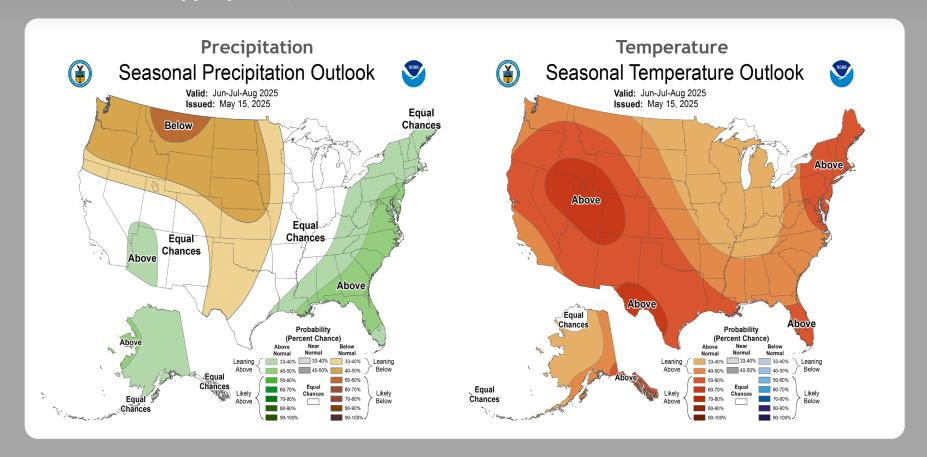
Extended Hydrologic Outlook June 2, 2025

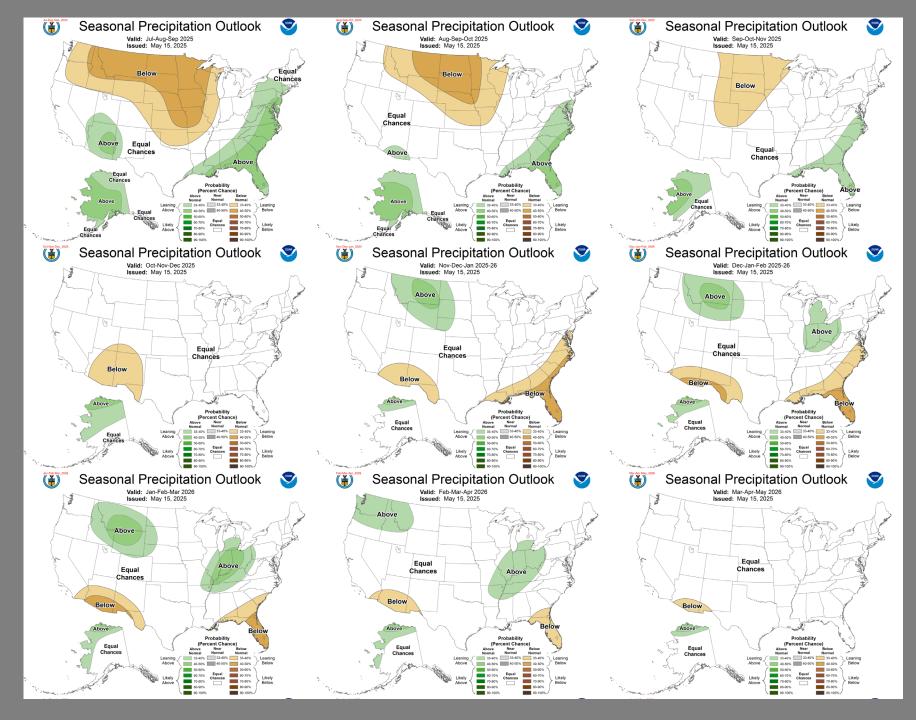
- The Climate Prediction Center (CPC) is forecasting <u>above</u> normal rainfall for June through August.
- ENSO-neutral is favored through summer 2025 (74% chance during June-August), with chances exceeding 50% through August-October 2025.
- Atlantic Multidecadal Oscillation (AMO) is <u>currently in</u> 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 2025

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-thannormal 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
- The current PDO is negative

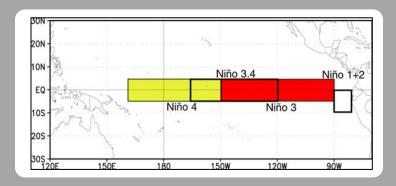
Atlantic Multidecadal Oscillation (AMO)

