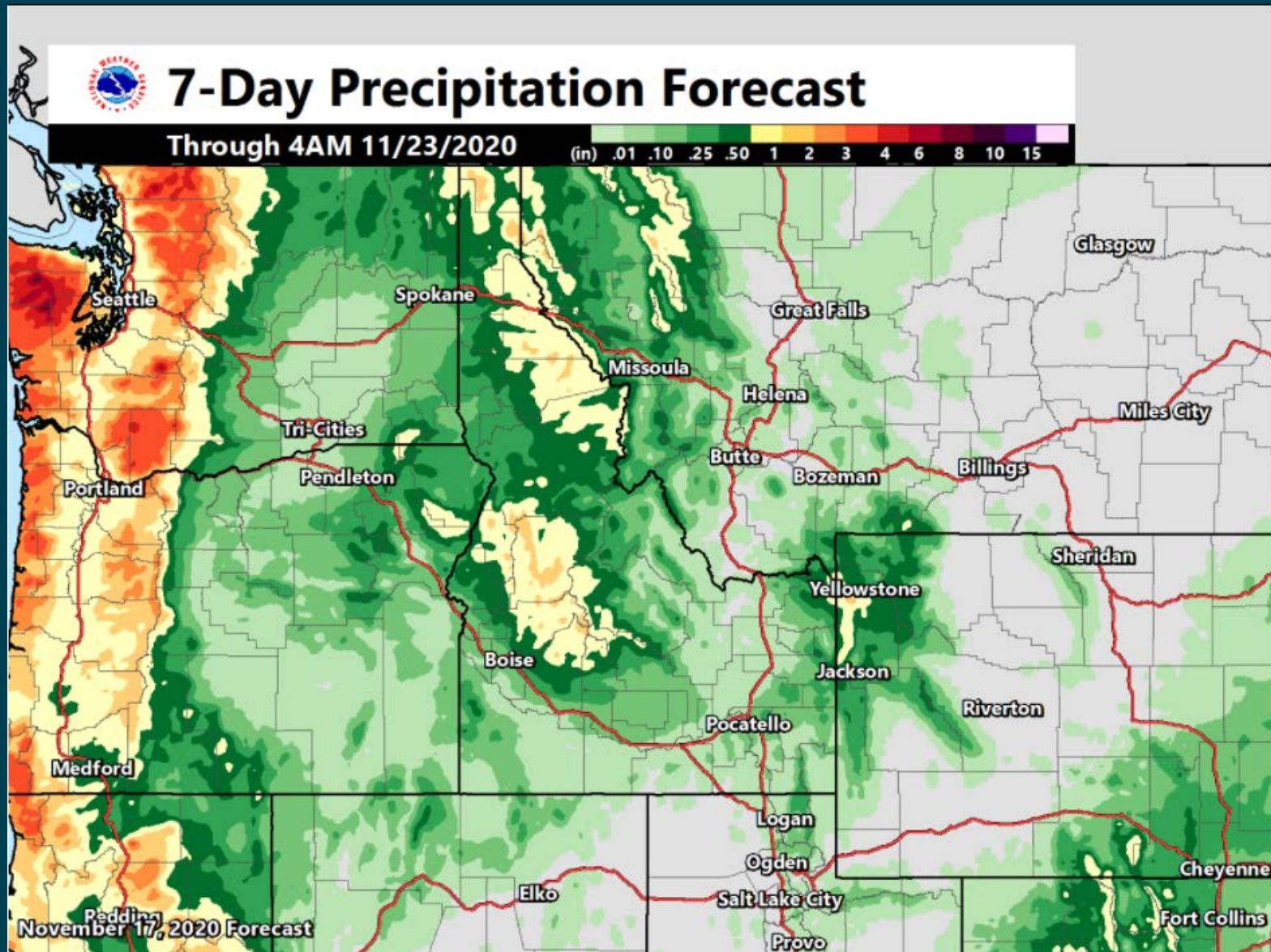
American Falls Reservoir

— 2021 — 2020 — 2019 — avg

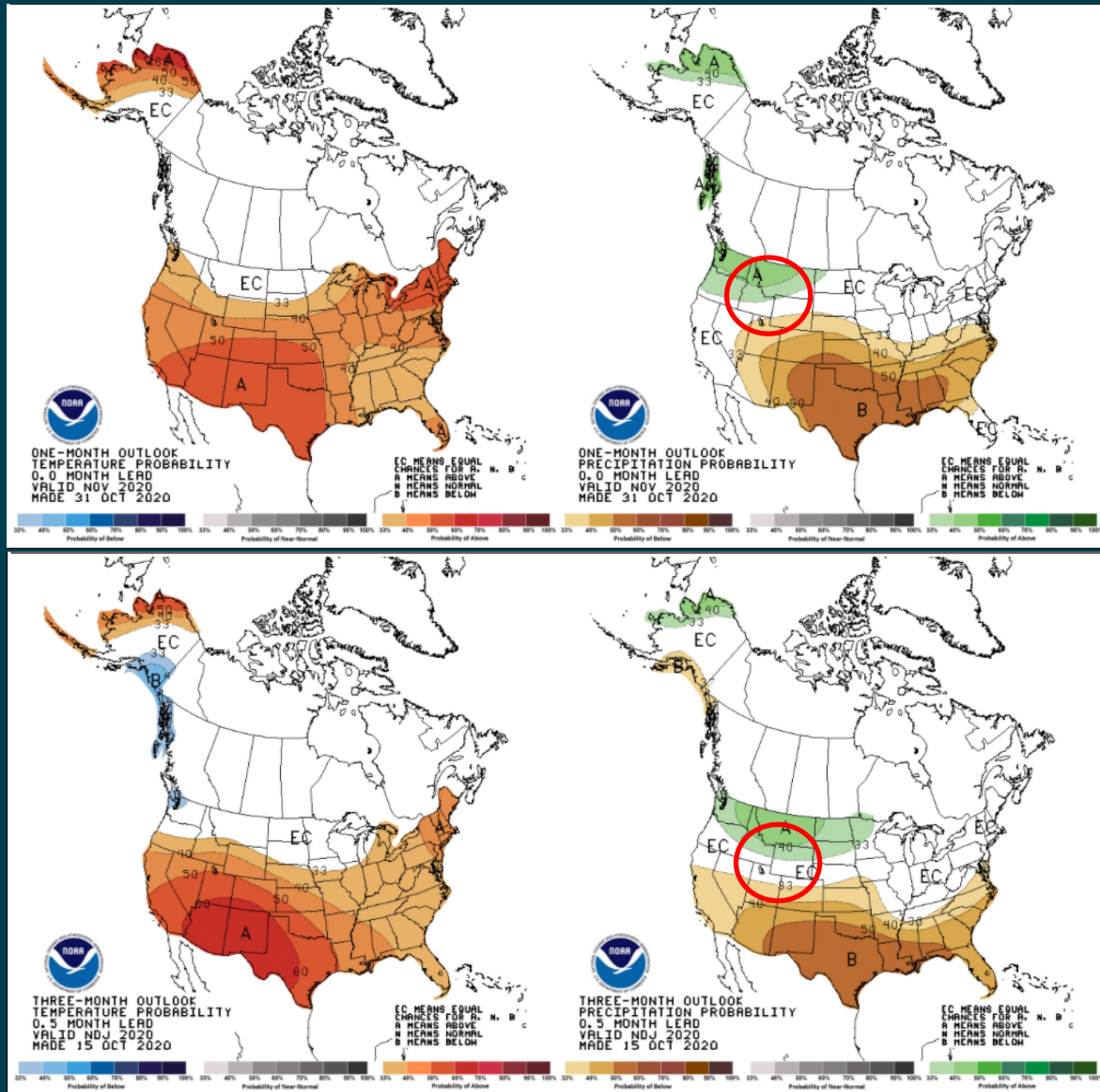
Acre-Feet



Hydrologic Outlook



Hydrologic Outlook



Hydrologic Outlook

ENSO Alert System Status: **La Niña Advisory**

La Niña conditions are present.*

Equatorial sea surface temperatures (SSTs) are below average from the west-central to eastern Pacific Ocean.

The tropical atmospheric circulation is consistent with La Niña.

