



EKI's Stewardship of Flathead Lake and the Lower Flathead River February 22, 2024



Confederated Salish & Kootenai Tribes
of the Flathead Reservation



ENERGY KEEPERS, INC.
A CORPORATION OF THE CONFEDERATED SALISH & KOOTENAI TRIBES



 **S&K TECHNOLOGIES, INC.**
A Family of Salish & Kootenai Tribally Owned Businesses



S&K
ELECTRONICS
Pride in Precision

 **EAGLE BANK**
S&K BANCORP
Of the land, lake and people.



On September 5, 2015, CSKT reacquired the Seli's Ksanka Qlispe' Project implementing a goal of 40 years.

CSKT turned over operations to their wholly owned Independent Power Producer – Energy Keepers Inc.



The Seli's Ksanka Qlispe' Hydroelectric Project

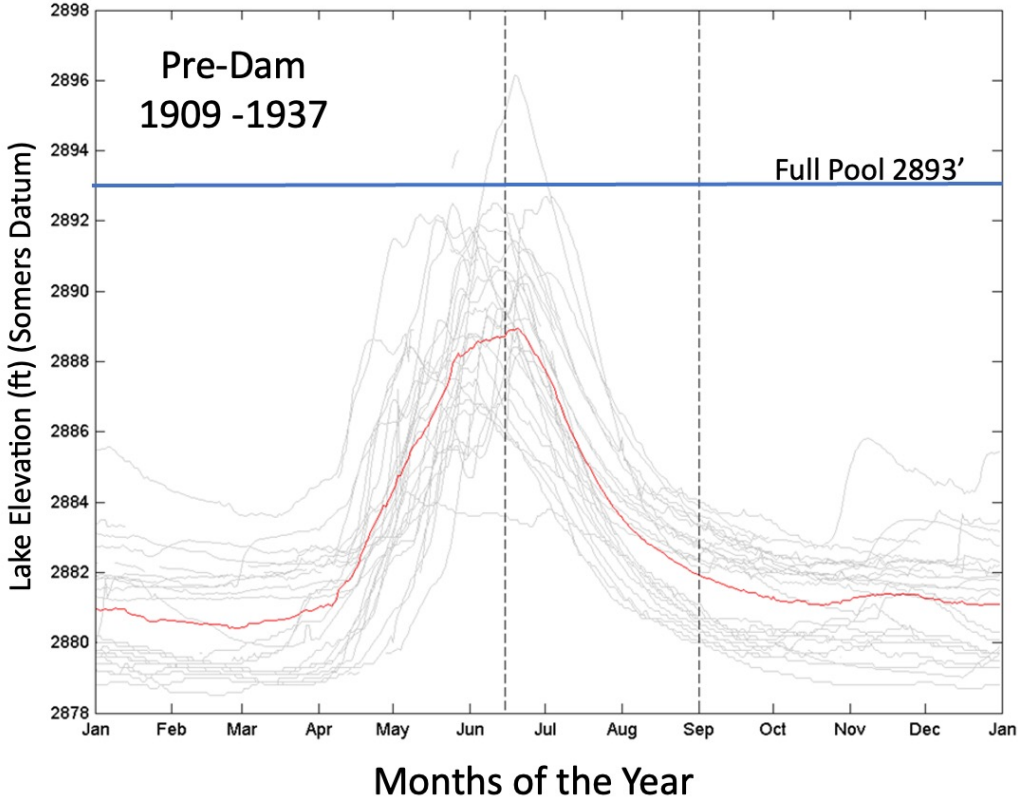
is built on sacred lands of the Confederated Salish and Kootenai People. Lands originally reserved by the Hellgate Treaty of 1855. A Steven's Treaty still in place today.



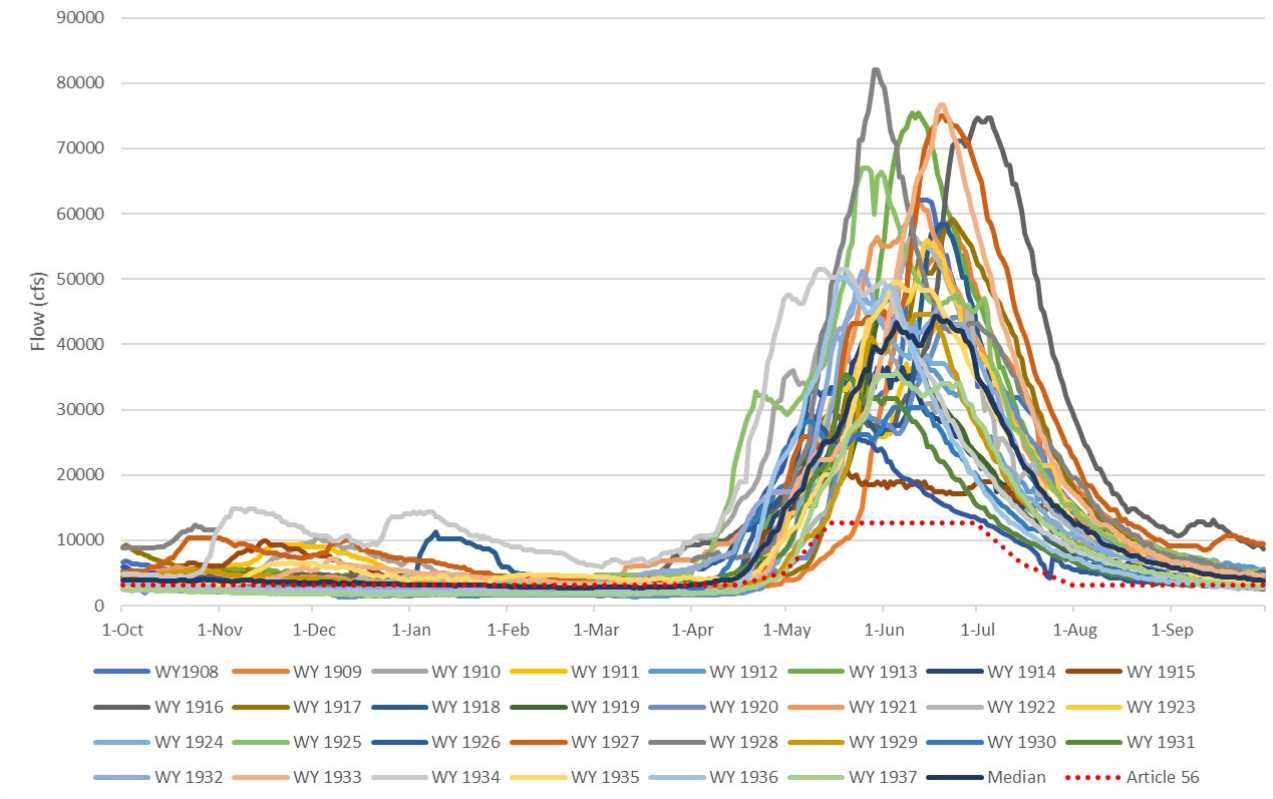
These lands and waters reserved by CSKT's treaty are the center of their homelands and provide the spiritual sustenance necessary for the perpetuation of CSKT's people and culture.

Pre-Dam - Lake and River Hydrographs

Natural Lake Level Fluctuations



Flathead River near Polson, MT



Federal Energy Regulator Commission (FERC) License P-005, The Seli's Ksanka Qlispe' Project

- + 50 Year License issued in 1985 to The Montana Power Company and The Confederated Salish and Kootenai Tribes as Co-Licensees
- + 80 Articles total, 25 are mitigation articles added in 1996
 - + Article 12
 - + Article 43
 - + Articles 56, 60, & 68 mitigation articles



Article 12 – Preserves FERC's Authority

- + Under the FPA, FERC is required to:
“[G]ive equal consideration to the [power and development purposes for which licenses are issued,] purposes of energy conservation, the protection, mitigation of damage to, and enhancement of, fish and wildlife (including related spawning grounds and habitat), the protection of recreational opportunities, and the preservation of other aspects of environmental quality.”
- + “..... and as the Commission may prescribe for the protection of life, health, and property, and in the interest of the fullest practicable conservation and utilization of such waters for power purposes and for other beneficial public uses, including recreational purposes, and the Licensee shall release water from the project reservoir at such rate in cubic feet per second, or such volume in acre-feet per specified period of time, as the Secretary of the Army may prescribe in the interest of navigation, or as the Commission may prescribe for the other purposes hereinbefore mentioned.