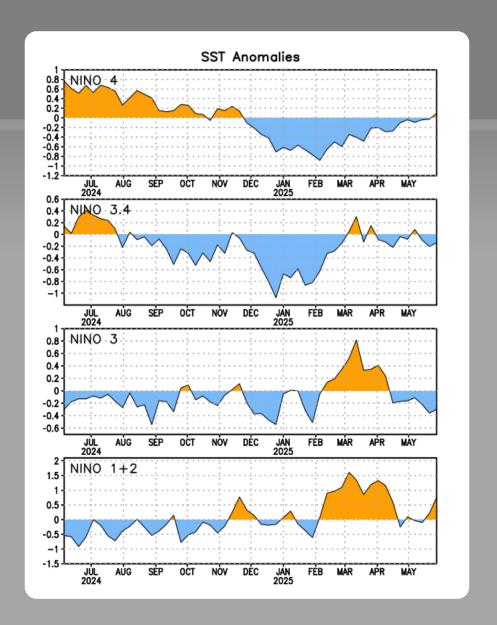
- Average annual inflow to Lake Okeechobee is nearly 50% greater during the warm phase compared to the cold phase of the AMO, easterly flow toward south Florida affected by phase
- The AMO is currently in the warm phase

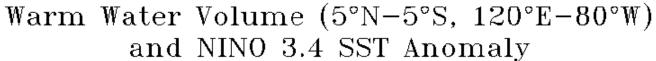
Niño Region SST Departures (°C) Recent Evolution

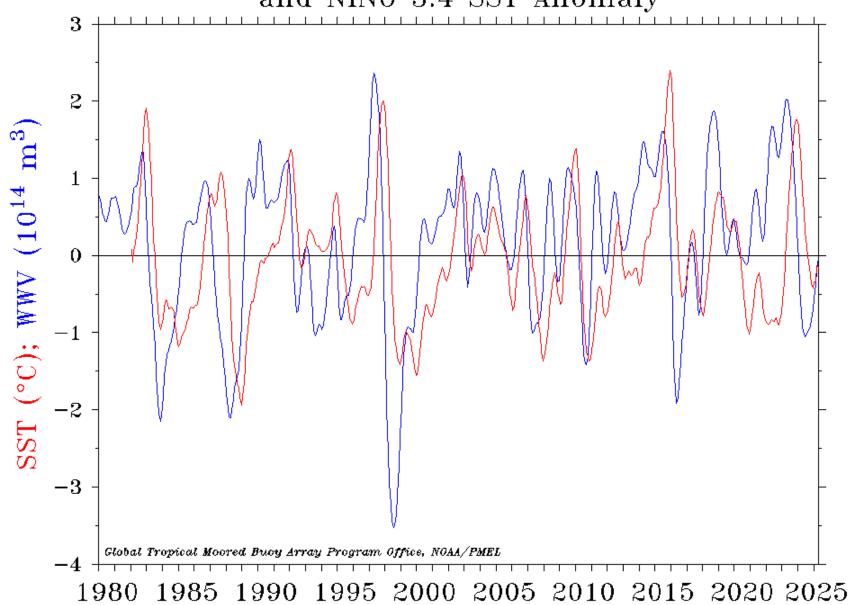
The latest weekly SST departures are:

Niño 40.1°CNiño 3.4-0.1°CNiño 3-0.3°CNiño 1+20.8°C

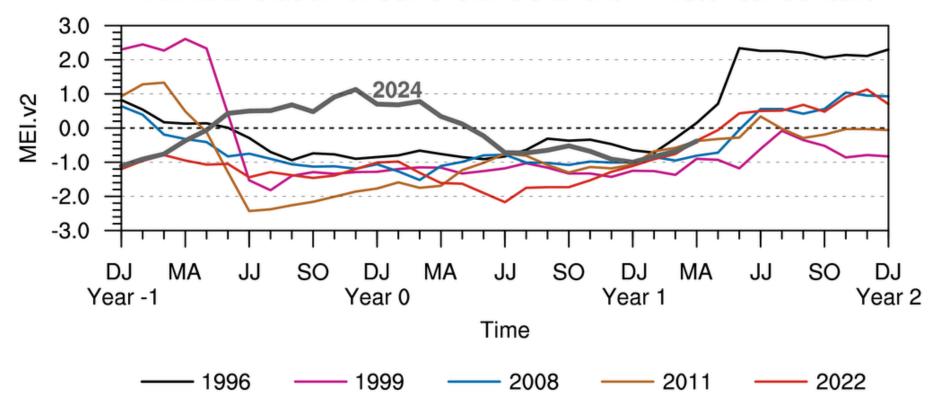






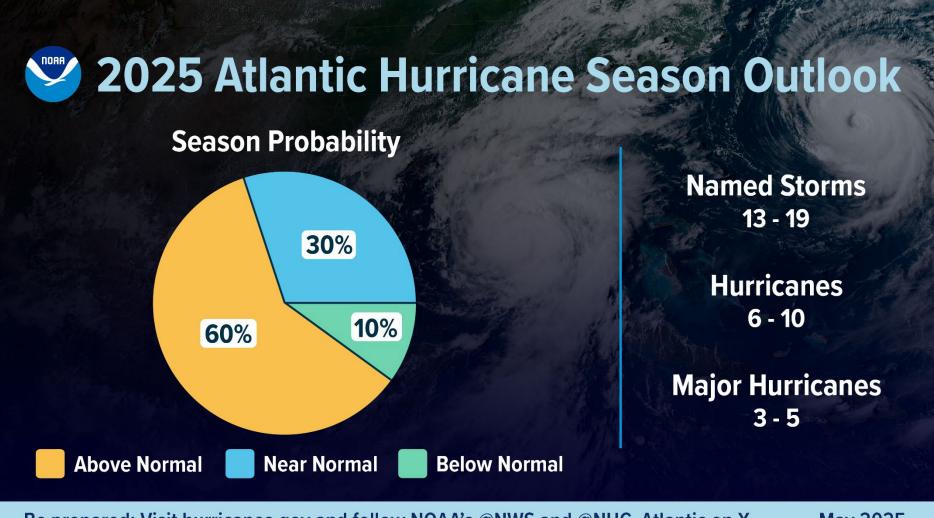


MEI.v2 Evolution of Current ENSO Event in Historical Context



2025 Tropical Outlook





Be prepared: Visit hurricanes.gov and follow NOAA's @NWS and @NHC_Atlantic on X.

May 2025

ATLANTIC BASIN SEASONAL HURRICANE FORECAST FOR 2025

| Forecast Parameter and 1991–2020 Average (in parentheses) | Issue Date 3 April 2025 |
|--|-------------------------------|
| Named Storms (NS) (14.4) | 17 |
| Named Storm Days (NSD) (69.4) | 85 |
| Hurricanes (H) (7.2) | 9 |
| Hurricane Days (HD) (27.0) | 35 |
| Major Hurricanes (MH) (3.2) | 4 |
| Major Hurricane Days (MHD) (7.4) | 9 |
| Accumulated Cyclone Energy (ACE) (123) | 155 |
| ACE West of 60°W (73) | 93 |
| Net Tropical Cyclone Activity (NTC) (135%) | 165 |

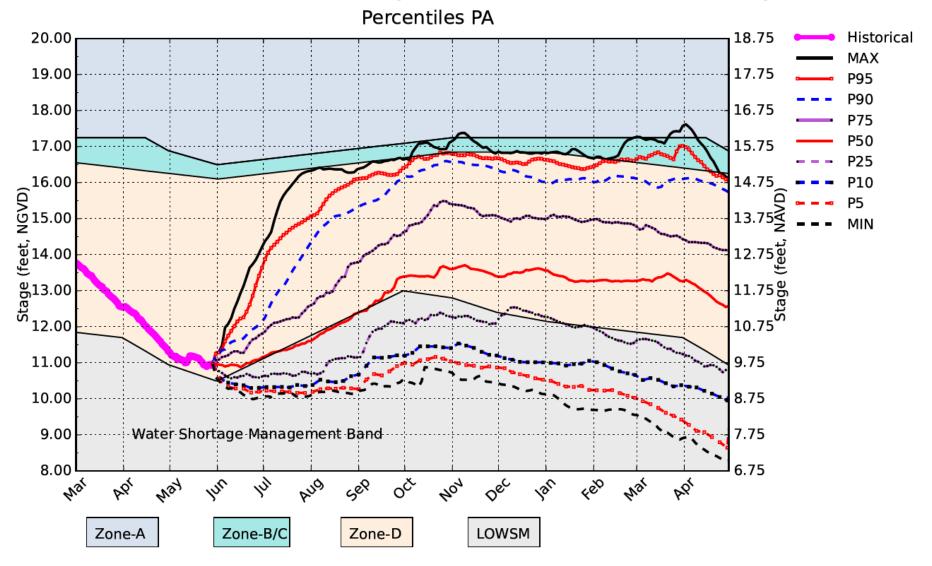
- Above-normal activity
- Uncertainty as to what the phase of ENSO will be this summer and fall
- Sea surface temperatures across the eastern and central Atlantic are generally warmer than normal, but not as warm as they were last year
- A warmer-than-normal tropical Atlantic combined with likely ENSO neutral (or potential La Niña) conditions typically provides a more conducive dynamic and thermodynamic environment for hurricane formation and intensification
- Next update: June 11, 2025

Source: Colorado State University (Tropical Meteorology Project)