La Niña is likely to continue through the Northern Hemisphere winter 2020-21 (~85% chance) and into spring 2021 (~60% chance during February-April).*



Hydrologic Outlook

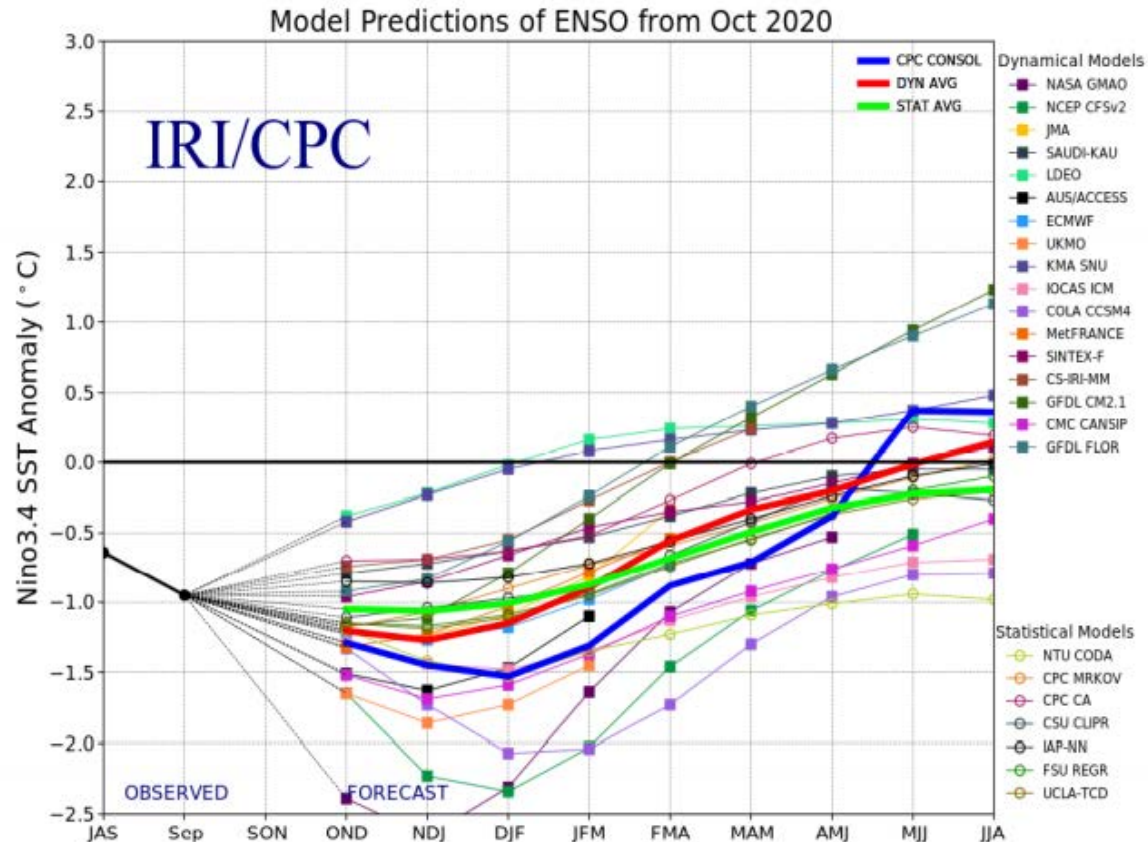


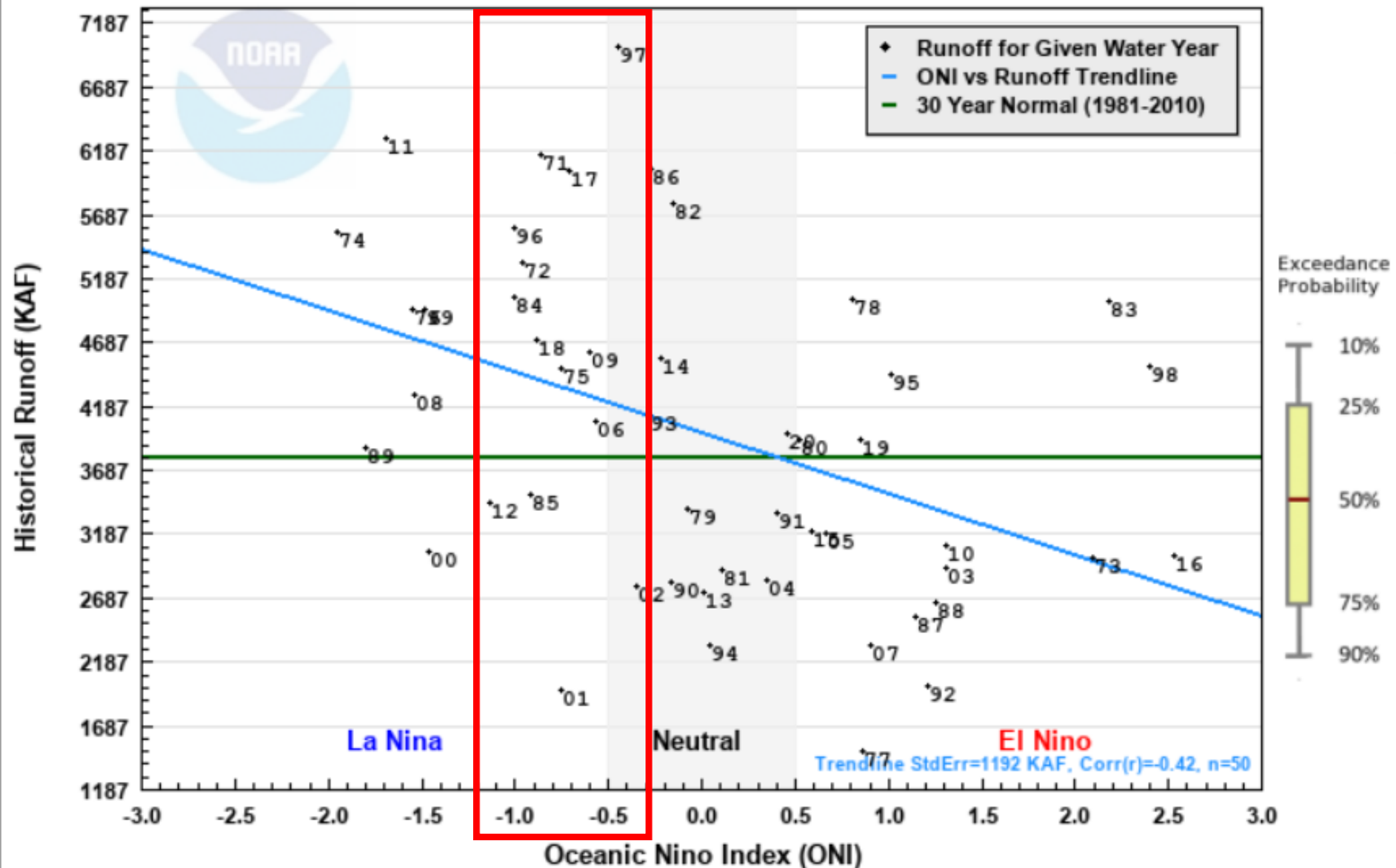
Figure provided by the International Research Institute (IRI) for Climate and Society (updated 19 October 2020).



Hydrologic Outlook

OCT-DEC Oceanic Nino Index vs APR-SEP Historical Water Supply Runoff

(HEI11) SNAKE - NEAR HEISE (1971-2020)



Latest Available ONI Index for OND:11/01/2019

Created: 11/12/2020 08:50 PST



Operational Outlook

- Jackson Lake: maintain winter flow until next spring.
- Palisades Reservoir: maintain winter minimum flow until next spring.
- Island Park: begin passing inflow in December when pool reaches the winter pool of ~6301 ft.
- Ririe Reservoir: maintain 0 cfs.
- American Falls: maintain ~900 cfs until later December 2020, then pass 300 cfs.
- Lake Walcott: maintain 525 cfs.
- November 24, 2020 – meet with Committee of Nine River and Reservoir Operations Subcommittee
- Early February 2021 – meet with Committee of Nine River and Reservoir Operations Subcommittee
- Gate inspections and associated drawdown levels for Jackson Lake (similar to fall 2019) scheduled for fall 2021.