Article 43 – Authorizes Storage of 1.2 MAF

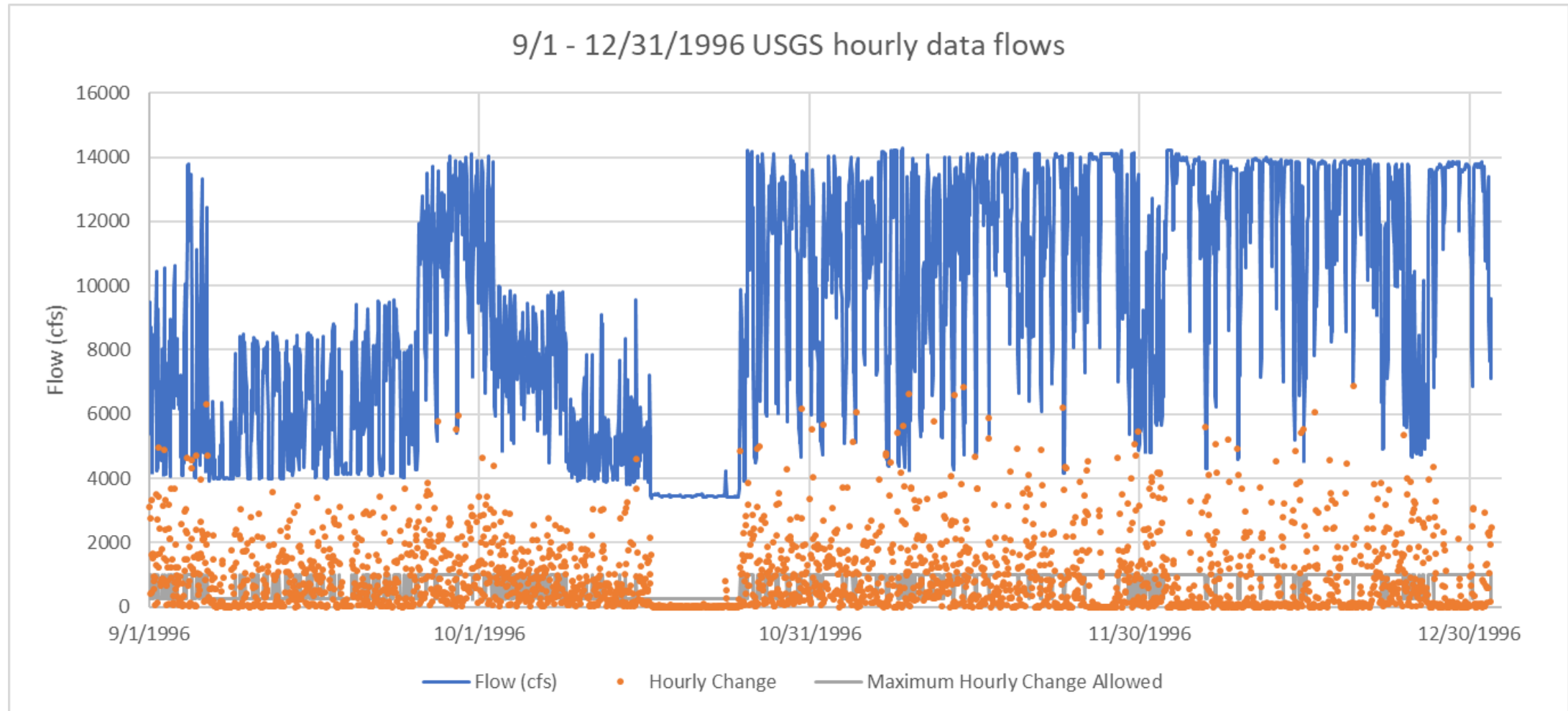


Article 43 Authorization:

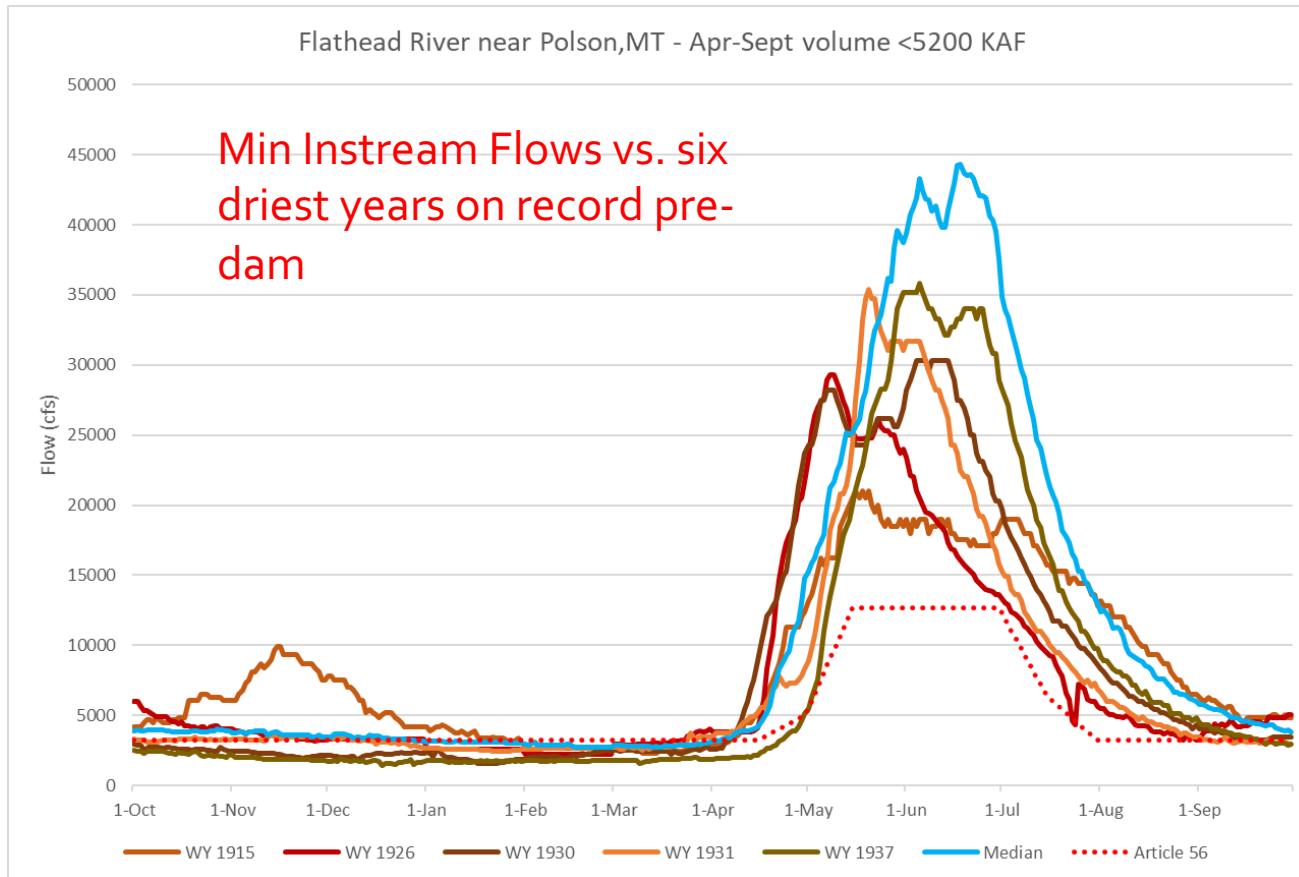
- 1.2 MAF to be stored between 2883 and 2893 for use by the licensee.
- Limited by 1964 Flood Control MOU
 - Max Elev. 2883' if conditions allow – April 15
 - Max. Elev. of 2890' – no sooner than May 31
 - Max. Elev. 2893' – on or about June 15



Lower Flathead River Prior to 4e conditions



Article 56 – Minimum Instream Flows



“The licensee shall maintain releases at or above the following instantaneous minimum flow, in cubic feet per second (cfs) on a continuous basis..... “

August 1 to April 15 = Continuous at 3,200 cfs
April 16 to April 30 = Increased from 3,200 cfs to 5,000 cfs at 120 cfs per day
May 1 to May 15 = Increased from 5,000 cfs to 12,700 cfs at 510 cfs per day
May 16 to June 30 = Continuous at 12,700 cfs
July 1 to July 15 = Reduced from 12,700 cfs to 6,400 cfs at 420 cfs per day
July 16 to July 31 = Reduced from 6,400 cfs to 3,200 cfs at 200 cfs per day

Article 60 – Drought Management Plan

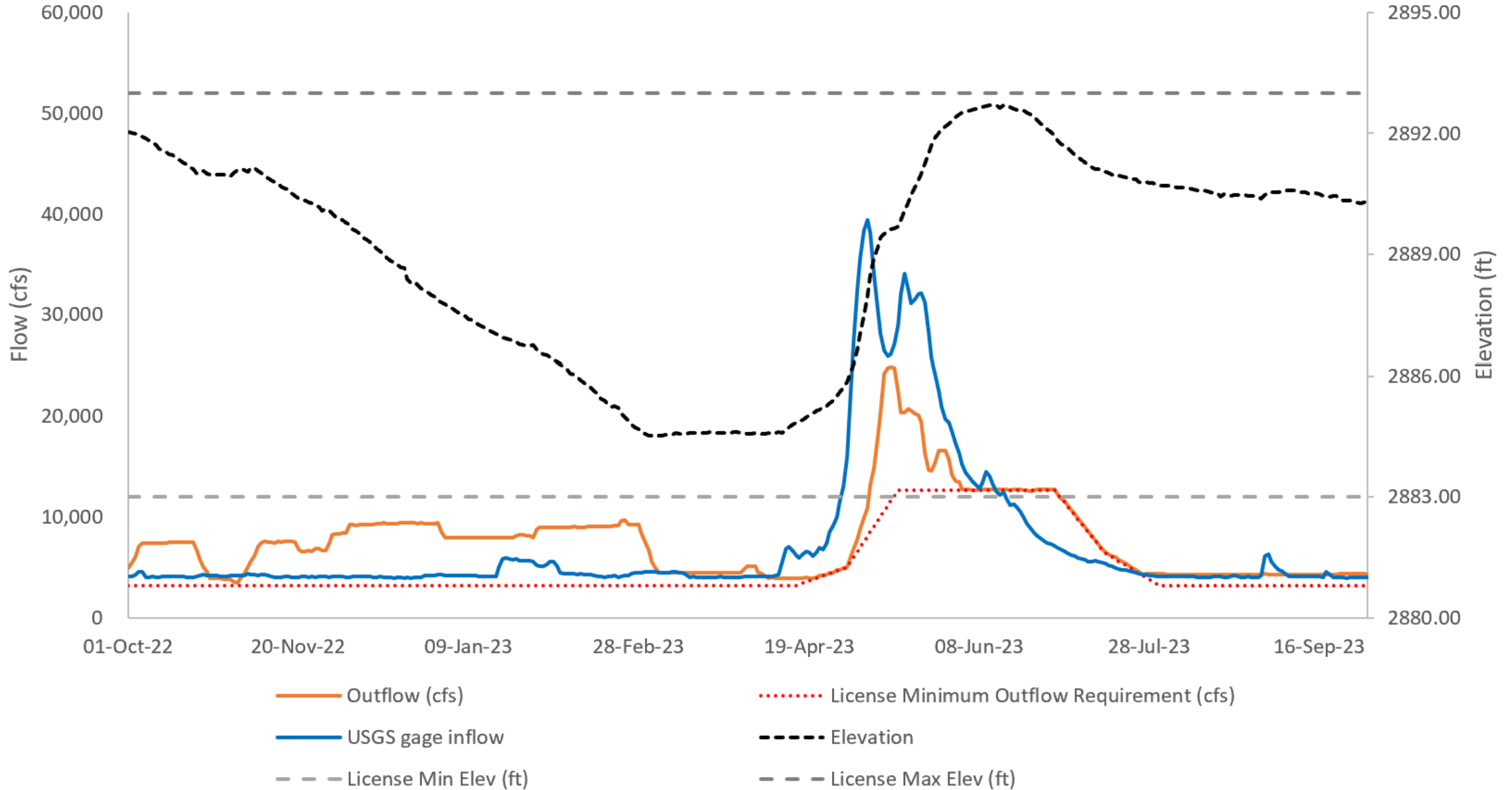
- + “..... provision for re-evaluation and adjustment of Flathead Lake flood control requirements and other provisions necessary to facilitate compliance with **lower Flathead River minimum instream flow requirements** designated by the Secretary. The Secretary reserves the right to reject, modify, or otherwise alter the drought management plan, in whole or in part.”
- + Draft Plan filed in 2002
- + EIS completed in 2010
- + No Record of Decision Issued
- + February 5, 2023, EKI responded to NOSFL petition asking FERC to direct the implementation of this plan.
- + EKI will file an updated is proactively coordinating and sharing data with the USACE on an ongoing basis to facilitate decision-making consistent with best practices and license obligations. Once the documentation is completed with appropriate consultations it will be submitted to the Secretary of the Interior and filed with the Commission.

