Extended Hydrologic Outlook
June 7, 2022

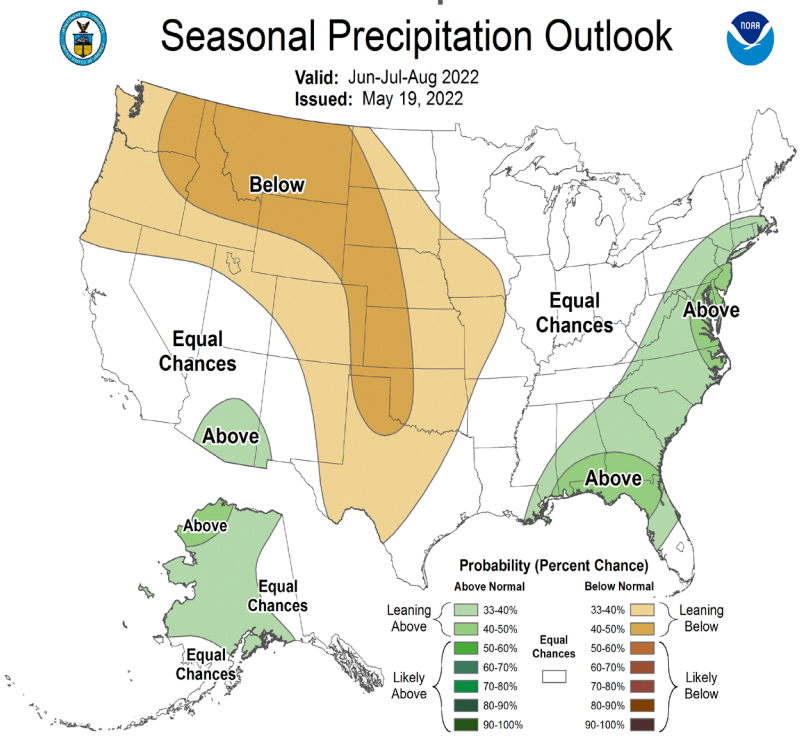
- The Climate Prediction Center (CPC) is forecasting equal chances of above normal, normal and below normal rainfall for June through August.
- La Niña is present and the odds for La Niña decrease into the late summer (58% chance in August-October 2022) before slightly increasing through the fall and early winter 2022 (61% chance).
- 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

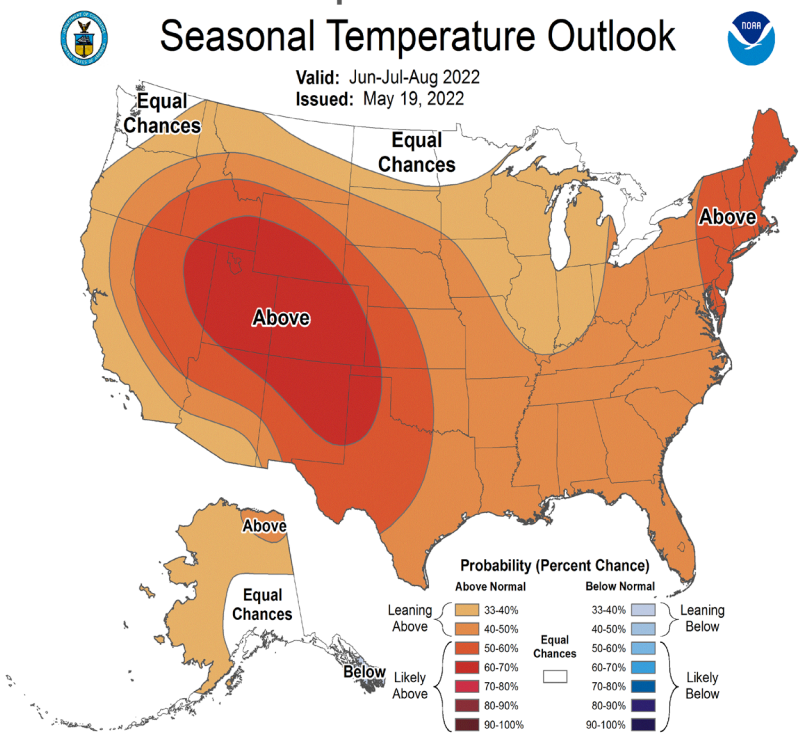
June - August 2022

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

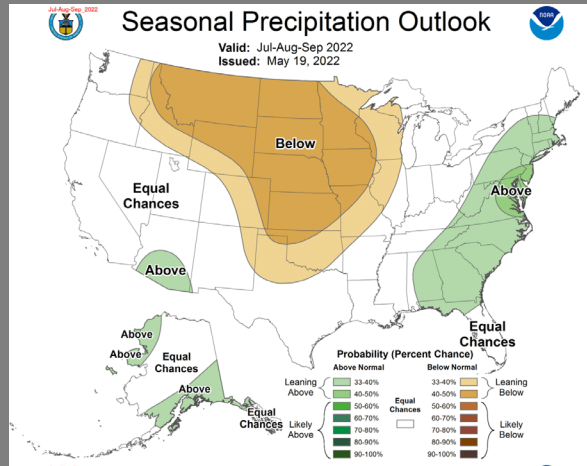
Precipitation

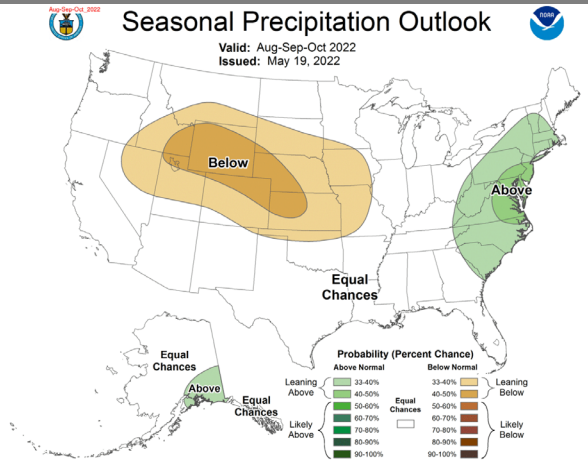


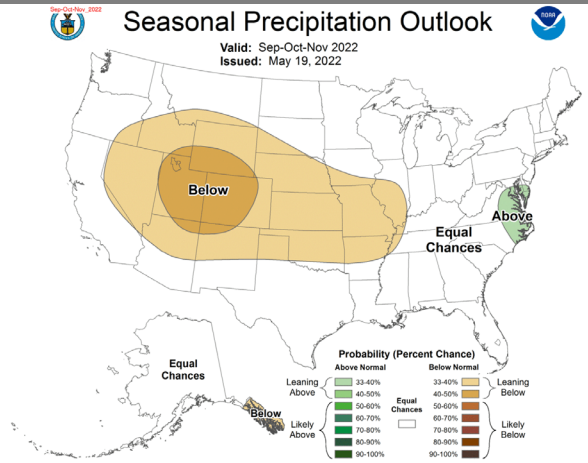
Temperature

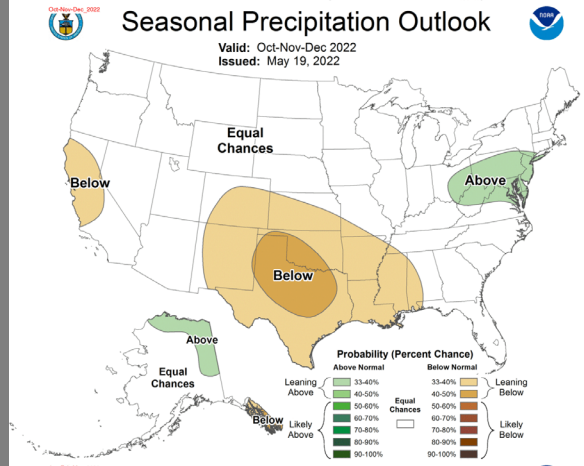


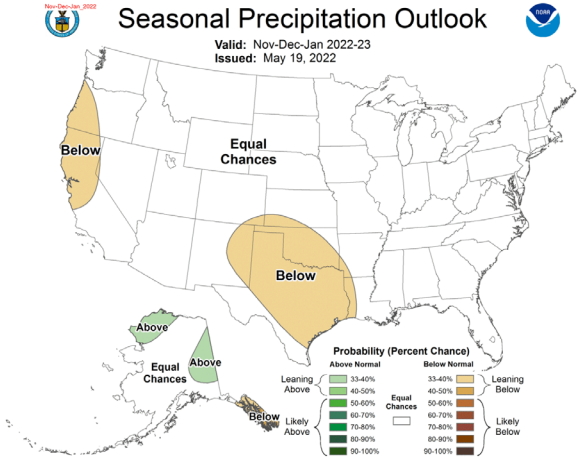
Prepared by: Climate Prediction Center/NCEP

