

Extended Hydrologic Outlook

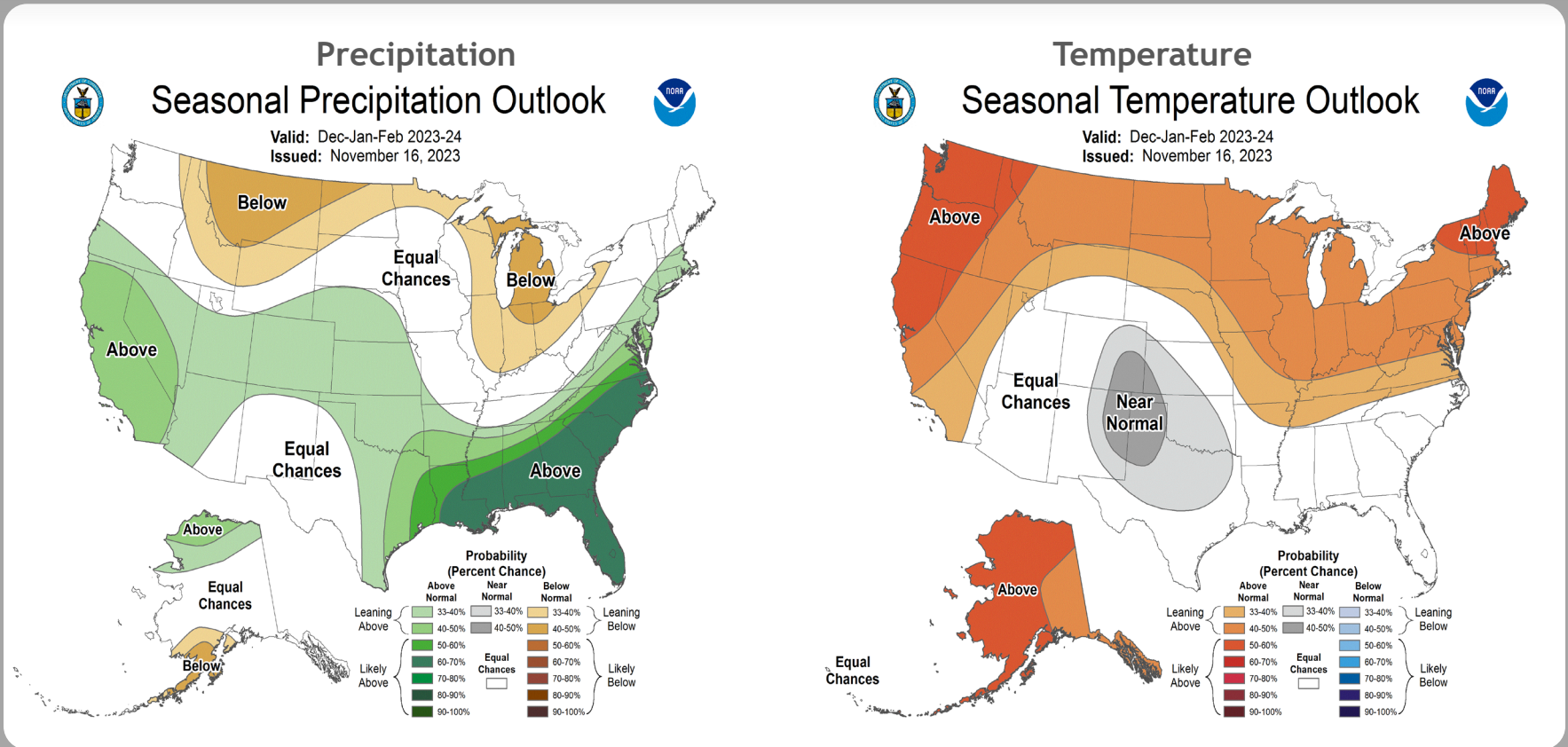
December 12, 2023

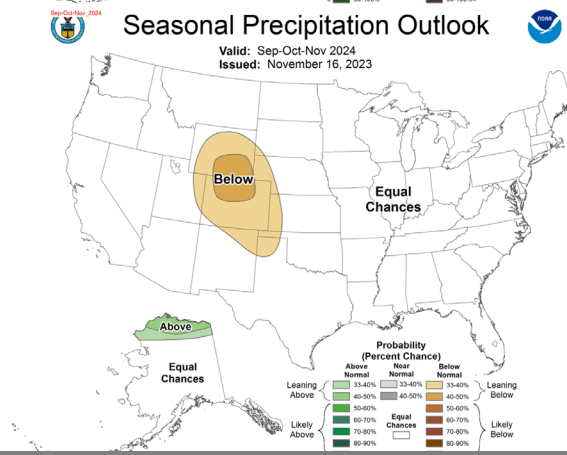
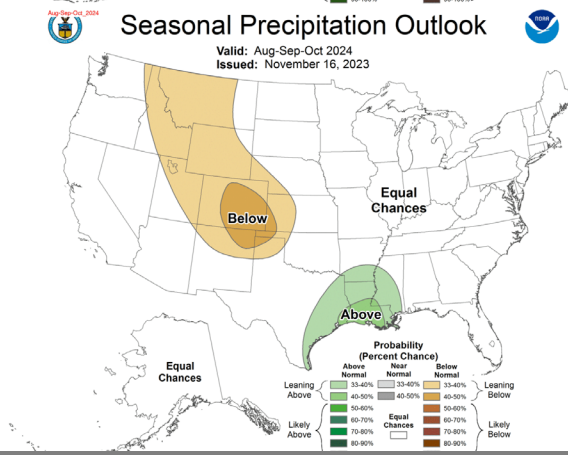
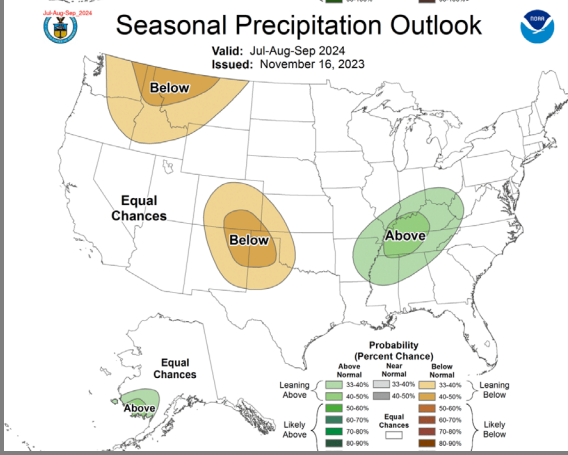
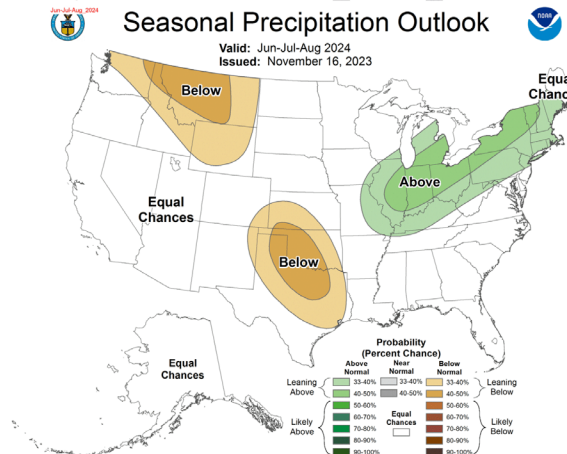
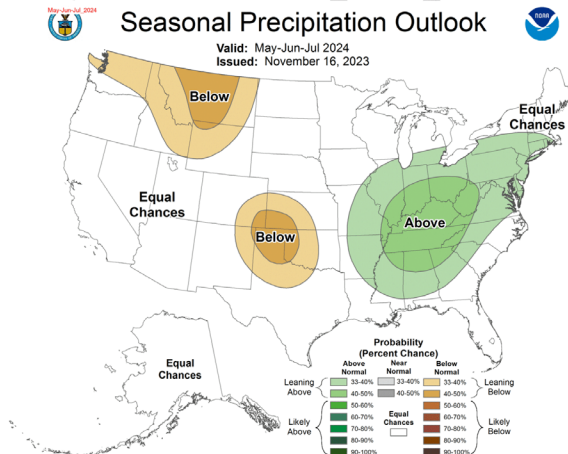
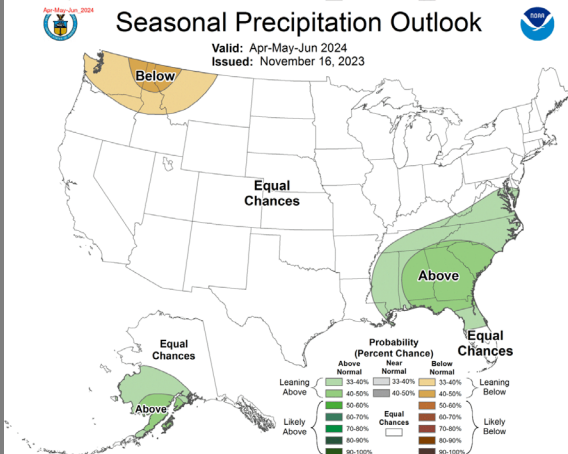
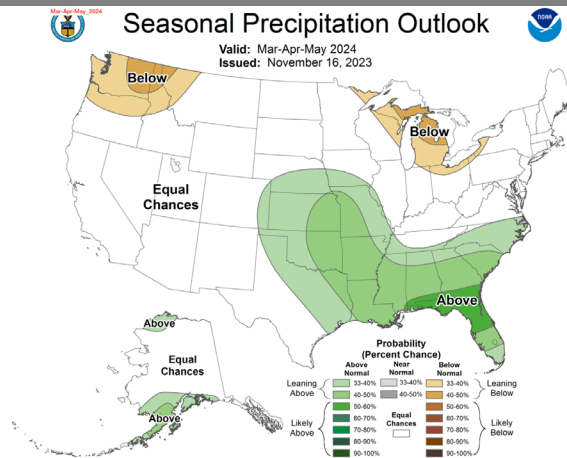
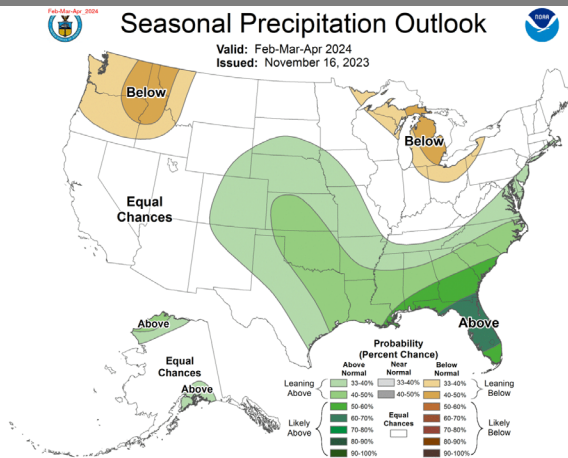
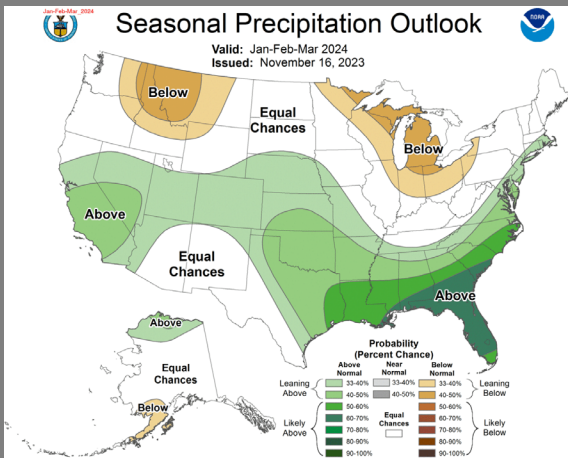
- The Climate Prediction Center (CPC) is forecasting above normal rainfall for December through February.
- El Niño conditions are observed and El Niño is anticipated to continue through the spring (with a 62% chance during April-June 2024).
- Atlantic Multidecadal Oscillation (AMO) is currently in the warm phase:
 - Average annual inflow to Lake Okeechobee is nearly 50% greater during the warm phase compared to the cold phase