Article 68 – Northshore Erosion Control

- + Requires erosion control across the Lazy N Ranch WPA.
- + Gravel beaches combined with a Maximum Lake Elevation of 2891' no later than October 31st.
- + Habitat has increased over 20 acres since 2015.



Water Year 2023 Flathead Lake Data





Northwest River Forecast Center

ESP Monthly Water Supply Volumes

Home

Close

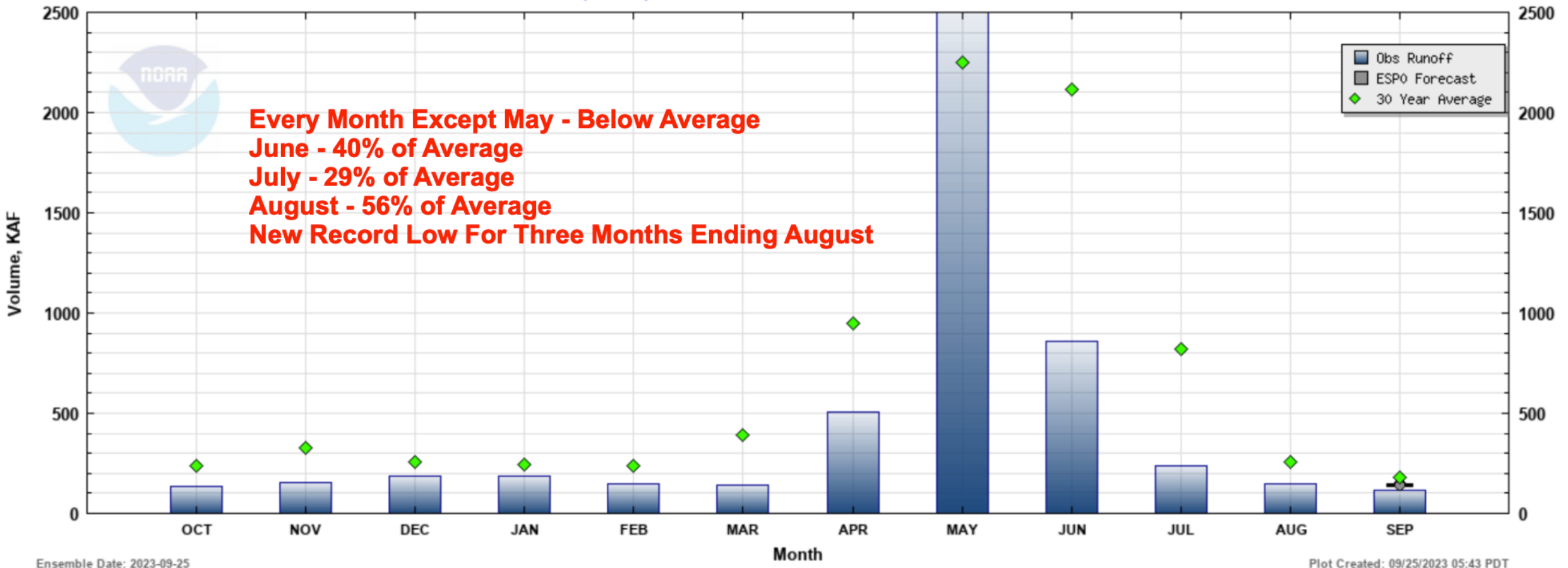
Seasonal Forecasts

Choose Date:

Next Water Year

Water Supply Volume Monthly Forecasts (ESP0) for Water Year 2023

(KERM8) FLATHEAD - SELI'S KSANKA QLISPE' DAM

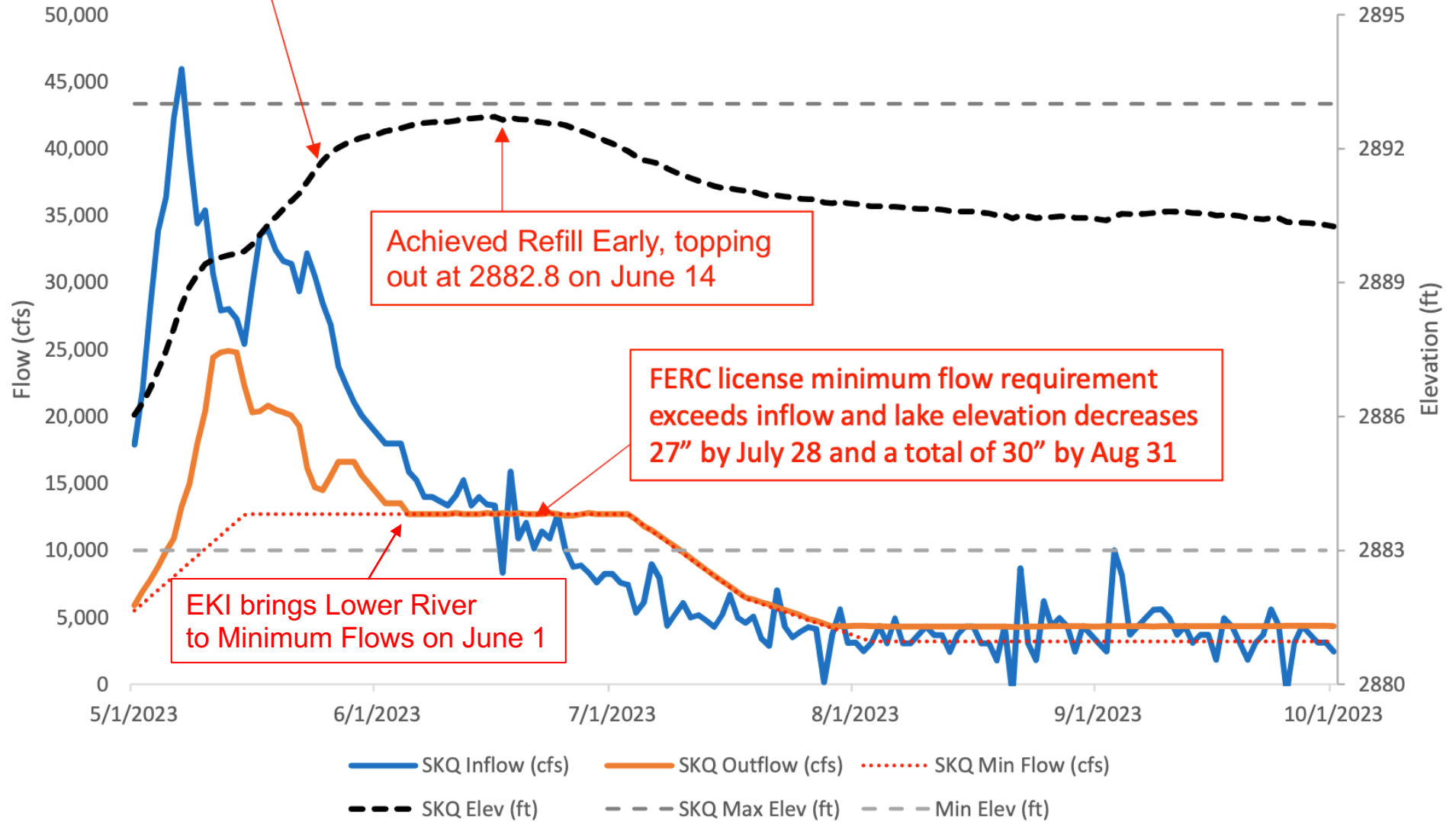


Ensemble Date: 2023-09-25

Plot Created: 09/25/2023 05:43 PDT

Released from Flood Risk Management Requirements – Filled lake to 2892.3 ft on May 31 (2.3 feet above normal)