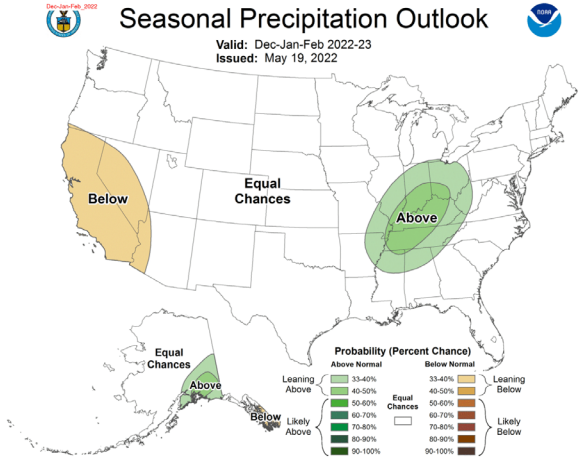


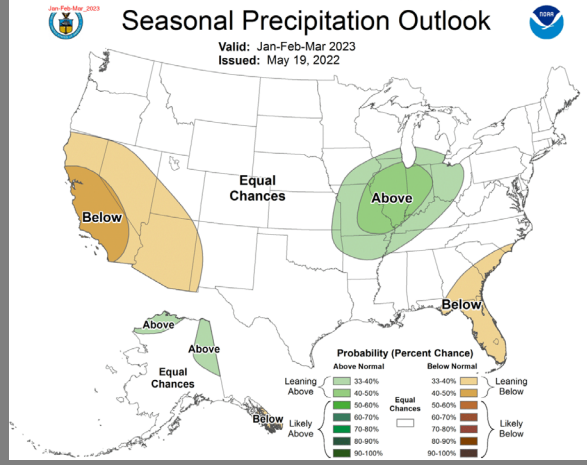


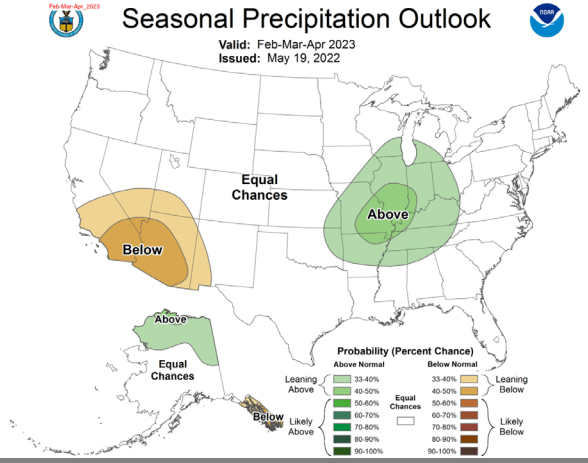


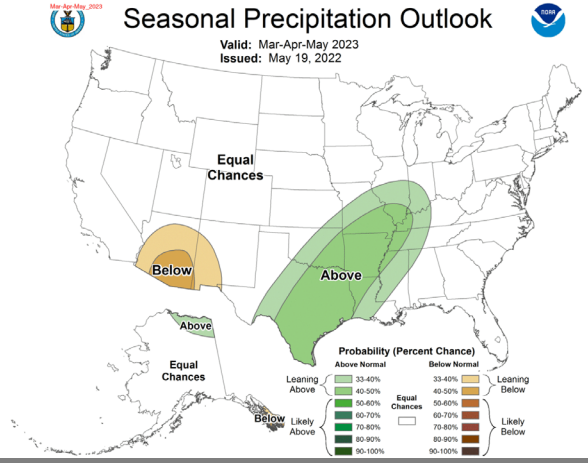












Prepared by: Climate Prediction Center/NCEP

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**

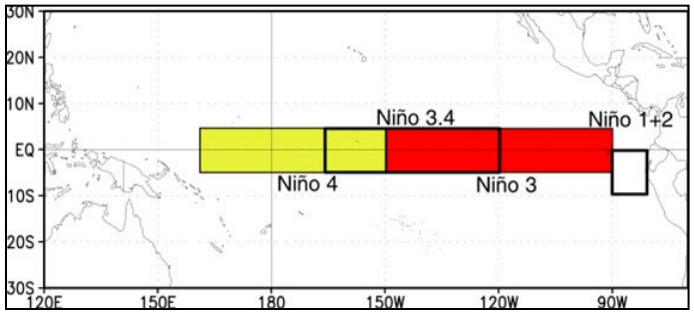
Atlantic Multidecadal Oscillation (AMO)

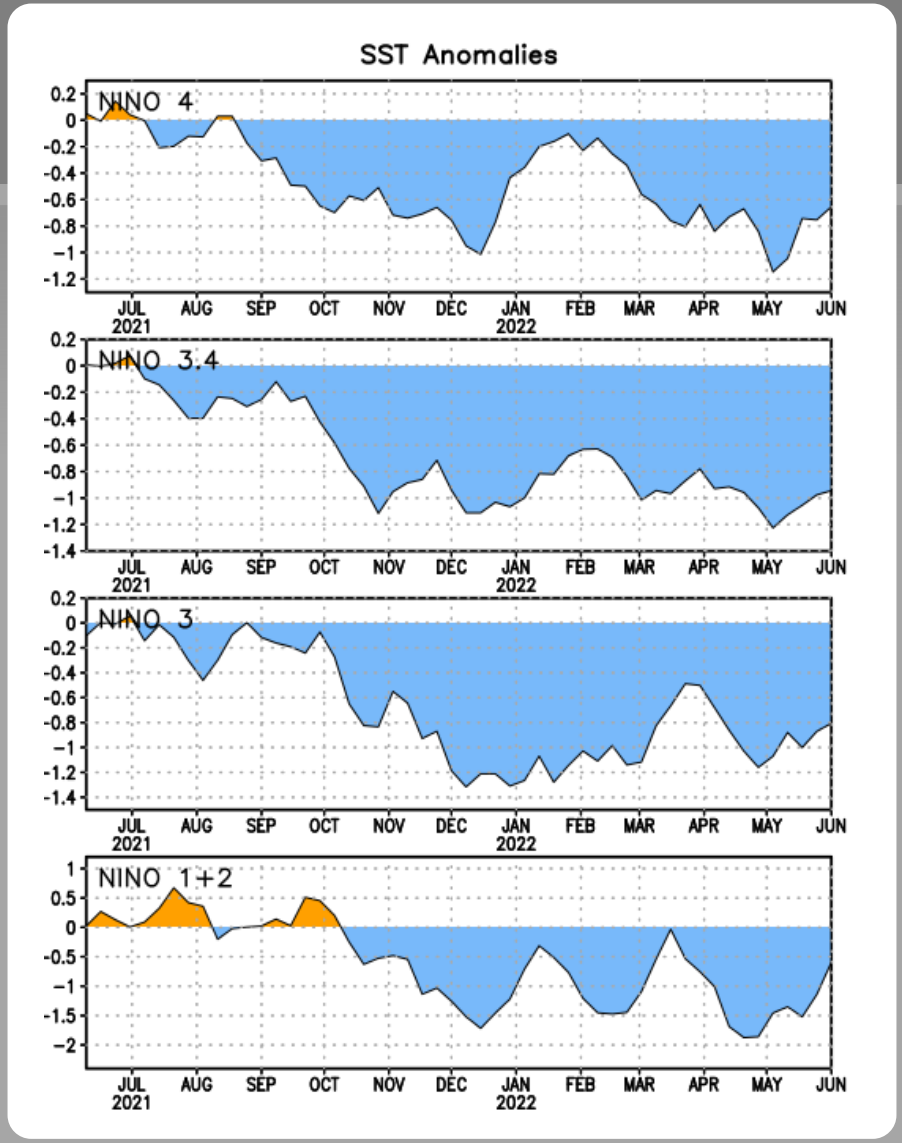
- **Average annual inflow to Lake Okeechobee is nearly 50% greater during the warm phase compared to the cold phase of the AMO, easterly flow toward south Florida affected by phase**