U. S. Seasonal Outlooks

December 2023 - February 2024

The seasonal outlooks combine the effects of long-term trends, soil moisture, and, when appropriate, ENSO.





Teleconnections to South Florida

Climate anomalies being related to each other at large distances:

El Niño Southern Oscillation (ENSO)

El Niño increases the chances of a wetter-than-normal dry season and decreased tropical activity, La Niña increases the chances of a drier-than-normal dry season and increased tropical activity (both have most influence in south Florida from November through March)

Pacific Decadal Oscillation (PDO)

Increases variations in south Florida dry season rainfall, positive leads to more El Niño events, negative leads to more La Niña events

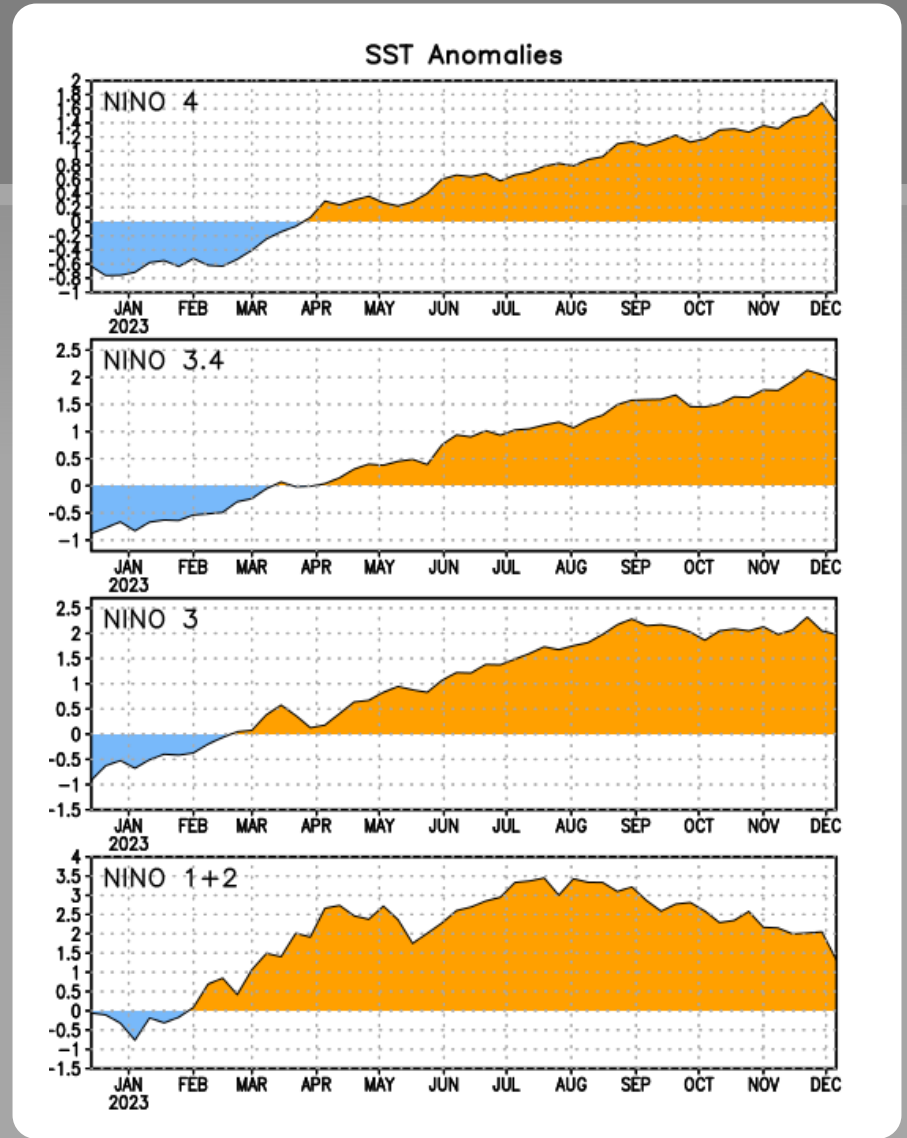
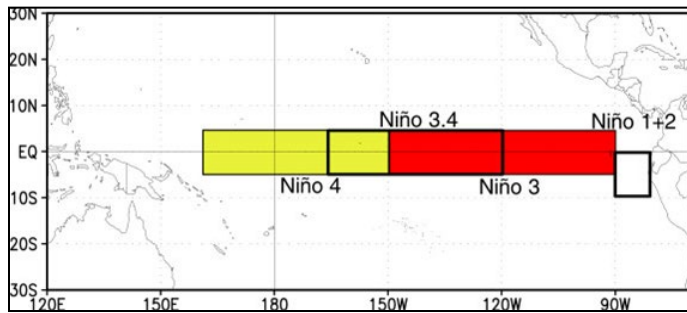
Atlantic Multidecadal Oscillation (AMO)