Flathead Lake Data May 1 - Sept 30, 2023

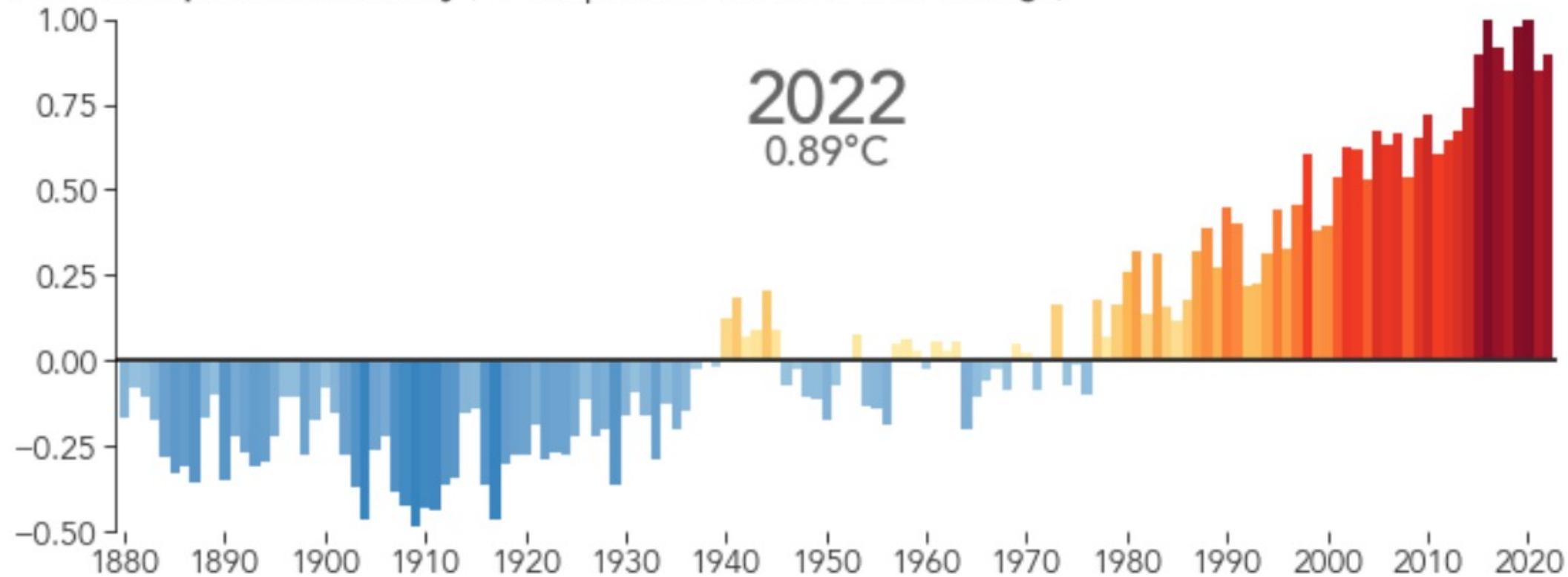


February 5, 2023, FERC Responded to Allegations

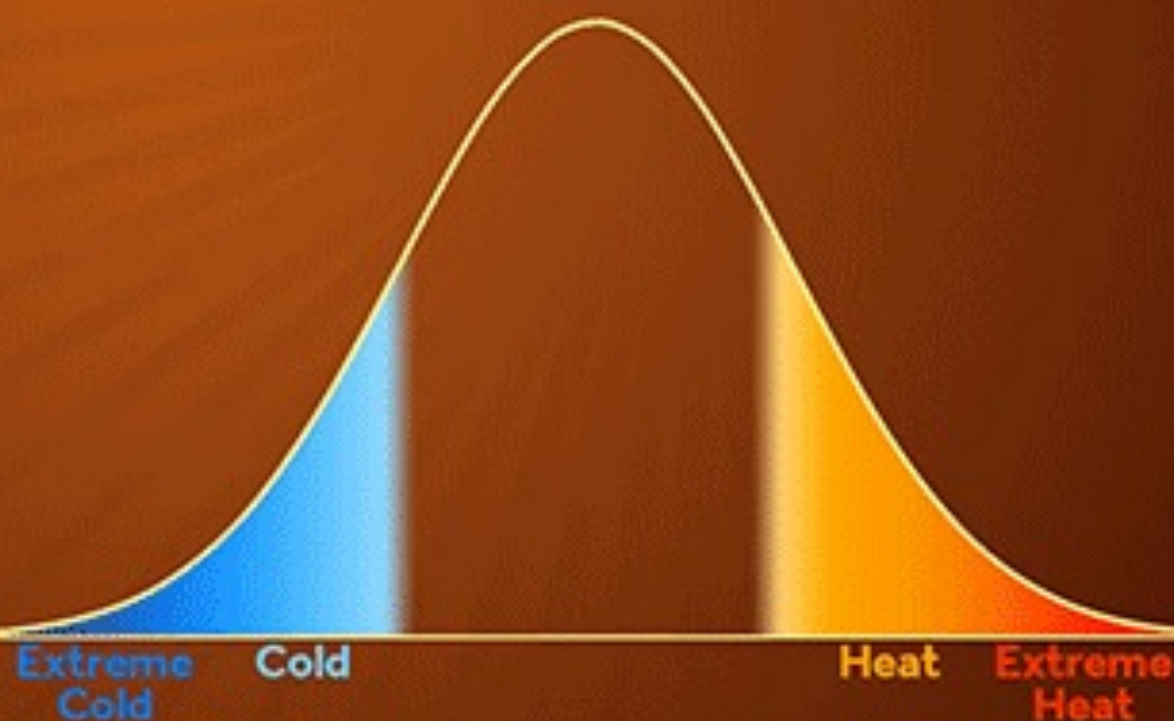
- + Over 20 complaints filed with FERC over the summer asserting EKI mismanaged the lake and did not comply with the license.
- + FERC Conducted a thorough review of EKI's operations and communicating the results to EKI in a 7-page letter February 5, 2024.
- + FERC's Conclusion:
- + "...you complied with the operational requirements of your license in the summer of 2023."

Last 9 Years Warmest on Record

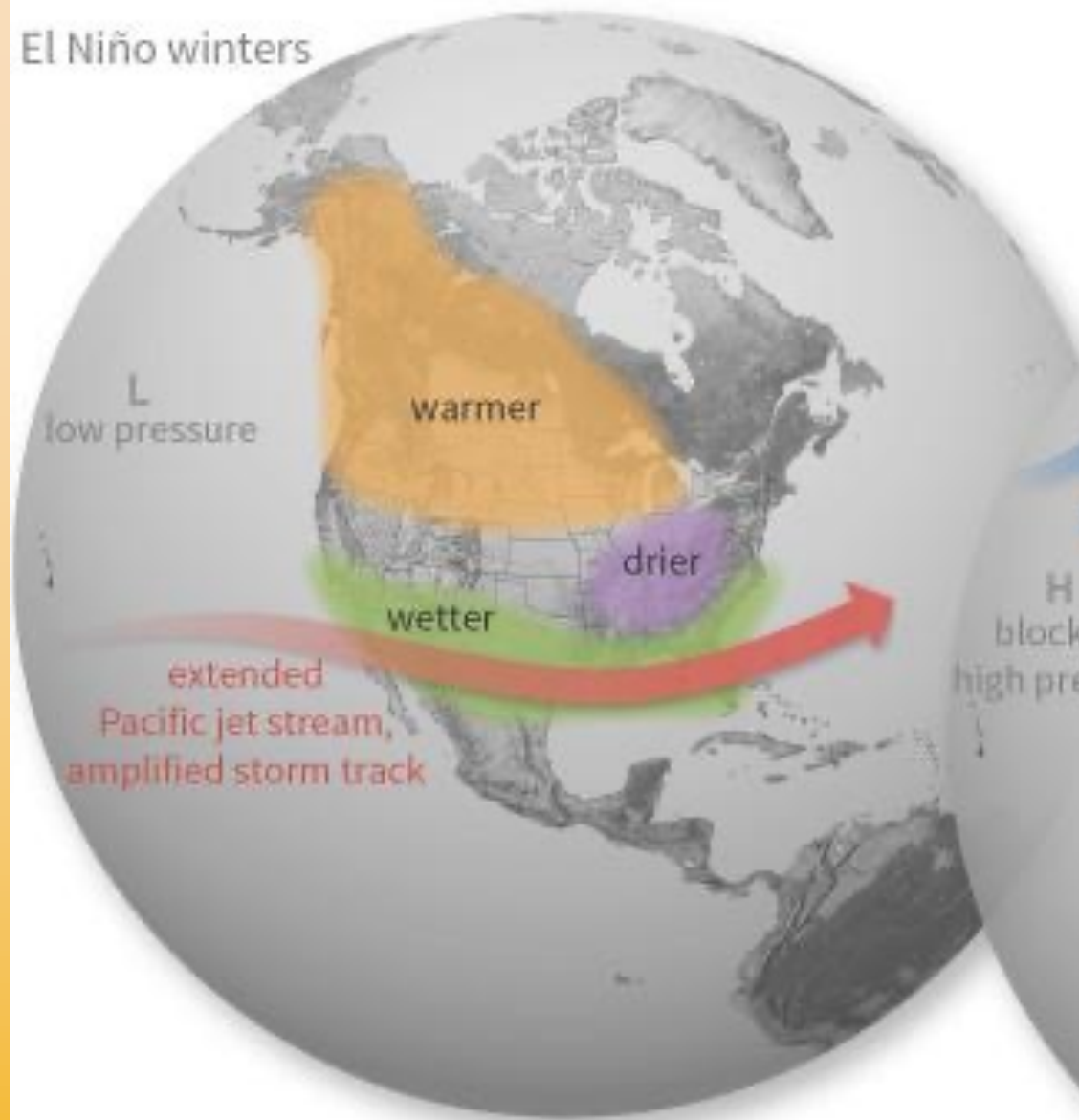
Global Temperature Anomaly ($^{\circ}\text{C}$ compared to the 1951-1980 average)