Niño Region SST Departures (ºC) Recent Evolution

The latest weekly SST departures are:

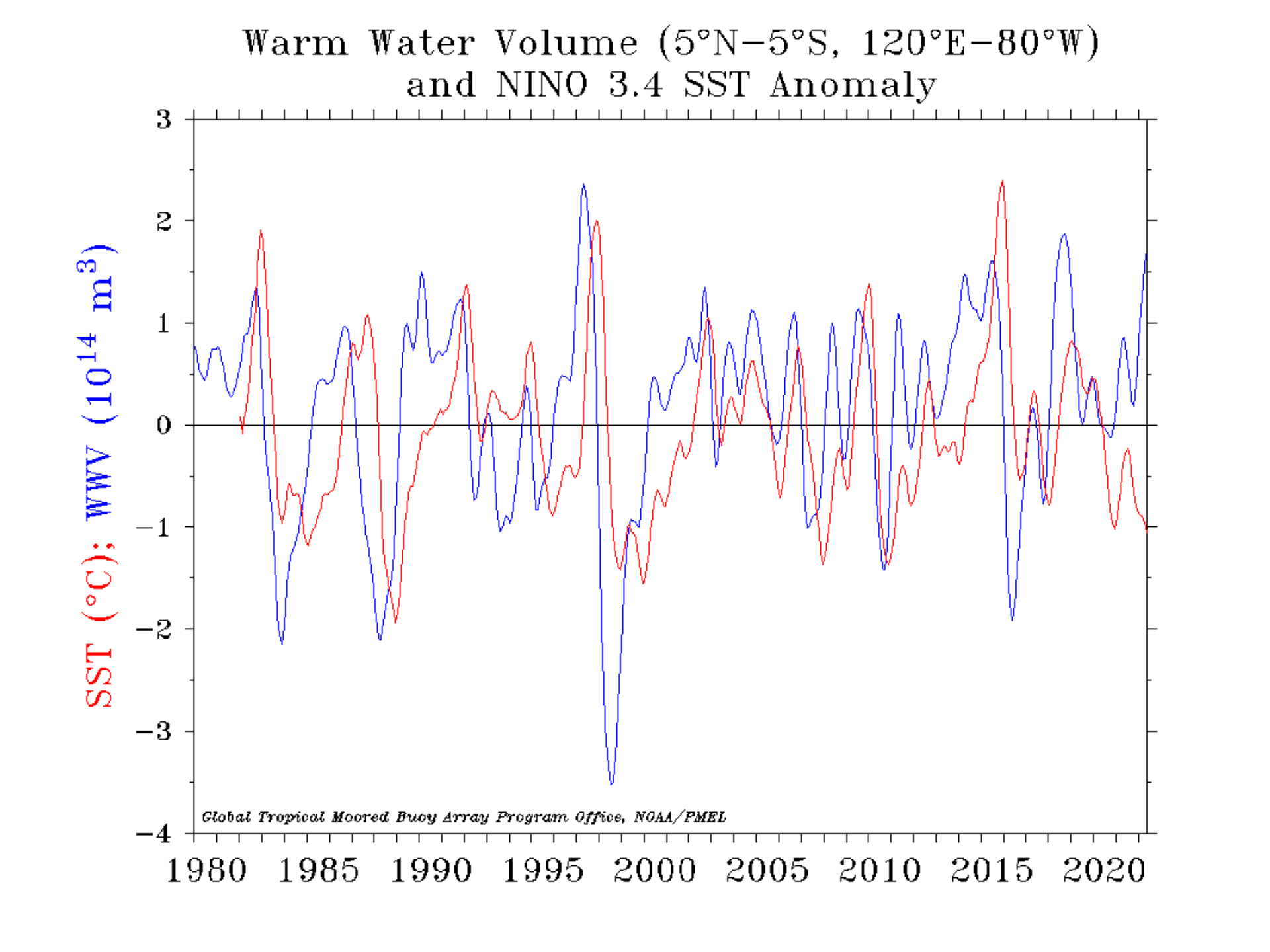
Niño 4	-0.7ºC
Niño 3.4	-0.9ºC
Niño 3	-0.8ºC
Niño 1+2	-0.6ºC