Average annual inflow to Lake Okeechobee is nearly 50% greater during the warm phase compared to the cold phase of the AMO, easterly flow toward south Florida affected by phase

Niño Region SST Departures (°C) Recent Evolution

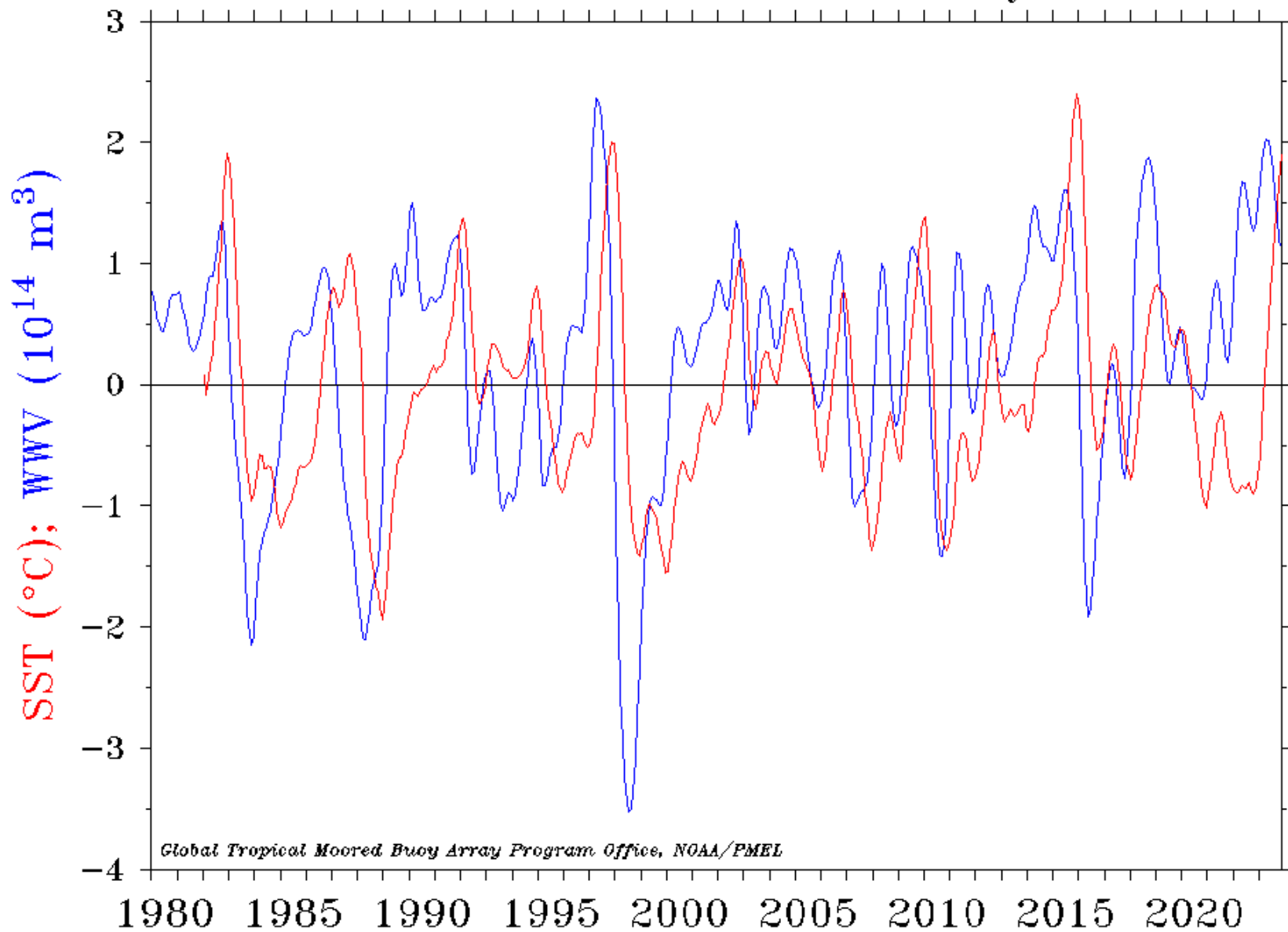
The latest weekly SST departures are:

Niño 4	1.4°C
Niño 3.4	1.9°C
Niño 3	2.0°C
Niño 1+2	1.3°C

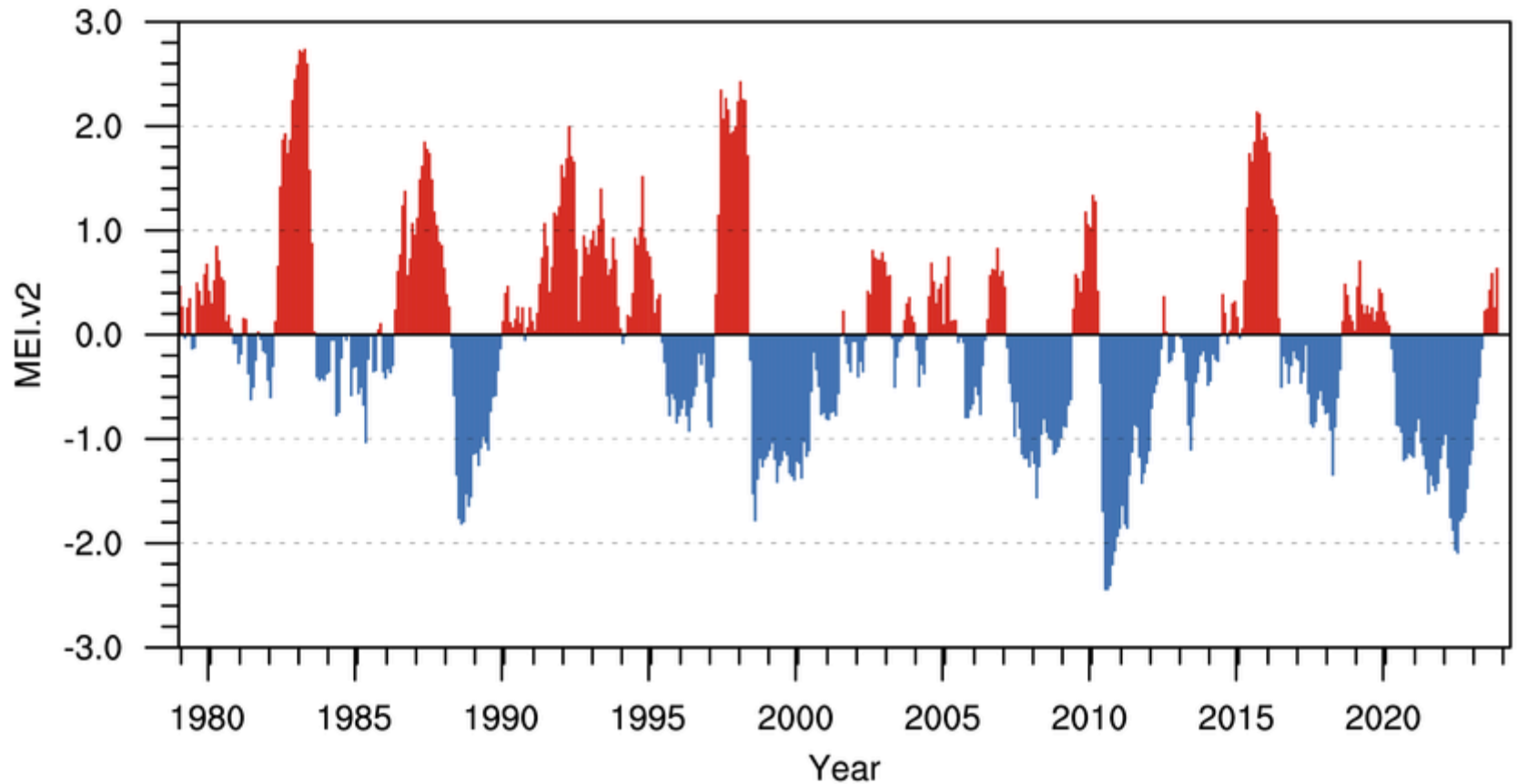


This weekly sea surface temperature data is based on OISSTv2.1 (Huang et al., 2021).

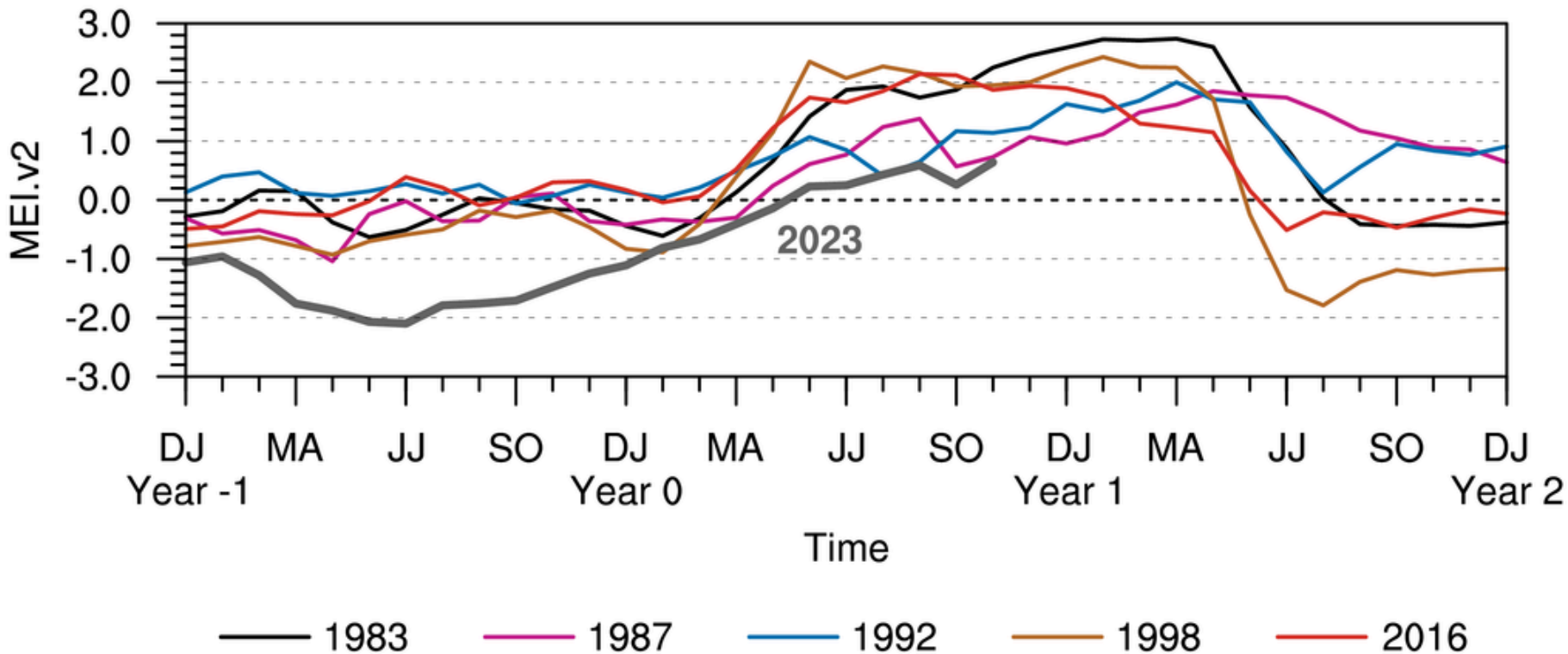
Warm Water Volume (5°N–5°S, 120°E–80°W) and NINO 3.4 SST Anomaly