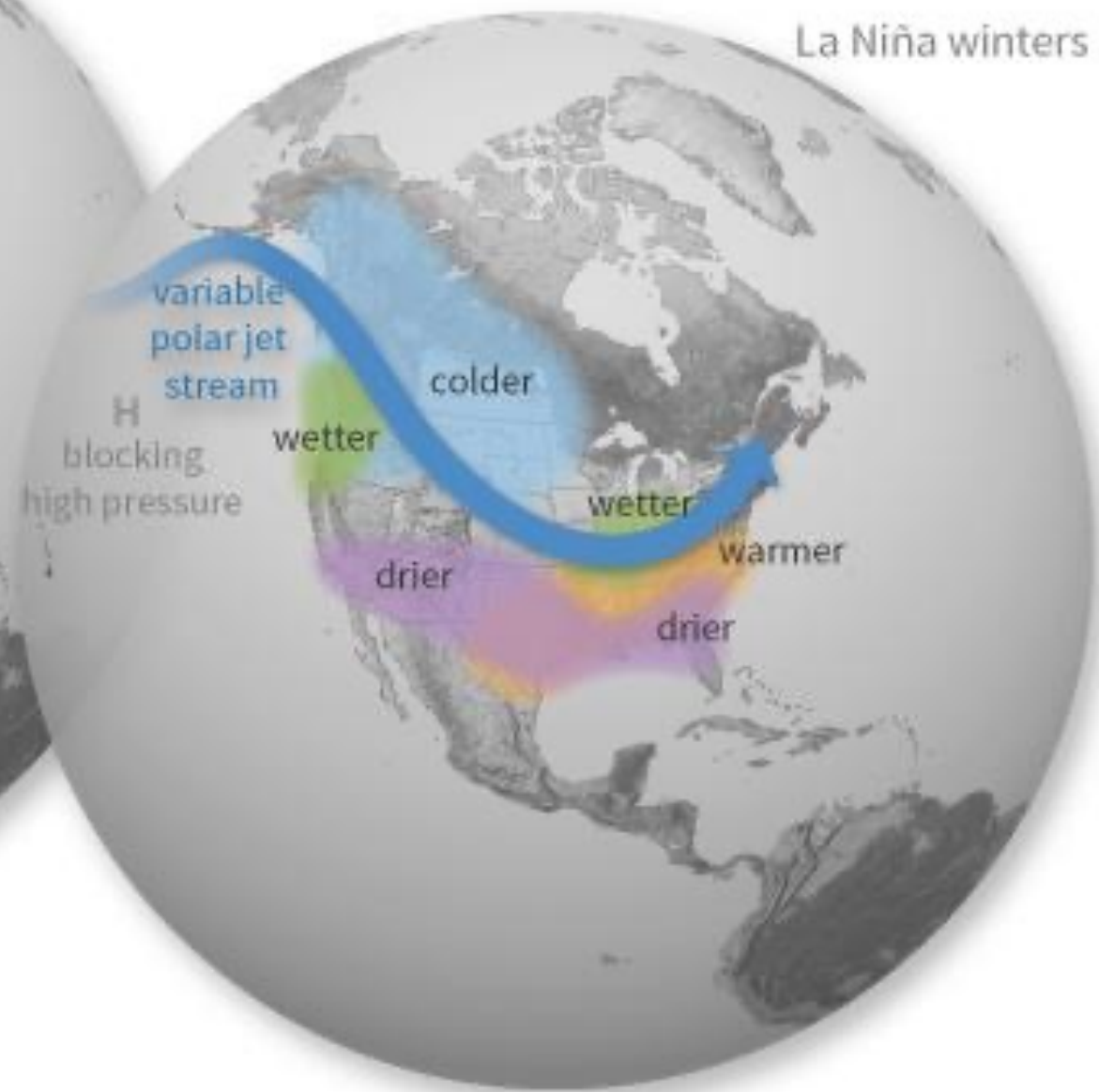
SMALL CHANGE IN AVERAGE BIG CHANGE IN EXTREMES



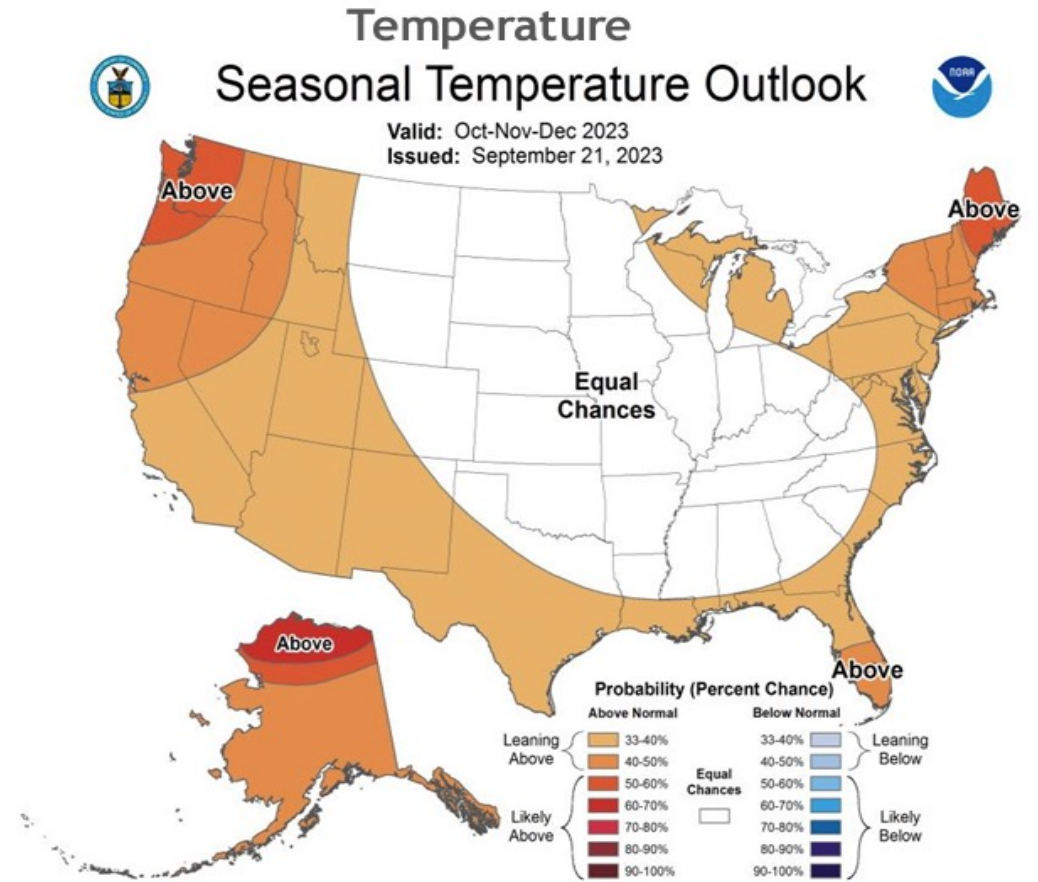
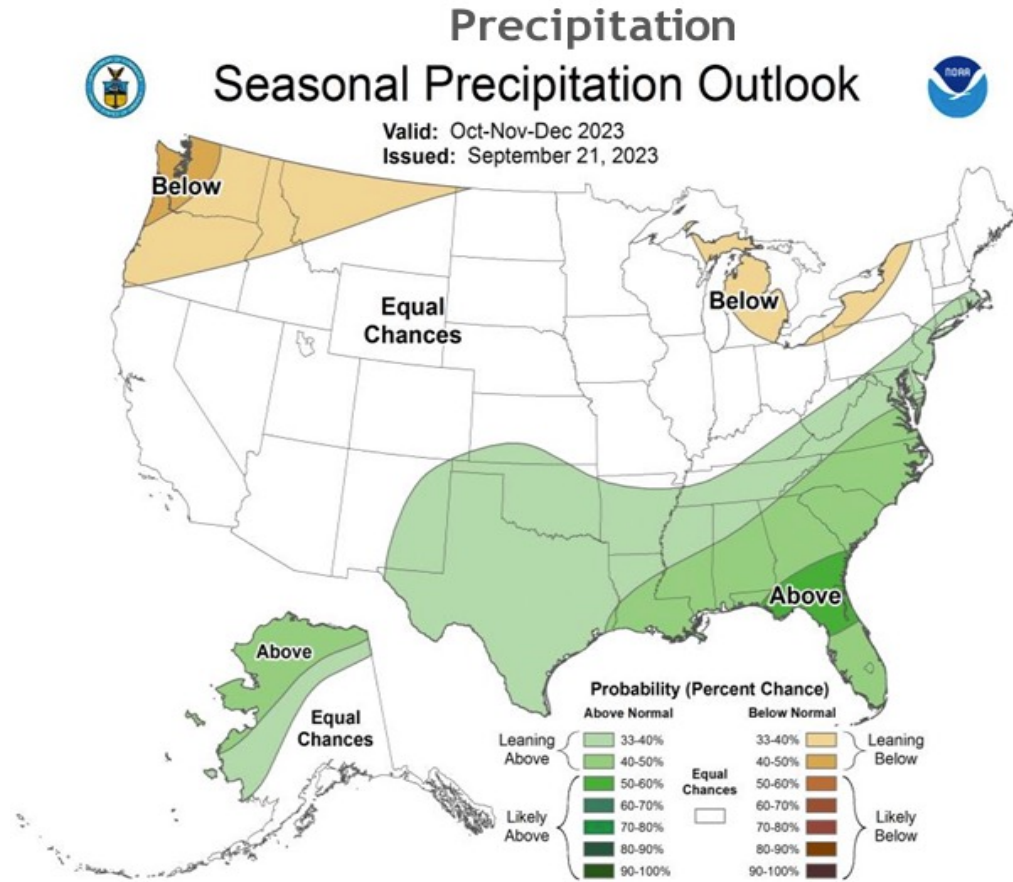
El Niño winters