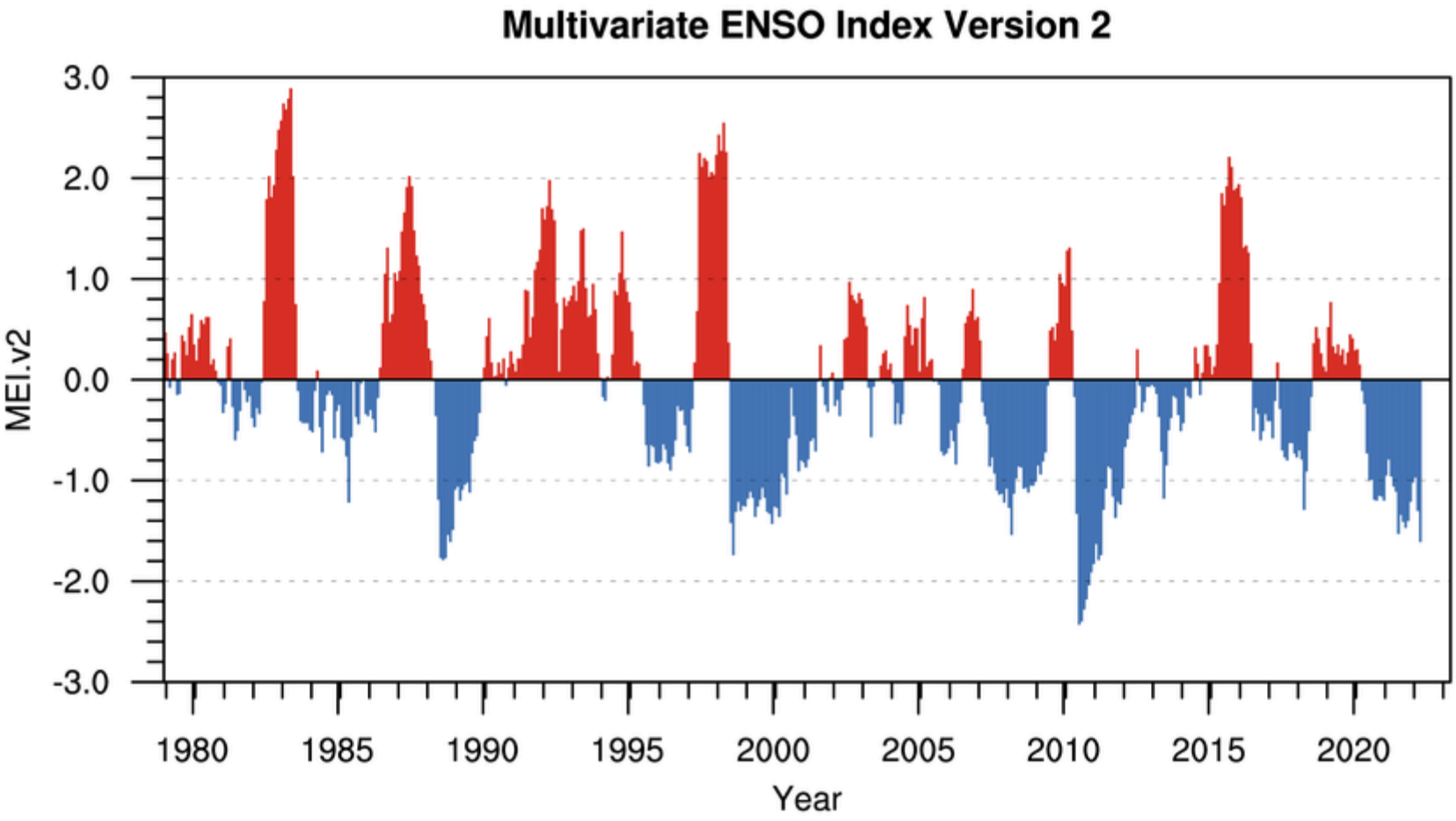




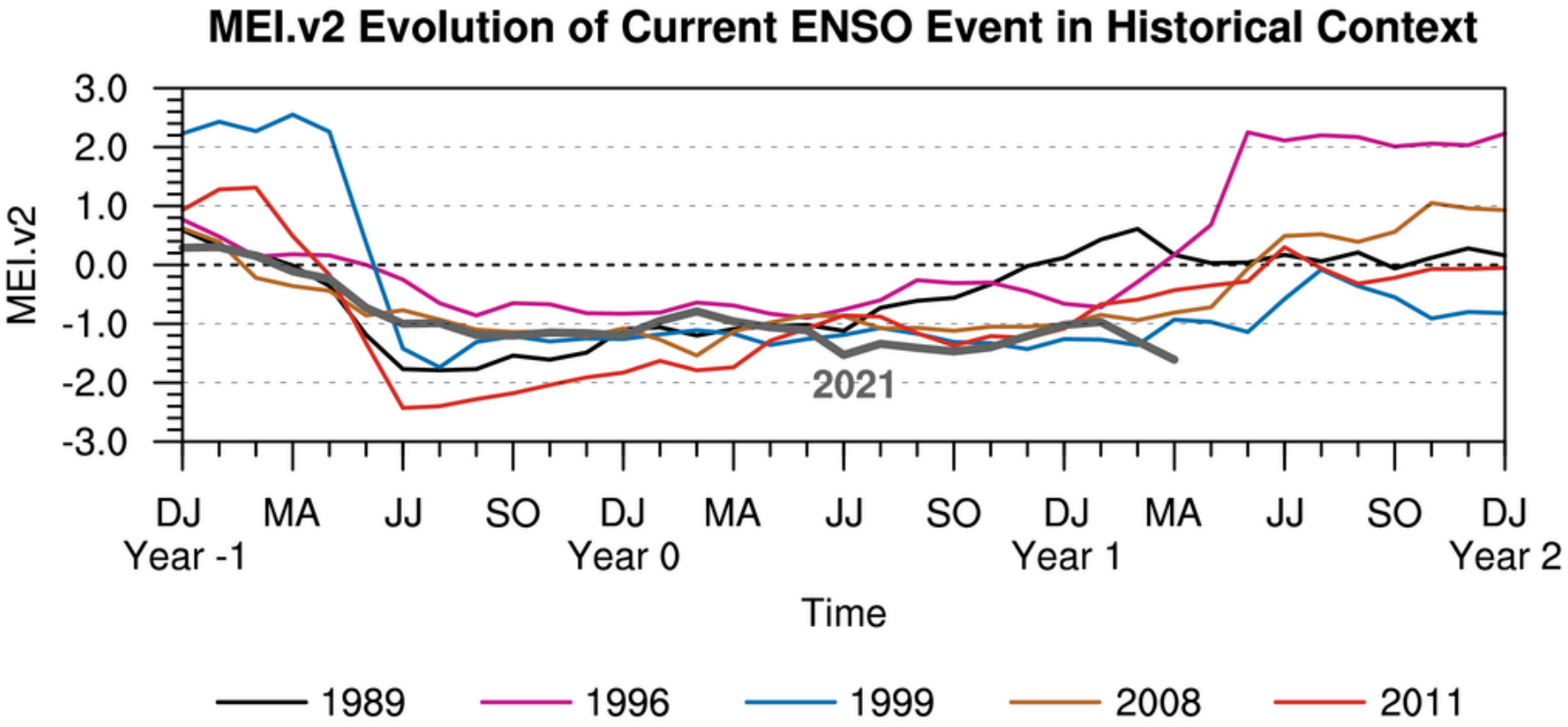
This weekly sea surface temperature data is based on OISSTv2.1 (Huang et al., 2021).