Multivariate ENSO Index Version 2

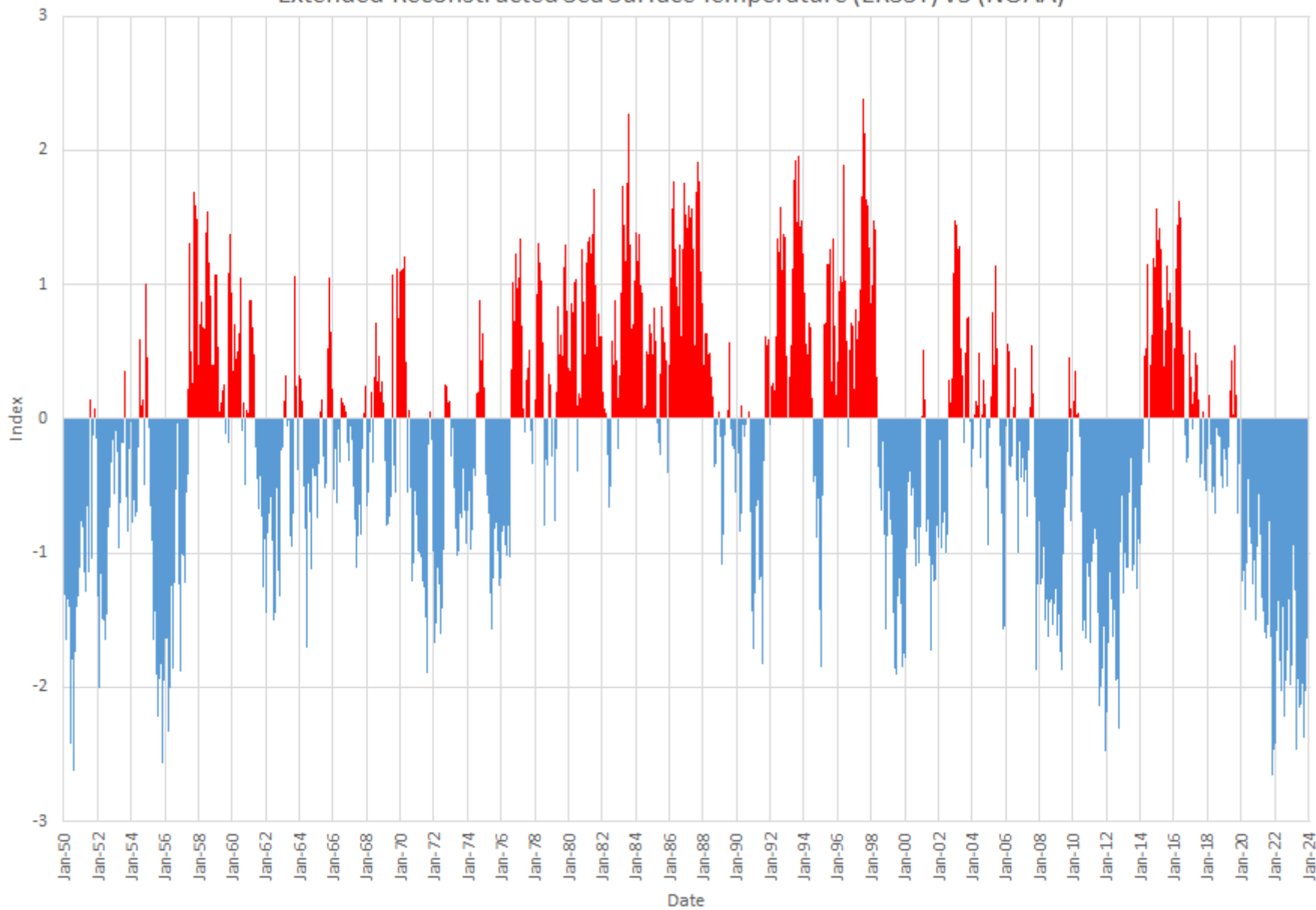


MEI.v2 Evolution of Current ENSO Event in Historical Context

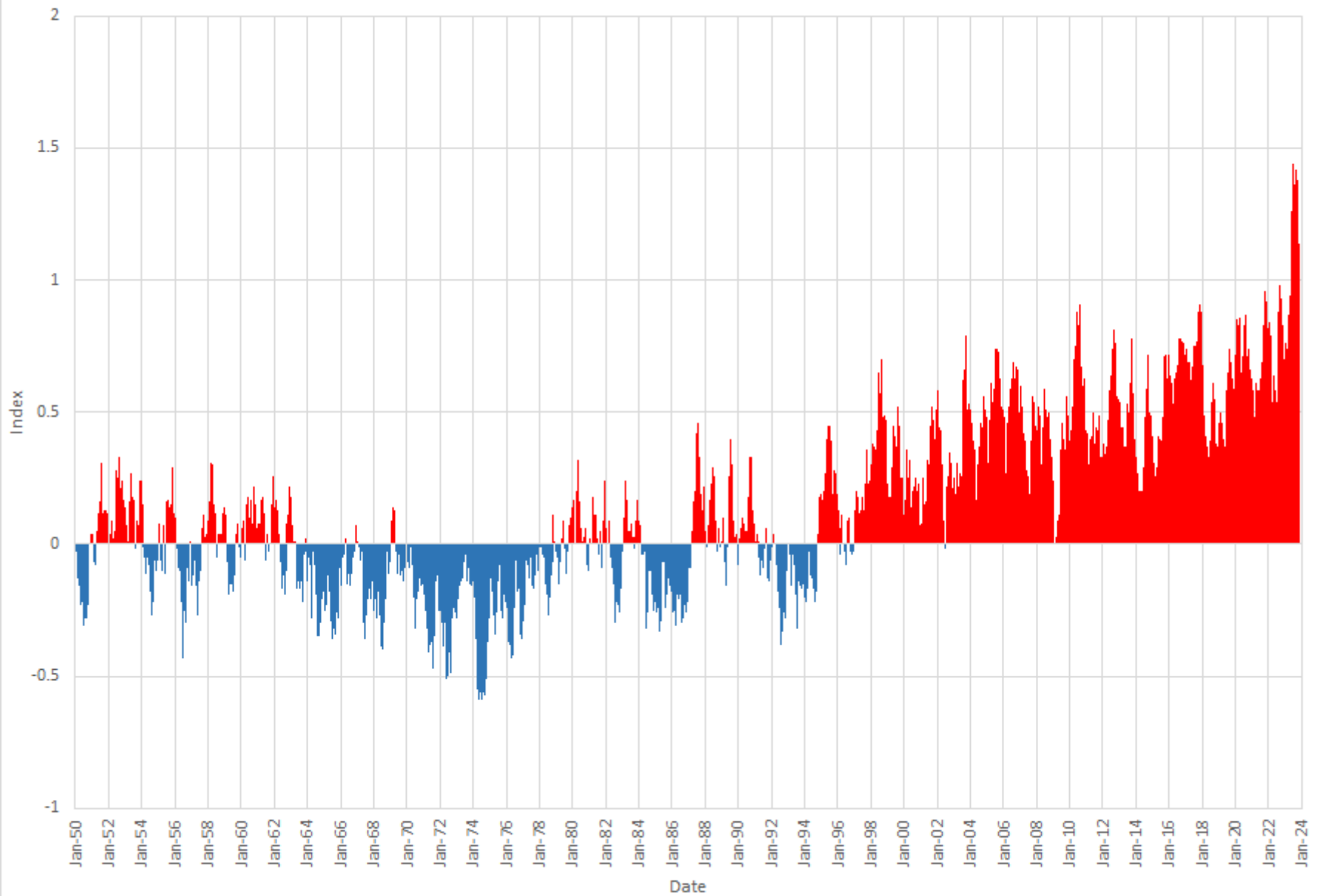


Pacific Decadal Oscillation

Extended Reconstructed Sea Surface Temperature (ERSST) v5 (NOAA)