La Niña winters



Continued Strong El Nino Forecasted for WY 24



AWS Plot | SNOW WATER EQUIVALENT IN FLATHEAD

NWCC Home Site Plots ▾ Basin Plots ▾ Interactive Map Report Generator Update Reports Forecast Plots ▾ Webse

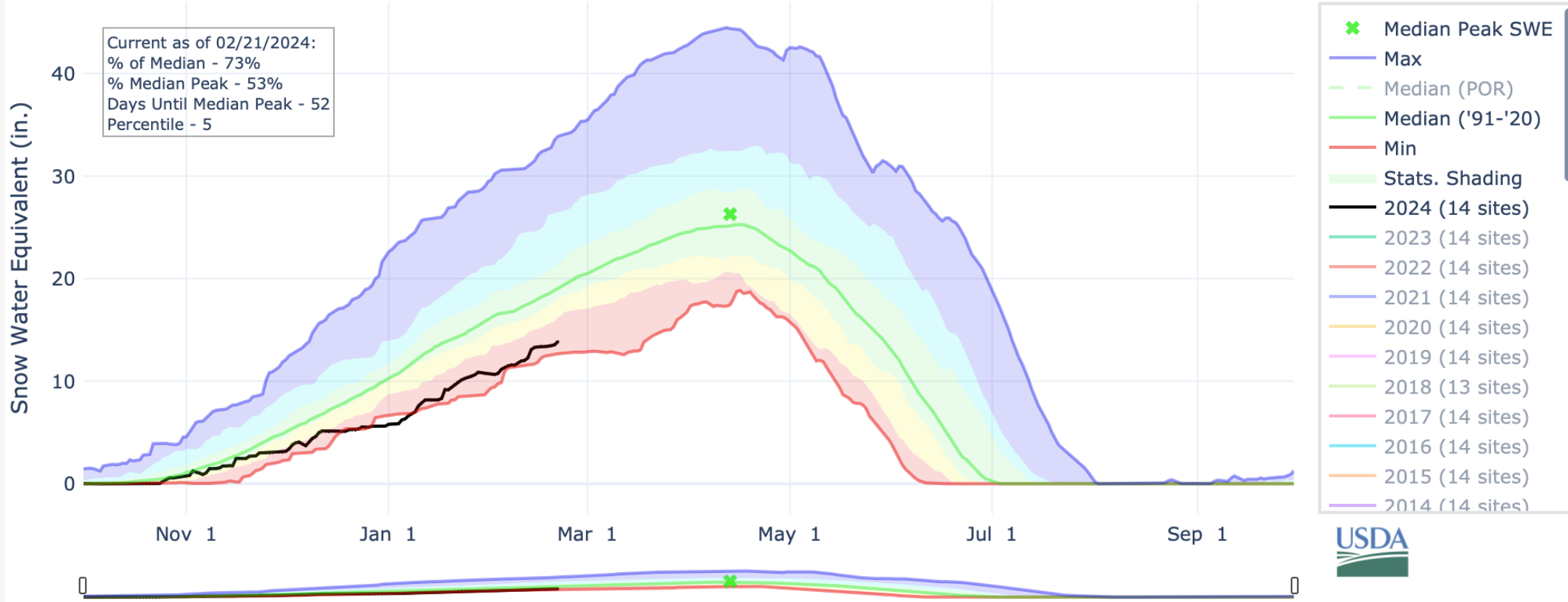
Add Title Active Only Clear Controls Clear Annotation Fullscreen

Reset Range

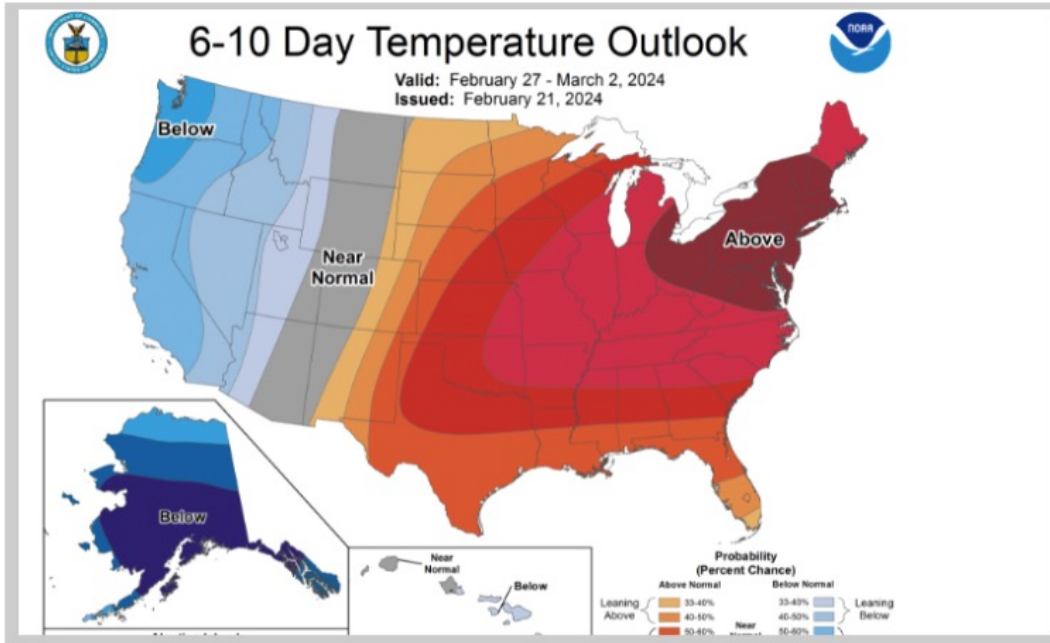
Link to data: [CSV](#) / [JSON](#)

Station List

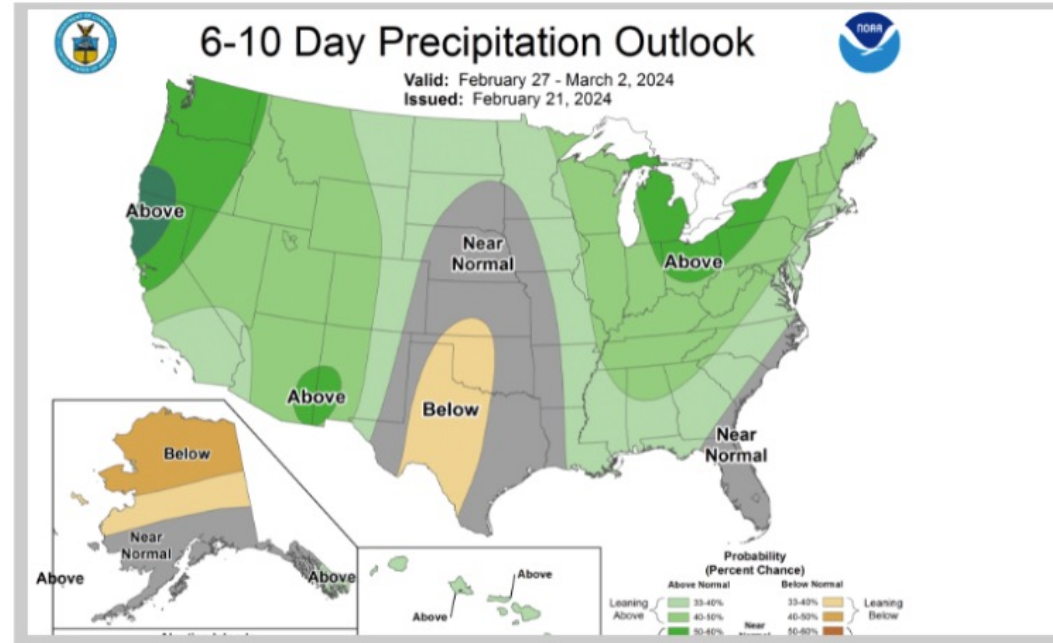
Current as of 02/21/2024:
% of Median - 73%
% Median Peak - 53%
Days Until Median Peak - 52
Percentile - 5