Prepared by: Climate Prediction Center/NCEP

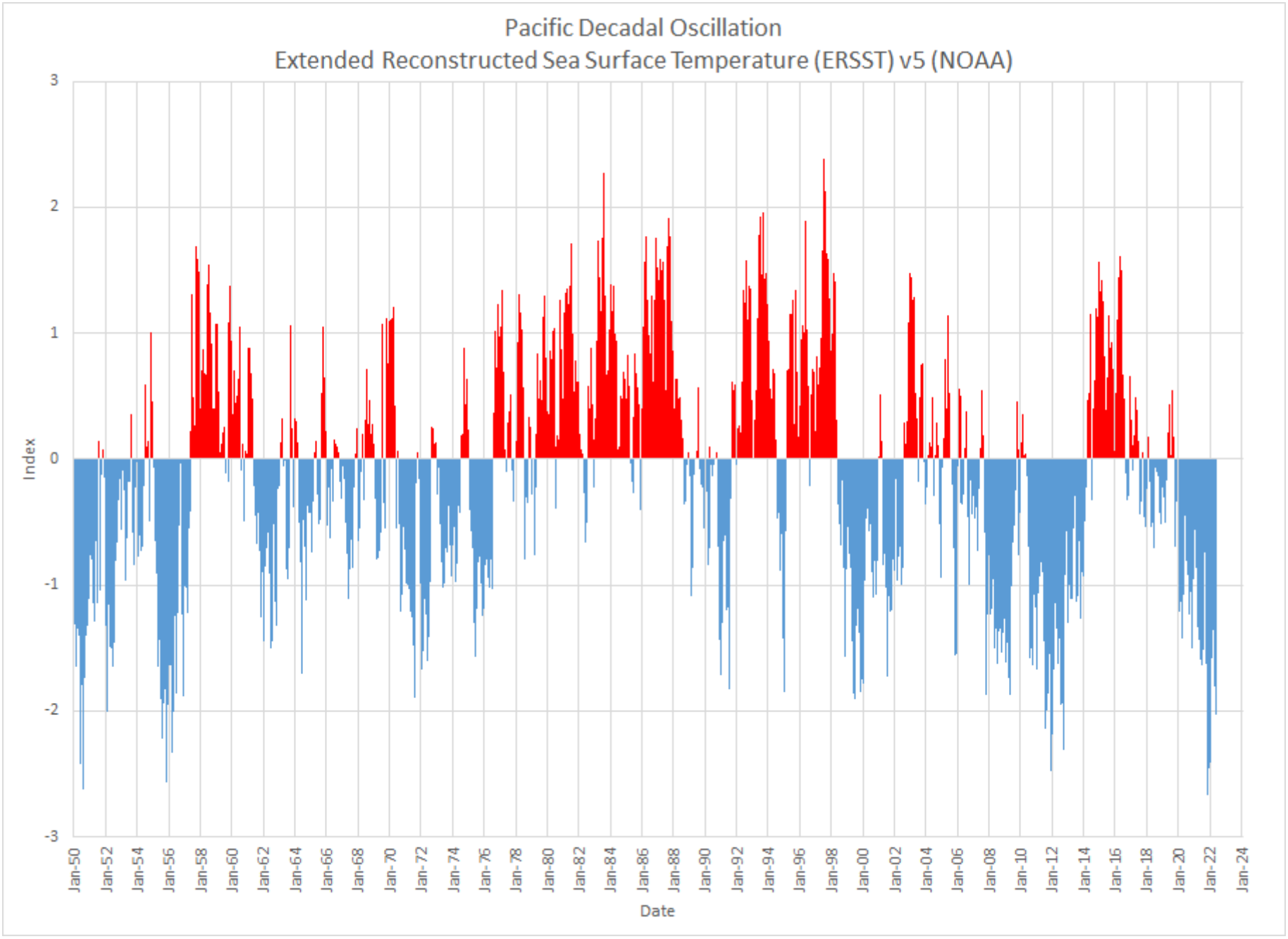

Warm Water Volume (5°N–5°S, 120°E–80°W)
and NINO 3.4 SST Anomaly
SST (°C); WWV (10^{14} m^3)
3
2
1
0
−1
−2
−3
−4
1980
1985
1990
1995
2000
2005
2010
2015
2020
Global Tropical Moored Buoy Array Program Office, NOAA/PMEL

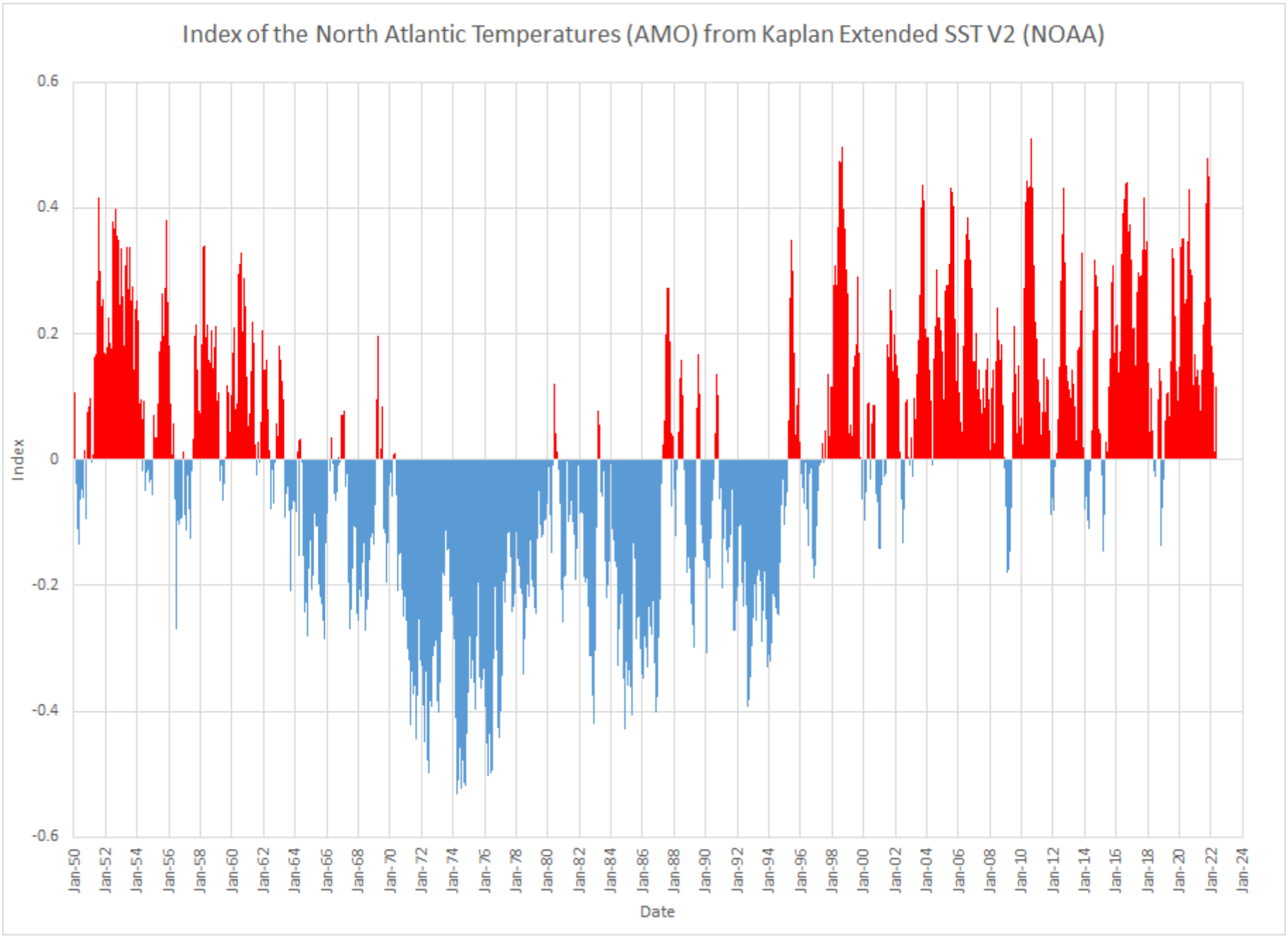


Prepared by: NOAA Physical Sciences Laboratory



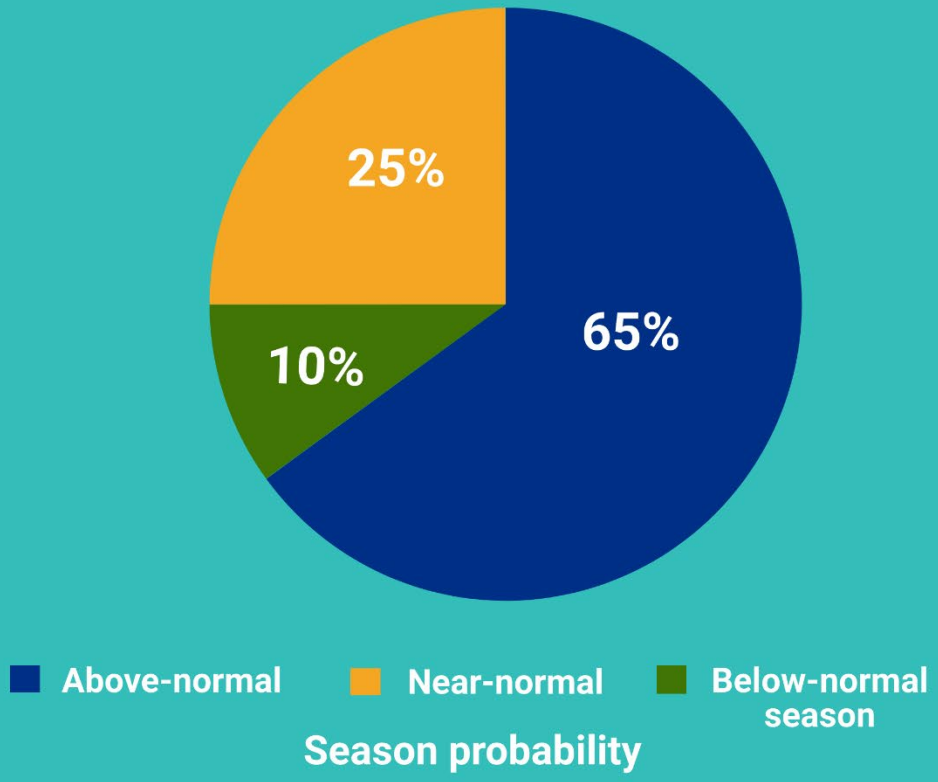
Prepared by: NOAA Physical Sciences Laboratory