ERSST AMO (North Atlantic 0-60N SSTA) Index

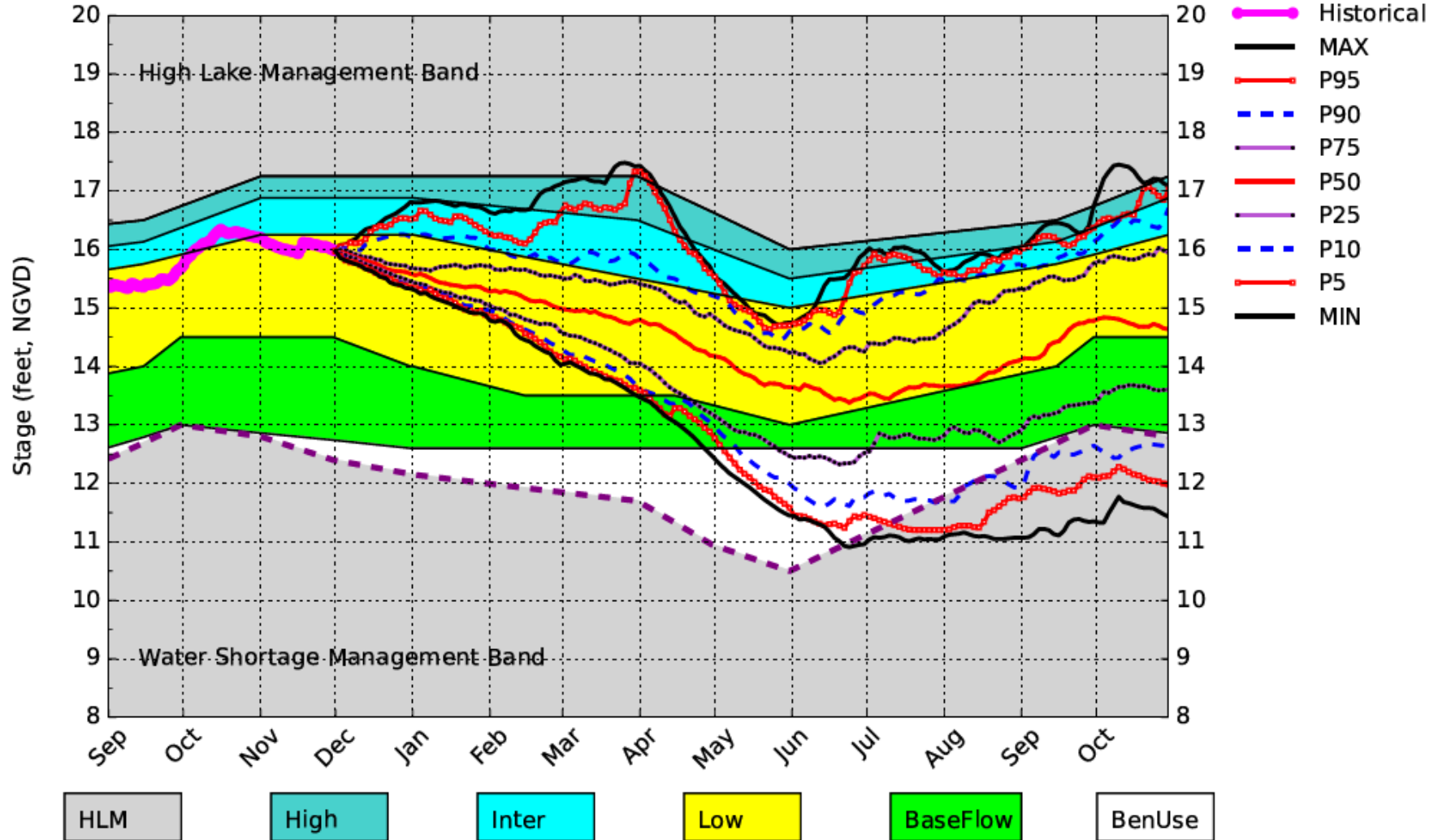


December DPA Assumptions

- The December 1, 2023 Dynamic Position Analysis (DPA) simulation is based on historical climatic conditions spanning the period 1965-2005. This DPA posting is made with the South Florida Water Management Model (SFWMM) v6.7.4 (Tamiami Trail) which includes the following improvement(s):
 - Improvements to include the Combined Operational Plan (COP)
- The December 1, 2023 DPA resets the initial stages for Lake Okeechobee (LOK) and the Water Conservation Areas (WCAs) on November 1st of each year of the DPA simulation and conditions the simulation to real time data during November to achieve real time stages on December 1st for LOK and WCAs.
- The Lake Okeechobee operations follow the Lake Okeechobee Regulation Schedule (LORS2008). Modeling assumptions are consistent with modeling performed for LORS2008 Supplemental Environmental Impact Statement (SEIS).
- LOK Temporary Forward Pump operations will be in place, whenever necessary, to improve water supply deliveries from LOK under low LOK stages.
- STA surface area values are modified to reflect current flowways under operation. STA depths are maintained to a minimum of 6 inches using Lake Okeechobee releases.
- Full LORS 2008 releases are modeled as specified in the regulation schedule.

Lake Okeechobee SFWMM December 2023 Position Analysis

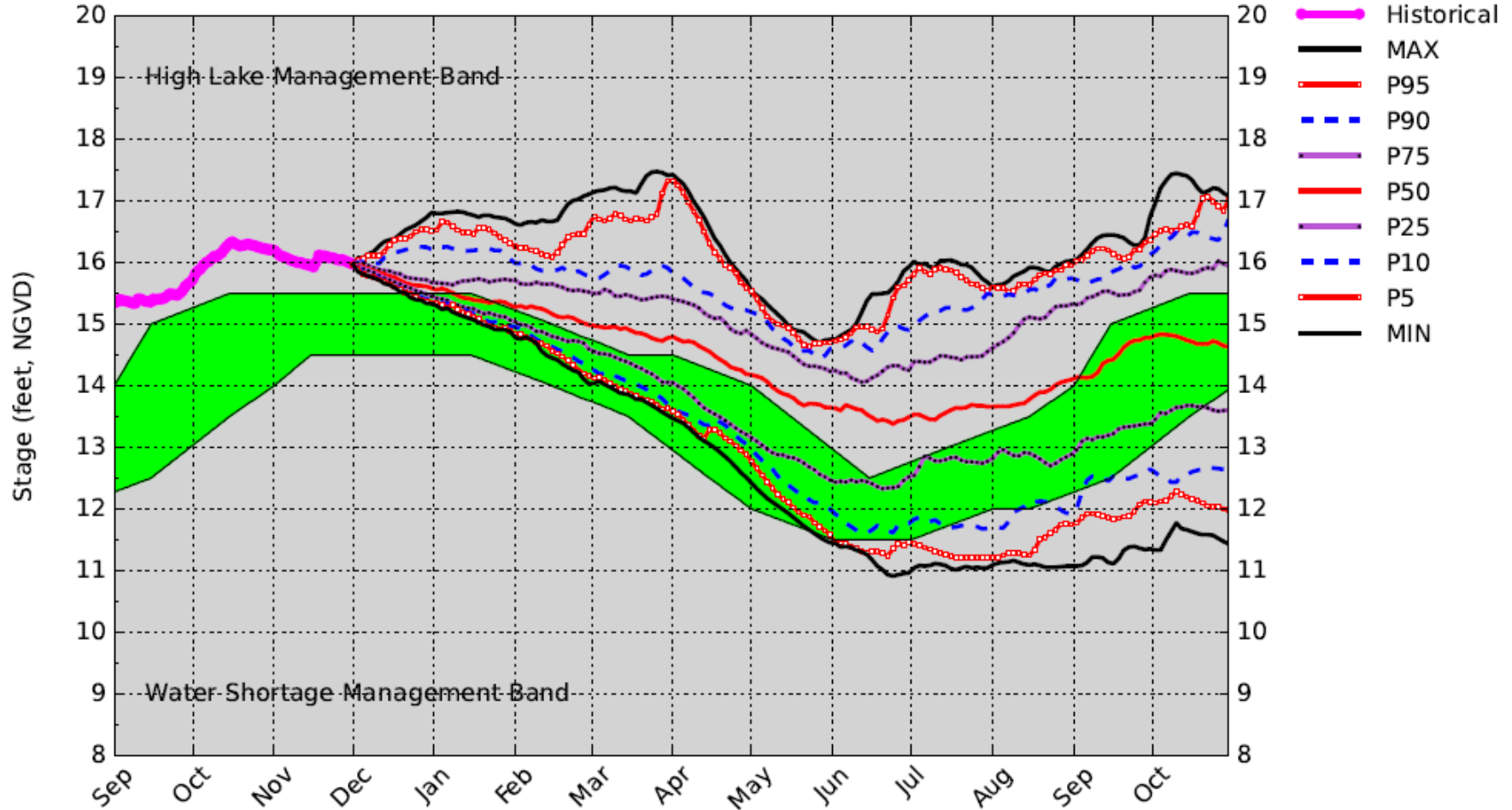
Percentiles PA



(See assumptions on the Position Analysis Results website)