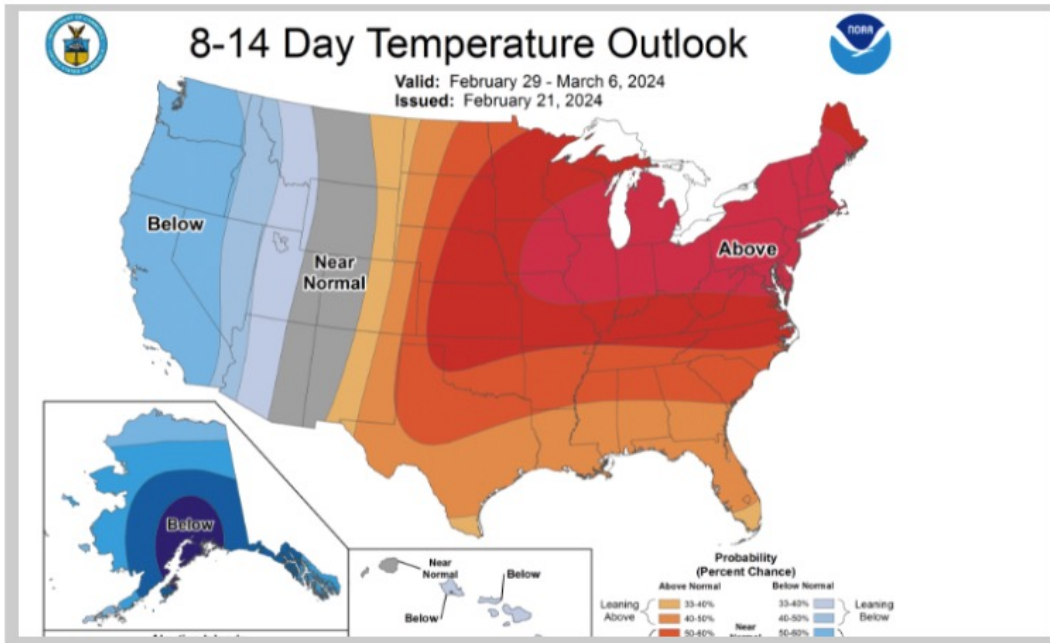
WXImage/v2/NOAA 6-10 Day Temp



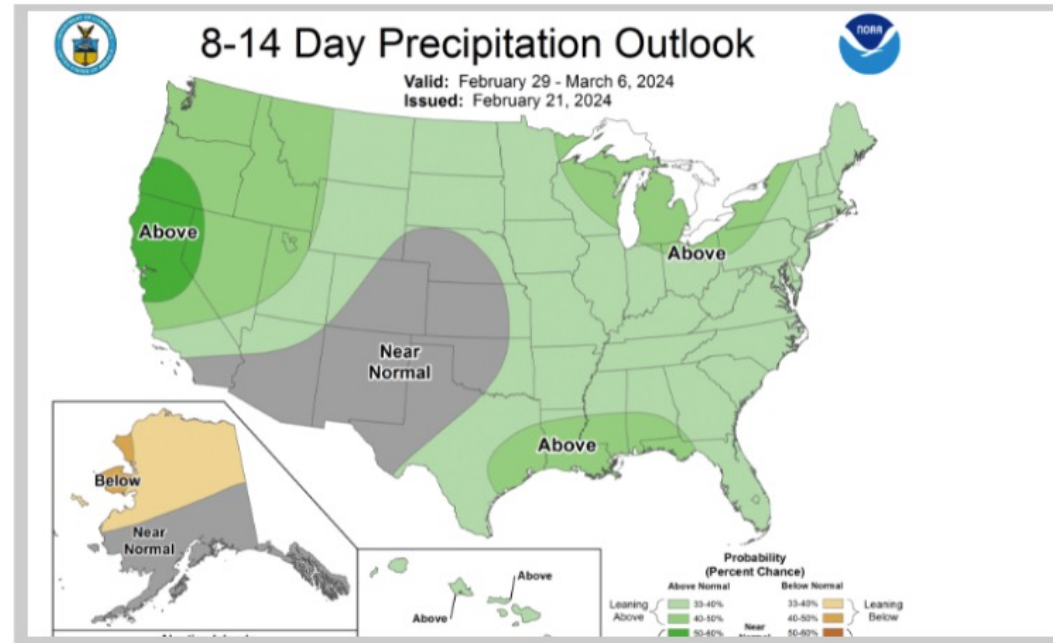
WXImage/v2/NOAA 6-10 Day Precip



WXImage/v2/NOAA 8-14 Day Temp



WXImage/v2/NOAA 8-14 Day Precip



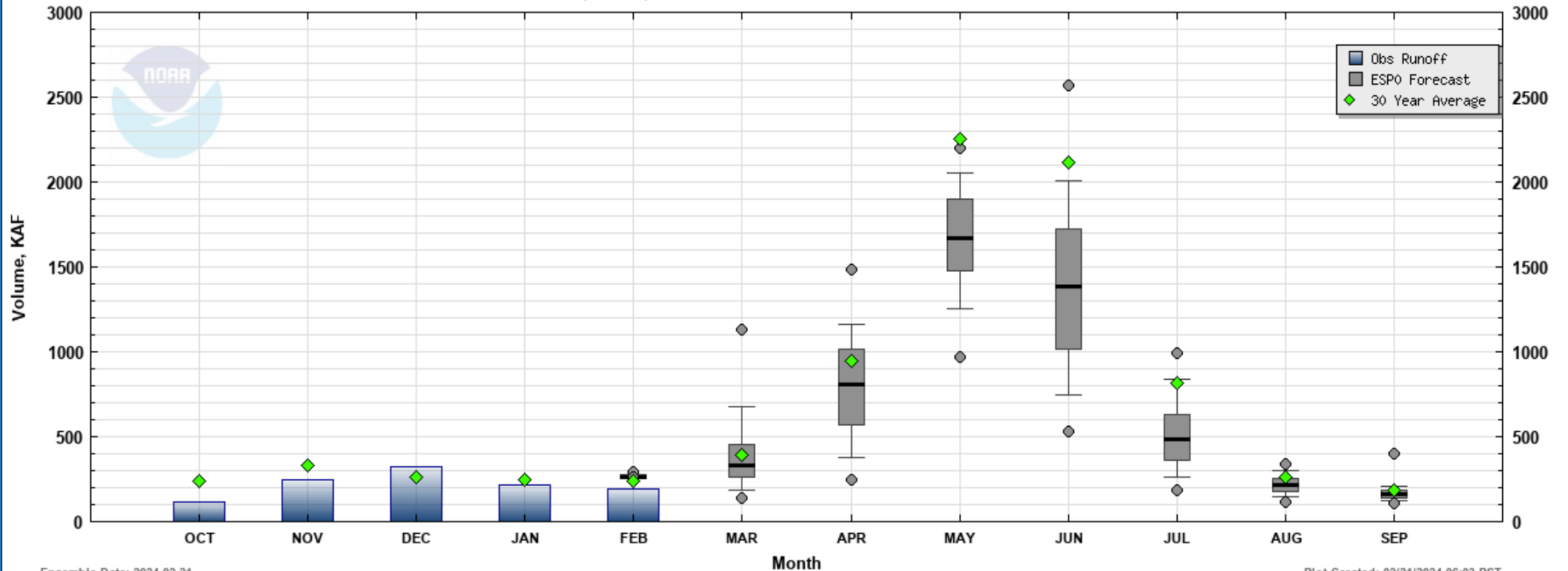


Northwest River Forecast Center ESP Monthly Water Supply Volumes

[Home](#)[Close](#)[Seasonal Forecasts](#)Choose Date: [Next Water Year](#)