Pacific Decadal Oscillation
Extended Reconstructed Sea Surface Temperature (ERSST) v5 (NOAA)
Index
3
2
1
0
-1
-2
-3
Jan-50
Jan-52
Jan-54
Jan-56
Jan-58
Jan-60
Jan-62
Jan-64
Jan-66
Jan-68
Jan-70
Jan-72
Jan-74
Jan-76
Jan-78
Jan-80
Jan-82
Jan-84
Jan-86
Jan-88
Jan-90
Jan-92
Jan-94
Jan-96
Jan-98
Jan-00
Jan-02
Jan-04
Jan-06
Jan-08
Jan-10
Jan-12
Jan-14
Jan-16
Jan-18
Jan-20
Jan-22
Jan-24
Date


Index of the North Atlantic Temperatures (AMO) from Kaplan Extended SST V2 (NOAA)
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
Index
Jan-50
Jan-52
Jan-54
Jan-56
Jan-58
Jan-60
Jan-62
Jan-64
Jan-66
Jan-68
Jan-70
Jan-72
Jan-74
Jan-76
Jan-78
Jan-80
Jan-82
Jan-84
Jan-86
Jan-88
Jan-90
Jan-92
Jan-94
Jan-96
Jan-98
Jan-00
Jan-02
Jan-04
Jan-06
Jan-08
Jan-10
Jan-12
Jan-14
Jan-16
Jan-18
Jan-20
Jan-22
Jan-24
Date

2022 Tropical Outlook

2022 Atlantic Hurricane Season Outlook



Named storms
14-21

Hurricanes
6-10

Major hurricanes
3-6

NOAA

Be prepared: Visit hurricanes.gov and follow @NWS and @NHC_Atlantic on Twitter.

May 2022

ATLANTIC BASIN SEASONAL HURRICANE FORECAST FOR 2022

Forecast Parameter and 1991–2020 Average (in parentheses)	Issue Date 7 April 2022	Issue Date 2 June 2022
Named Storms (14.4)	19	20
Named Storm Days (69.4)	90	95
Hurricanes (7.2)	9	10
Hurricane Days (27.0)	35	40
Major Hurricanes (3.2)	4	5
Major Hurricane Days (7.4)	9	11
Accumulated Cyclone Energy Index (123)	160	180
Net Tropical Cyclone Activity (135%)	170	195

- Anticipate above-average activity
- No significant El Niño forecasted
- Sea surface temperatures averaged across portions of the tropical Atlantic are above normal, while most of the subtropical and mid-latitude eastern North Atlantic is much warmer than normal.

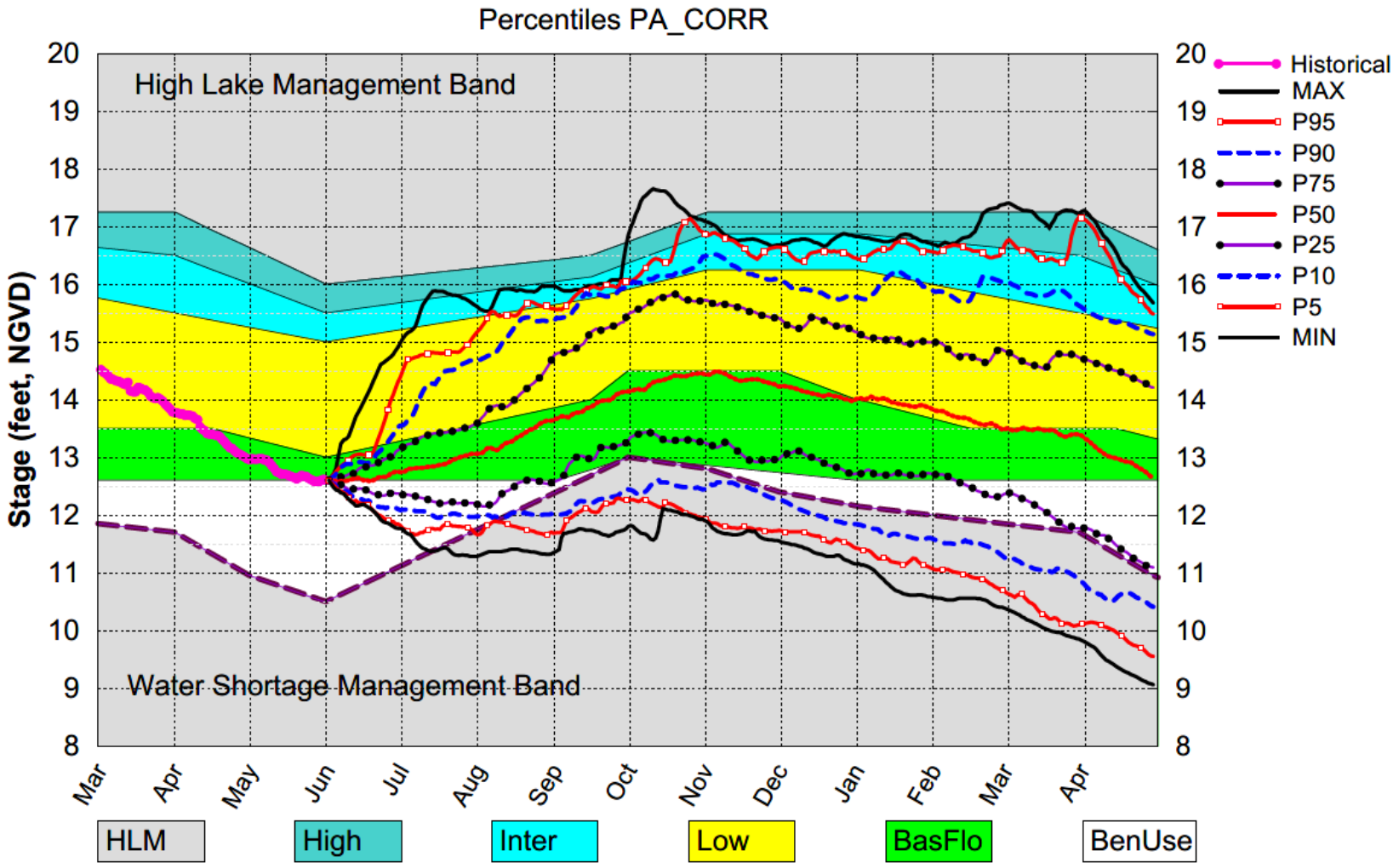
Source: Colorado State University (Tropical Meteorology Project)

June DPA Assumptions

- **The June 1, 2022 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 June 1, 2022 DPA resets the initial stages for Lake Okeechobee (LOK) and the Water Conservation Areas (WCAs) on May 1st of each year of the DPA simulation and conditions the simulation to real time data during April to achieve real time stages on June 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.**