Lake Okeechobee SFWMM December 2023 Position Analysis

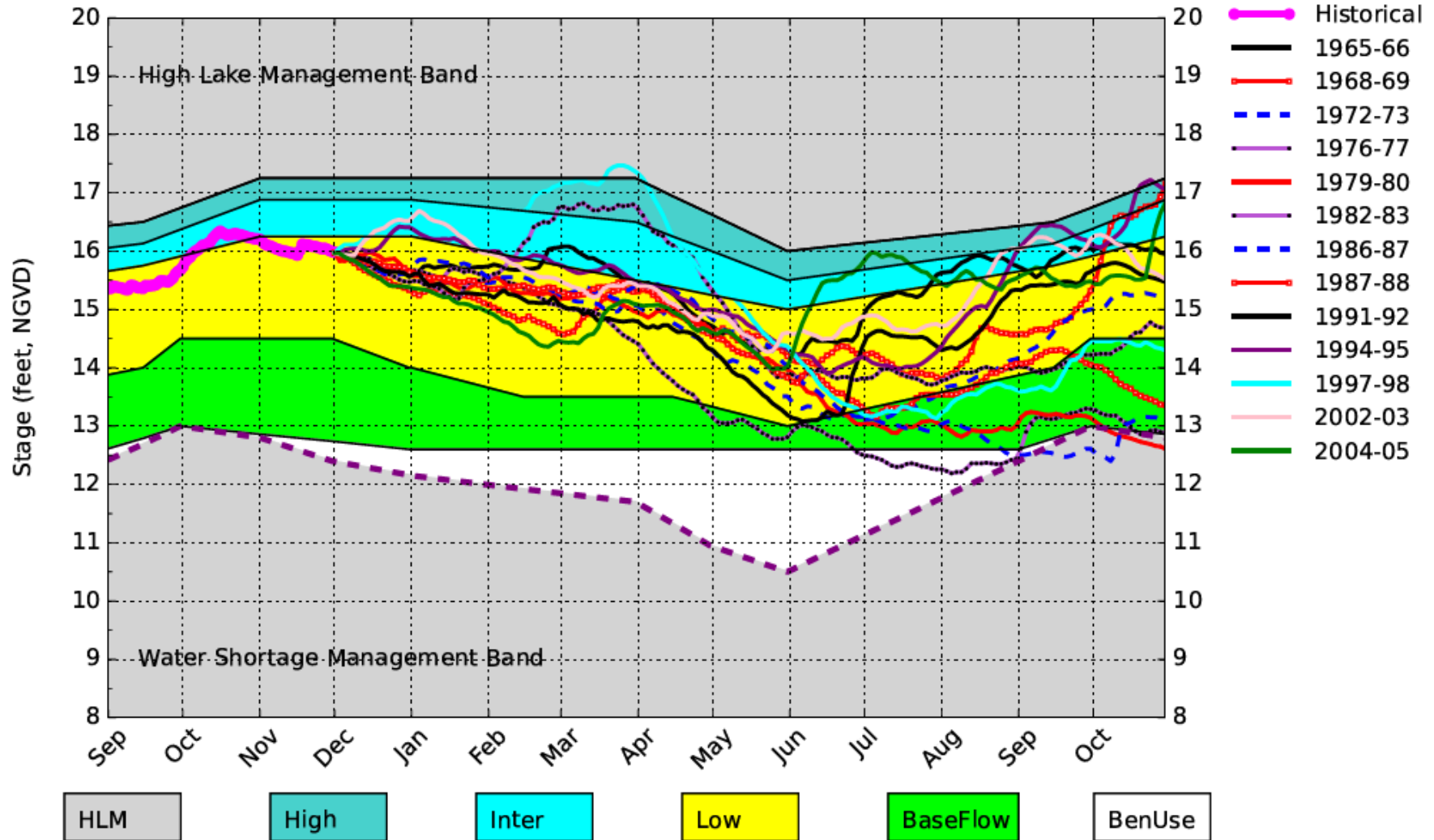
Percentiles PA



(See assumptions on the Position Analysis Results website)

Lake Okeechobee SFWMM December 2023 Position Analysis

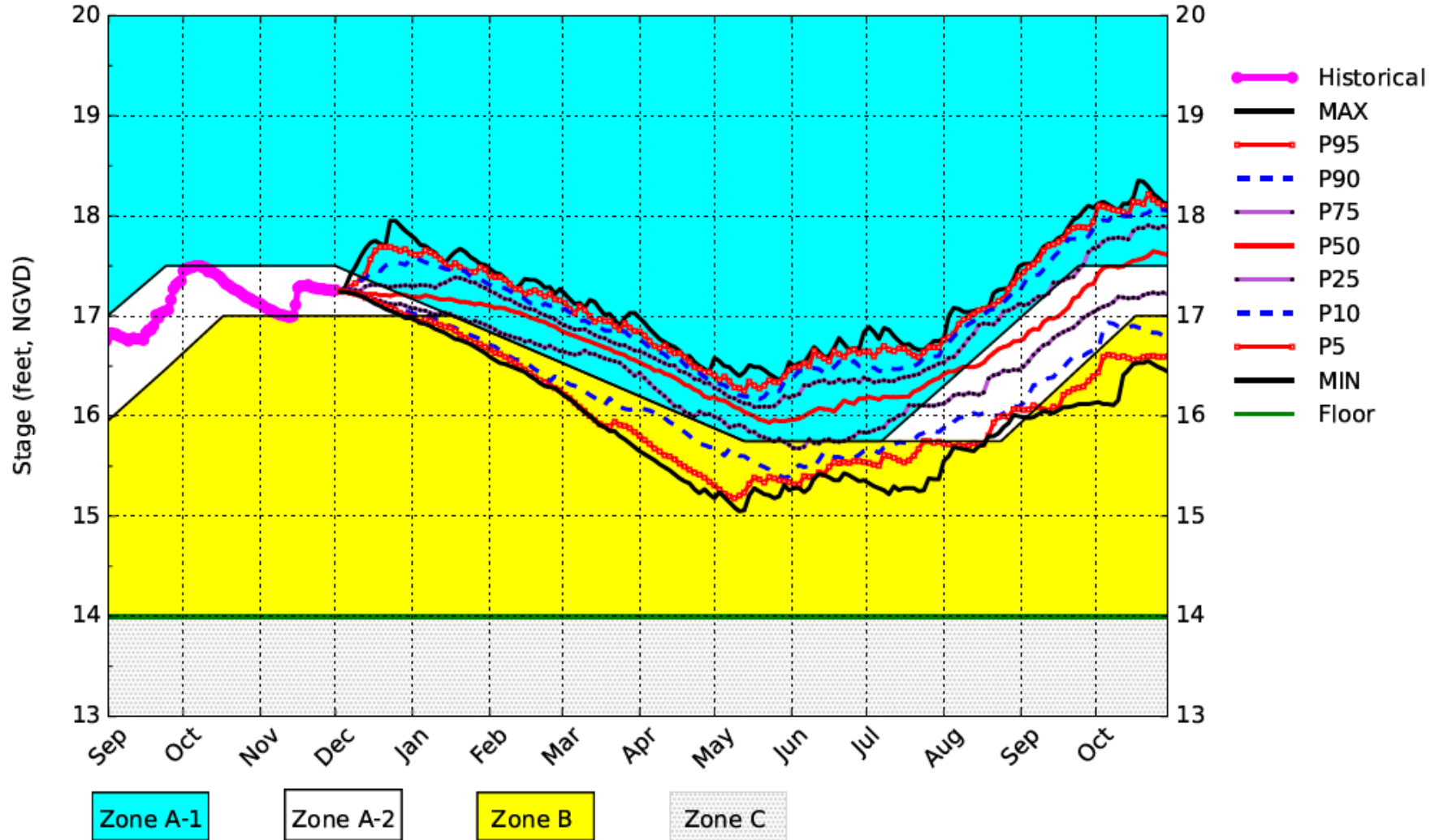
All El Nino Years Plot PA



(See assumptions on the Position Analysis Results website)