Water Supply Volume Monthly Forecasts (ESP0) for Water Year 2024

(KERM8) FLATHEAD - SELI'S KSANKA QLSPE' DAM



Ensemble Date: 2024-02-21

Plot Created: 02/21/2024 06:03 PST

7 days 30 days 1 year

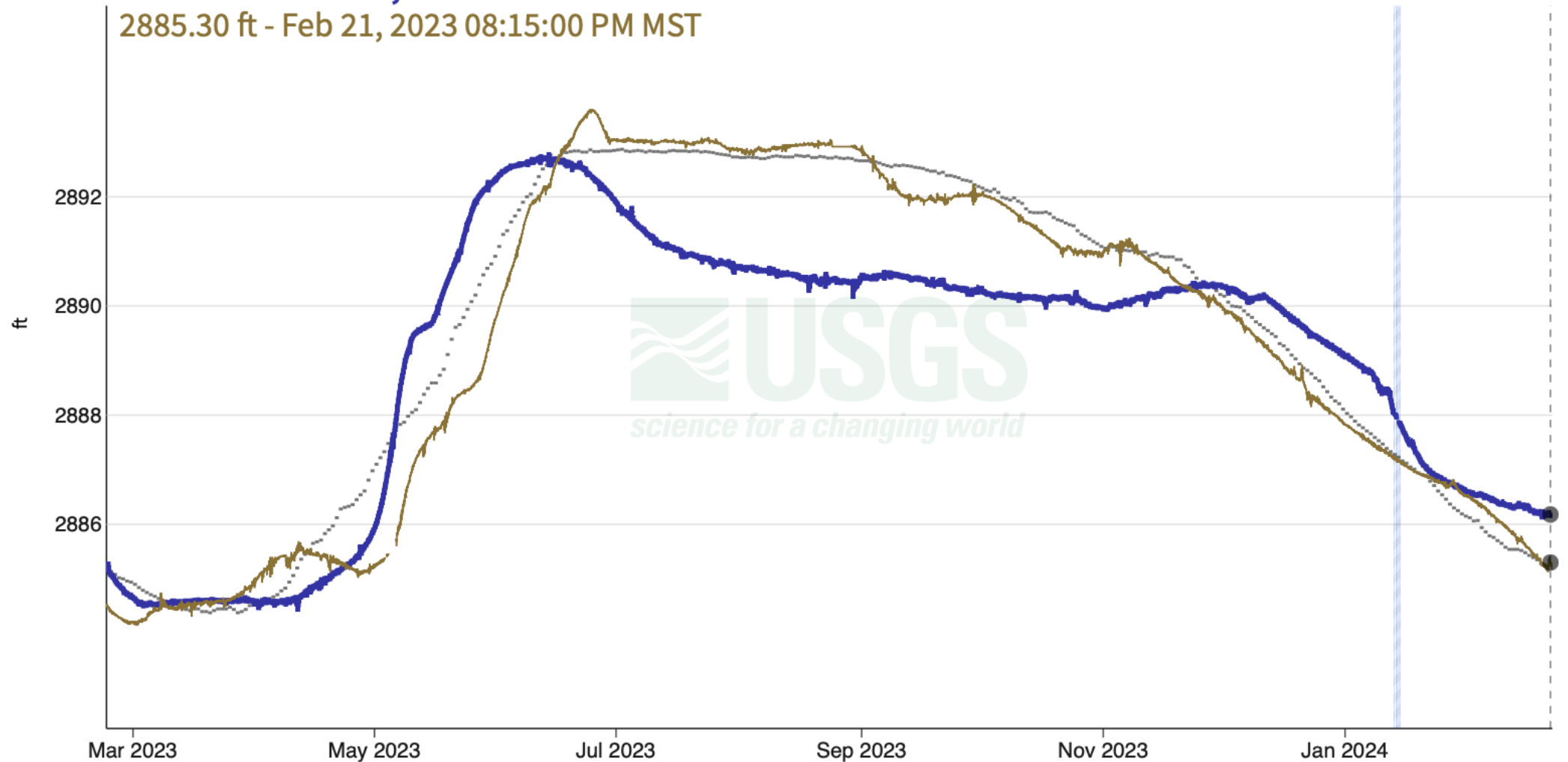
Flathead Lake at Polson MT - 12371550

February 22, 2023 - February 22, 2024

Elevation of reservoir water surface above datum, feet

2886.18 ft - Feb 21, 2024 08:15:00 PM MST

2885.30 ft - Feb 21, 2023 08:15:00 PM MST



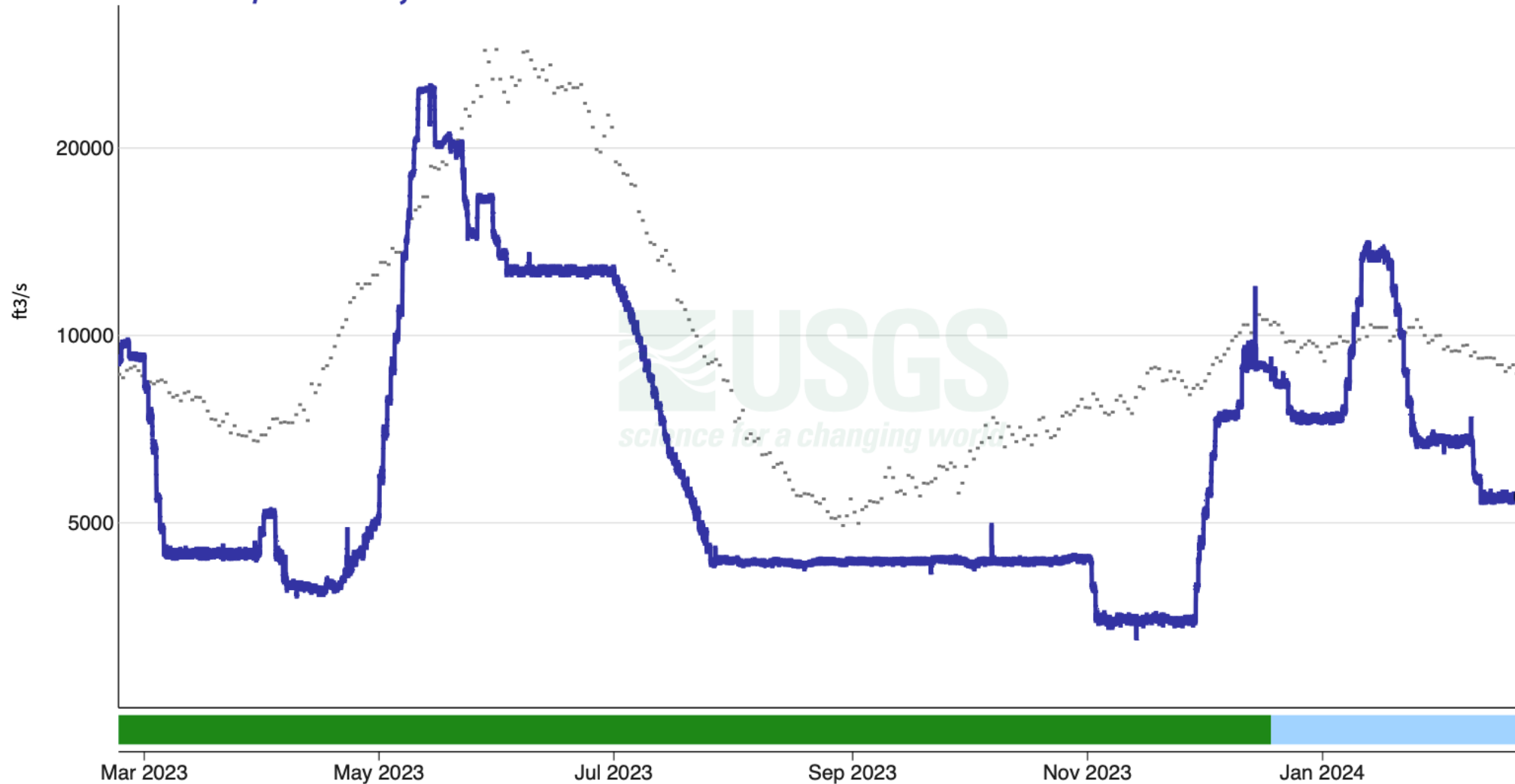
7 days 30 days 1 year

Flathead River near Polson MT - 12372000

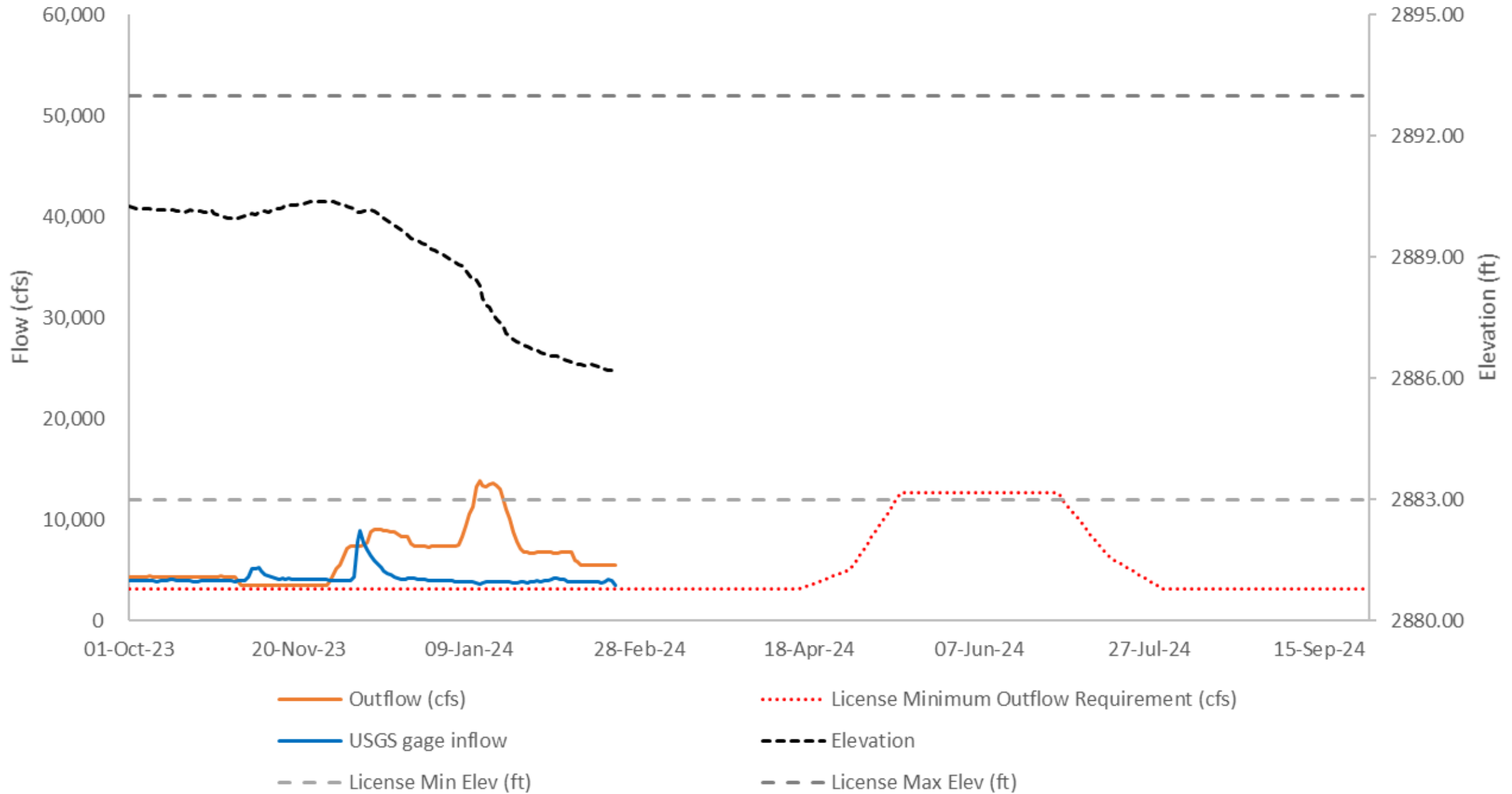
February 22, 2023 - February 22, 2024

Discharge, cubic feet per second

5510 ft³/s - Feb 21, 2024 02:35:00 PM MST



Water Year 2024 Flathead Lake Data



Thoughts going forward

- + Climate forecasts are for more extremes in our weather which will lead to more extremes in the water supply into Flathead Lake.
- + Resilience in the face of conditions that none of us have ever faced.
- + Best Practices for Docks
- + Best Practices for other shoreline structures
- + Lake Level Forecasts – [Energy Keepers Website](#)



Questions