PRELIMINARY RESULTS

Lake Okeechobee SFWMM June 2022 Position Analysis

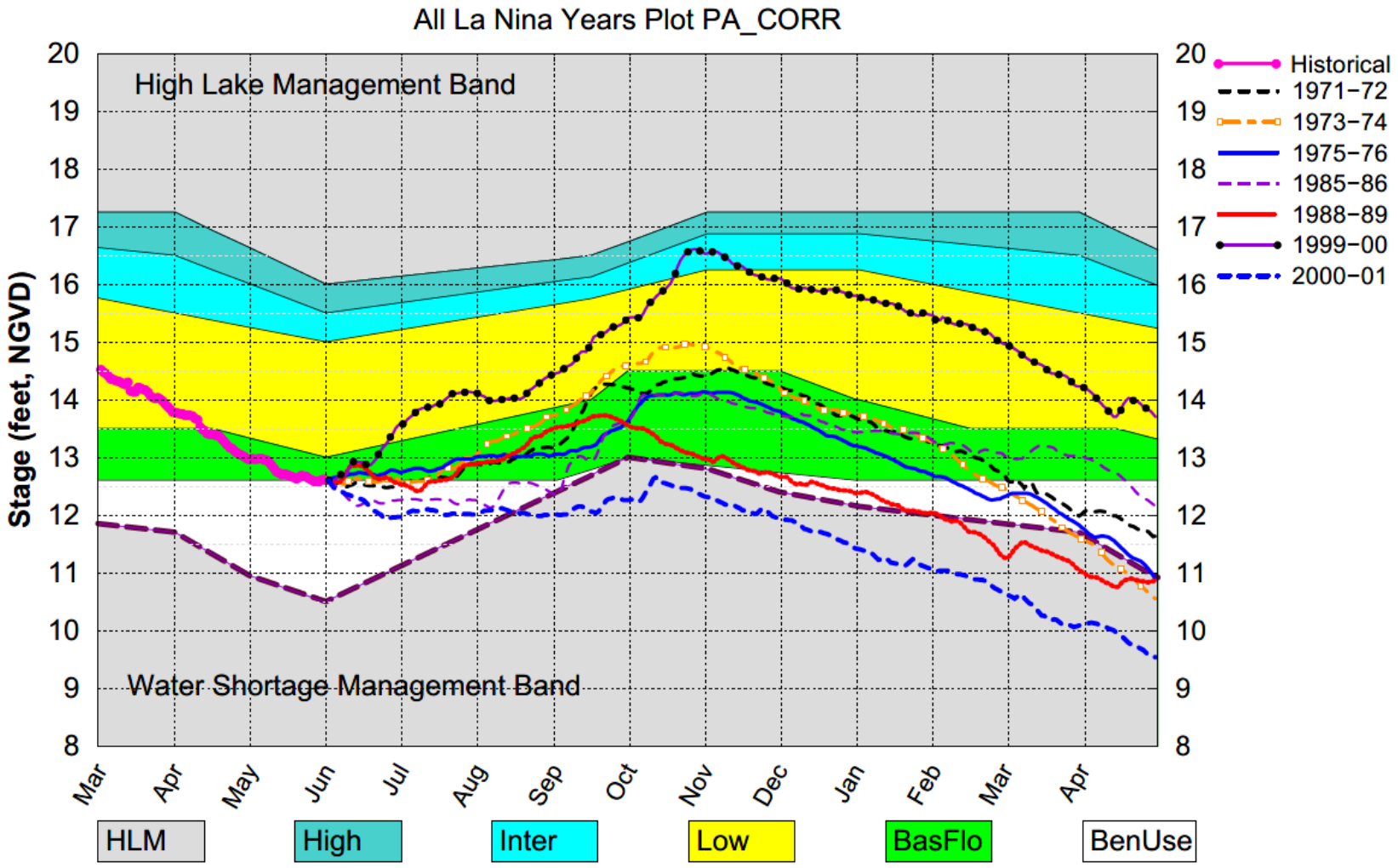


(See assumptions on the Position Analysis Results website)

Sat Jun 4 18:03:16 2022

PRELIMINARY RESULTS

Lake Okeechobee SFWMM June 2022 Position Analysis

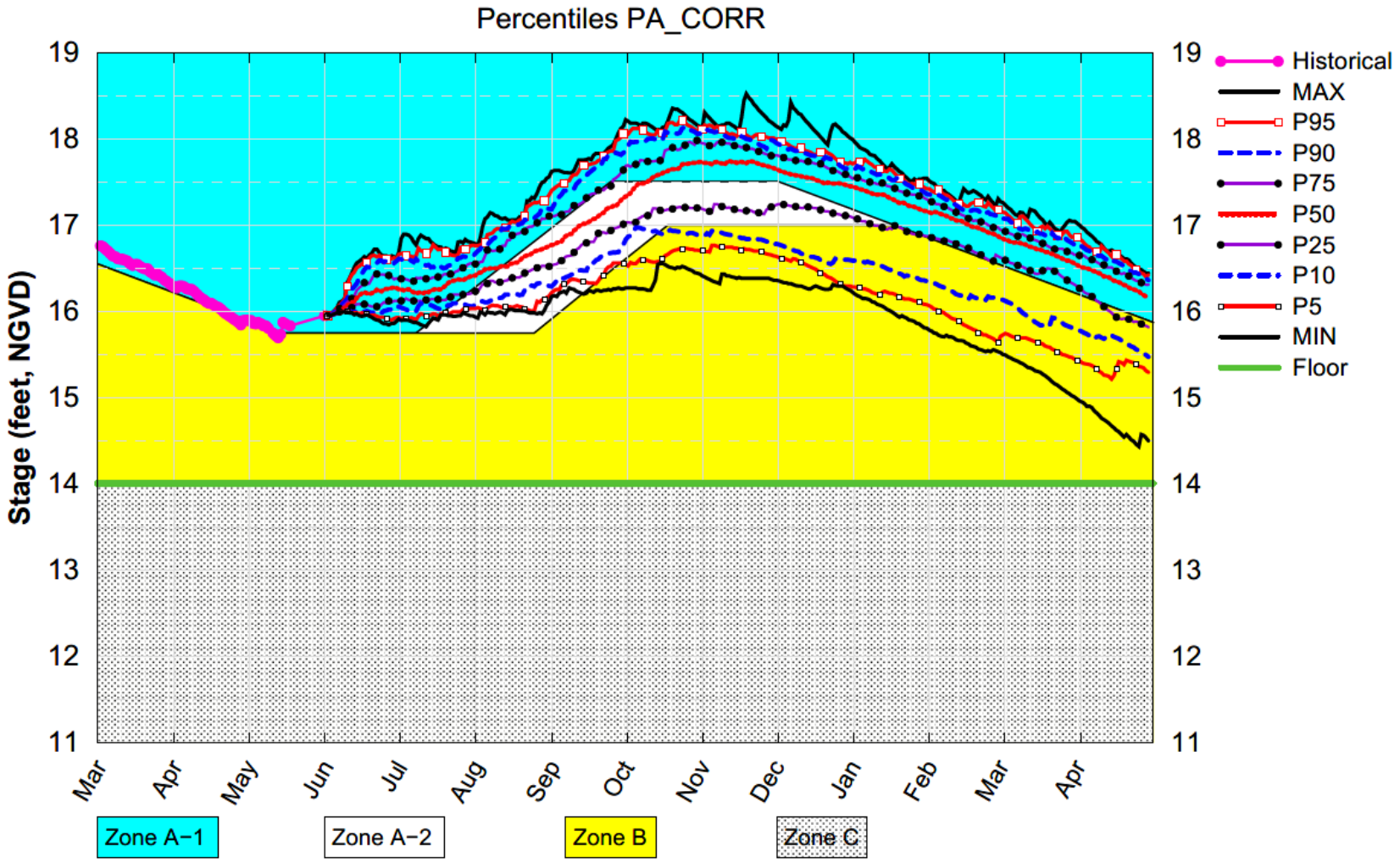


(See assumptions on the Position Analysis Results website)