WCA1 SFWMM December 2023 Position Analysis

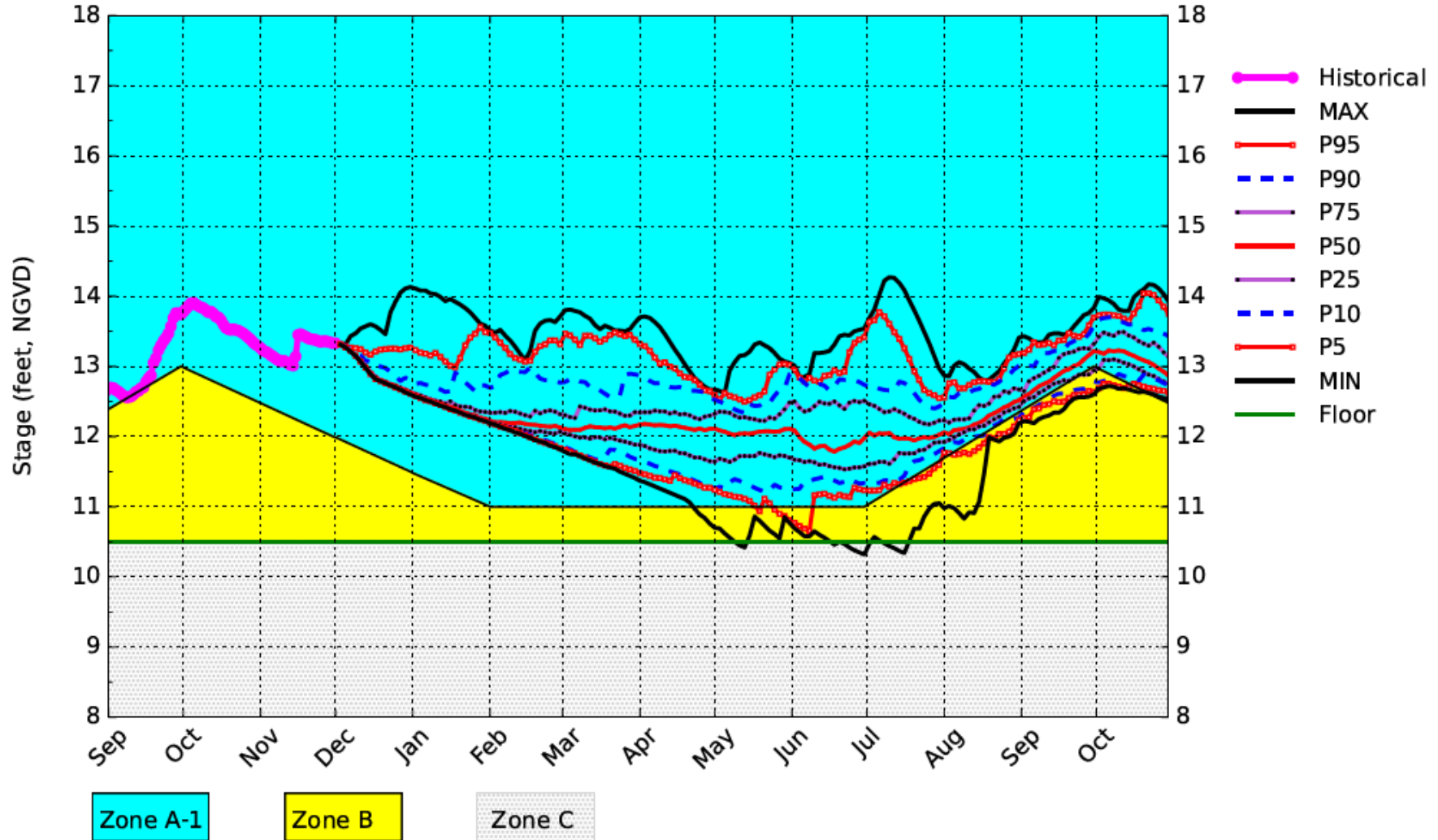
Percentiles PA



(See assumptions on the Position Analysis Results website)

WCA2A SFWMM December 2023 Position Analysis

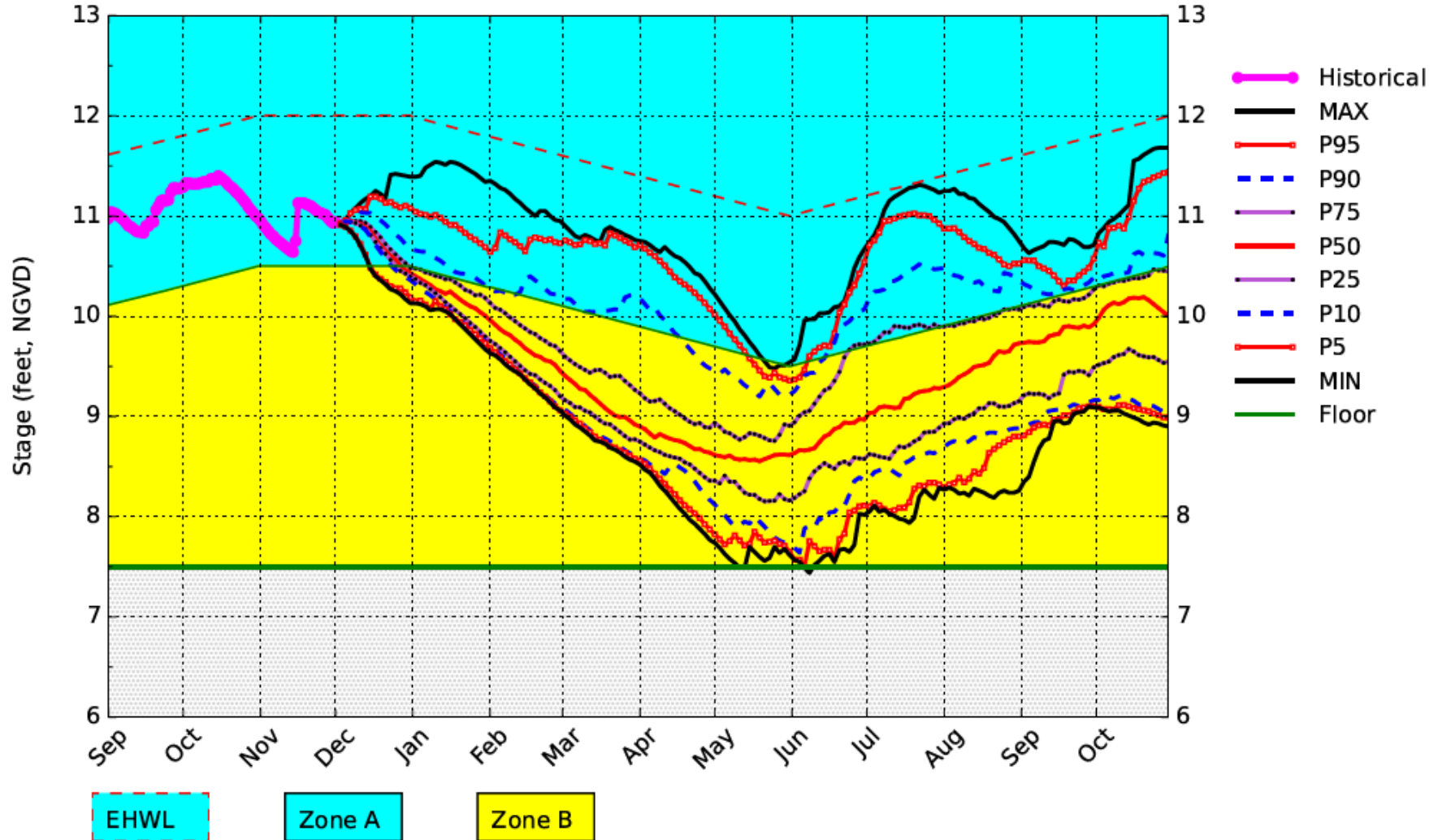
Percentiles PA



(See assumptions on the Position Analysis Results website)

WCA3A SFWMM December 2023 Position Analysis

Percentiles PA



(See assumptions on the Position Analysis Results website)