Sat Jun 4 18:03:50 2022

PRELIMINARY RESULTS

WCA1 SFWMM June 2022 Position Analysis

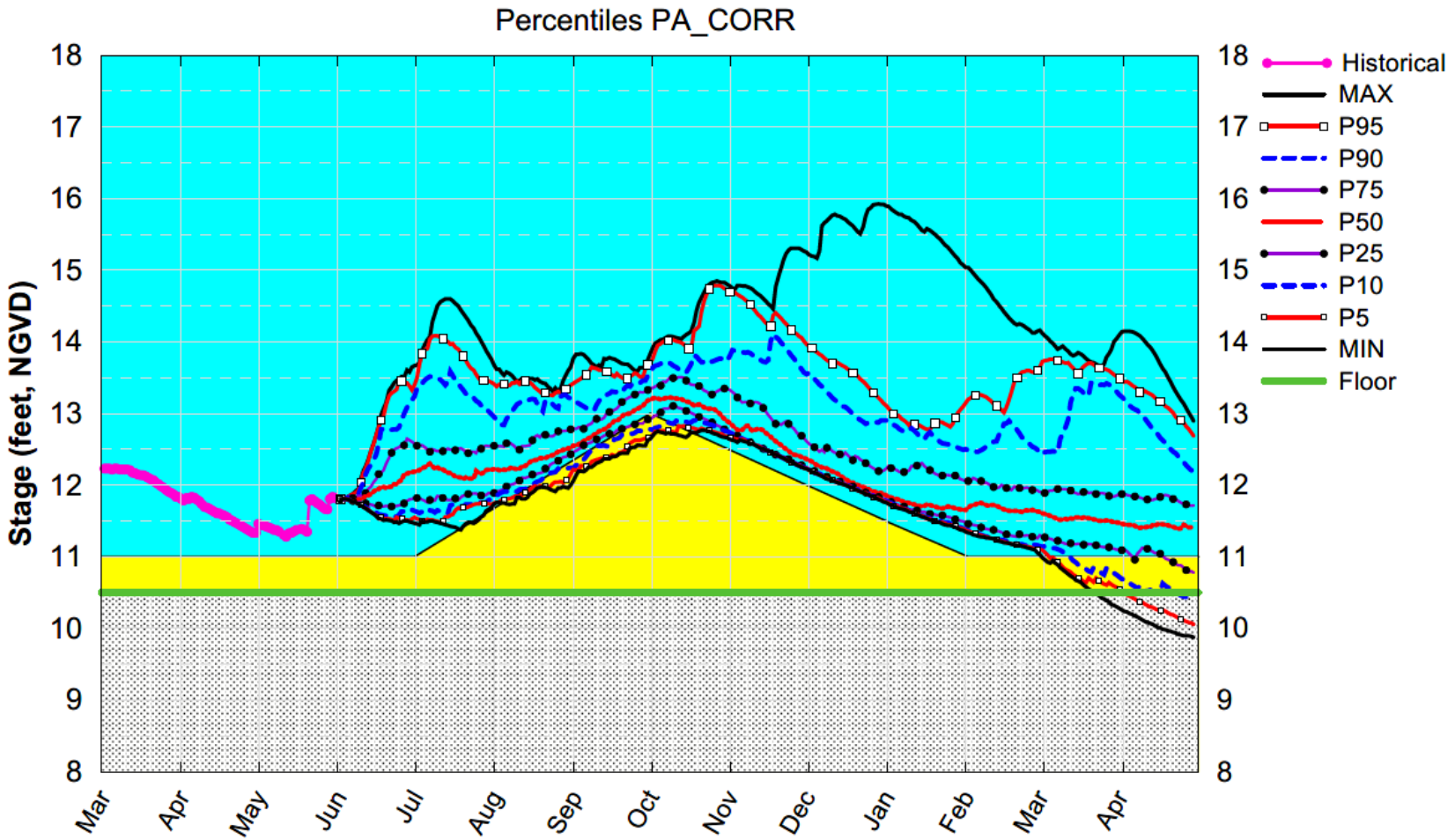


(See assumptions on the Position Analysis Results website)

Sat Jun 4 18:03:21 2022

PRELIMINARY RESULTS

WCA2A SFWMM June 2022 Position Analysis

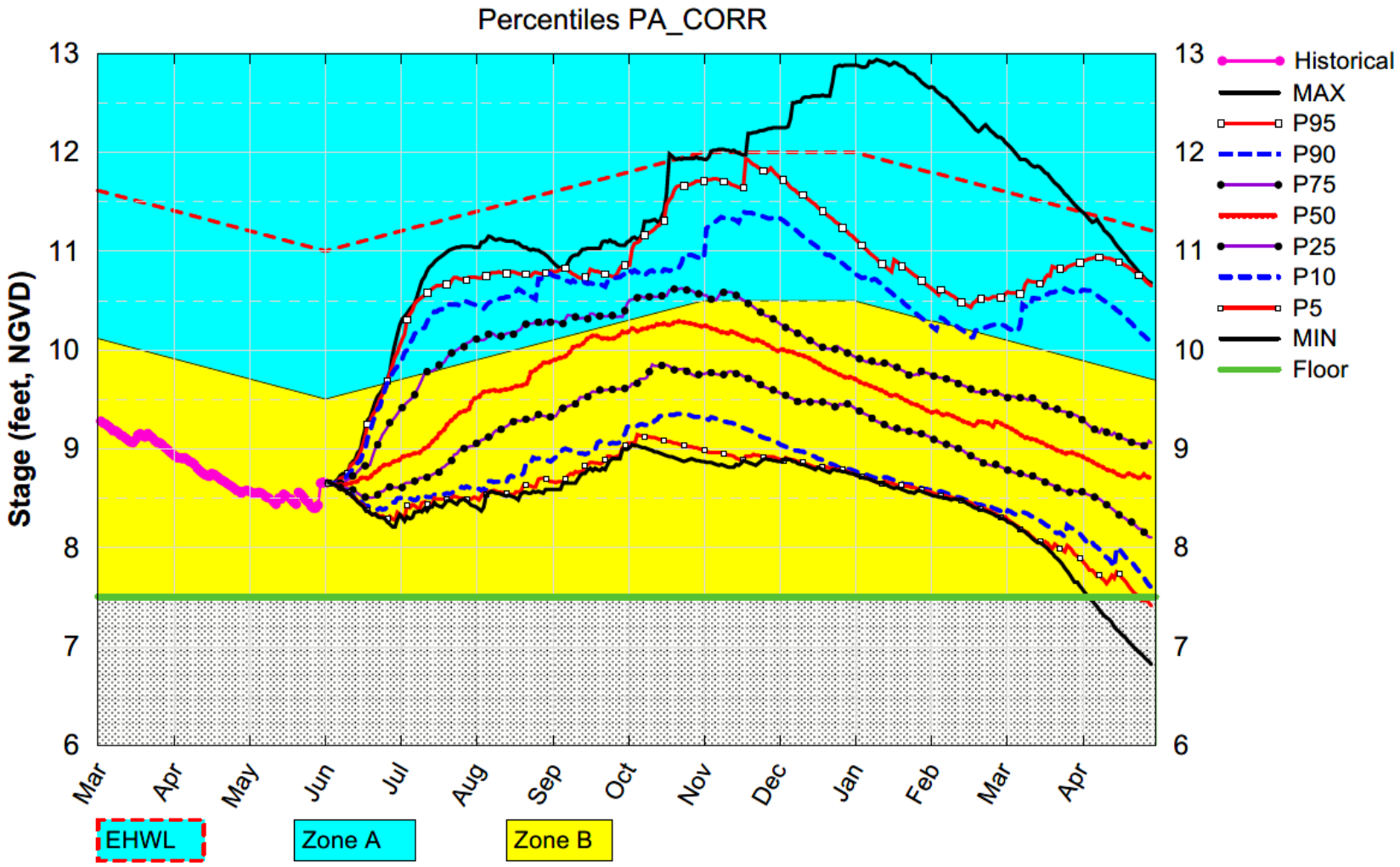


(See assumptions on the Position Analysis Results website)

Sun Jun 5 21:16:08 2022

PRELIMINARY RESULTS

WCA3A SFWMM June 2022 Position Analysis



(See assumptions on the Position Analysis Results website)

Sat Jun 4 18:03:30 2022