May 29, 2025 DPA Assumptions

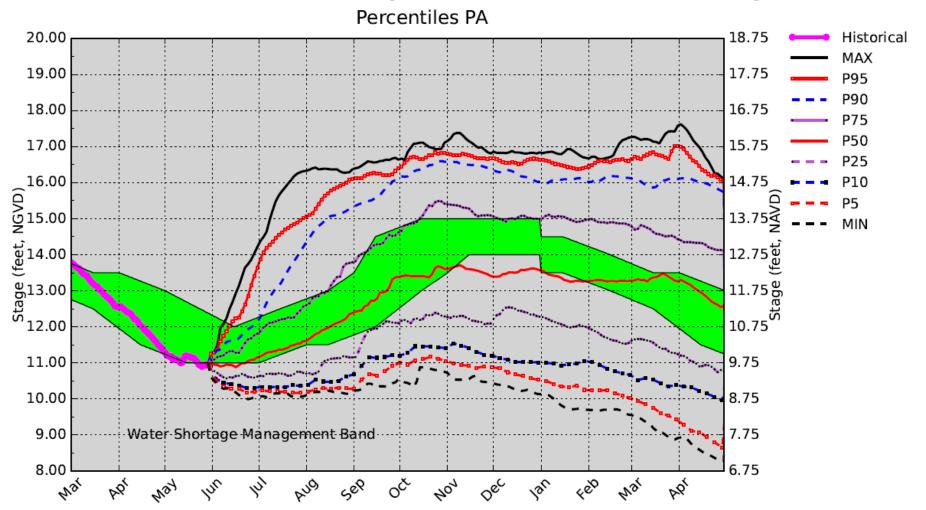
- The May 29, 2025 Dynamic Position Analysis (DPA) simulation is based on historical climatic conditions spanning the period 1965-2016. This DPA posting is made with the South Florida Water Management Model (SFWMM) v7.3.4.
- The May 29, 2025 DPA resets the initial stages for Lake Okeechobee (LOK) and the Water Conservation Areas (WCAs) on May 1st of each year of the DPA simulation and conditions the simulation to real time data during May to achieve real time stages on May 29th for LOK and WCAs.
- The Lake Okeechobee operations follow the Lake Okeechobee System Operating
 Manual (LOSOM). Modeling assumptions are consistent with modeling performed
 for LOSOM 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 flow ways under operation.
 STA depths are maintained to a minimum of 6 inches using Lake Okeechobee releases.
- Lake Okeechobee Water Shortage Management (LOWSM) is included in the simulation which reflects the currently approved 40E-21 and 40E-22 water shortage rules.

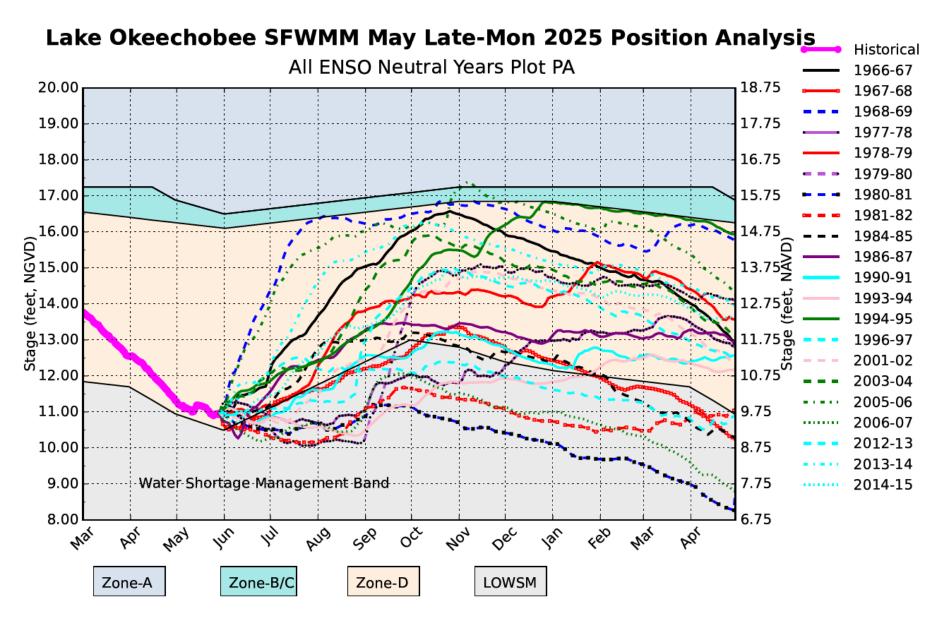
Lake Okeechobee SFWMM May Late-Mon 2025 Position Analysis



(See assumptions on the Position Analysis Results website)

Lake Okeechobee SFWMM May Late-Mon 2025 Position Analysis

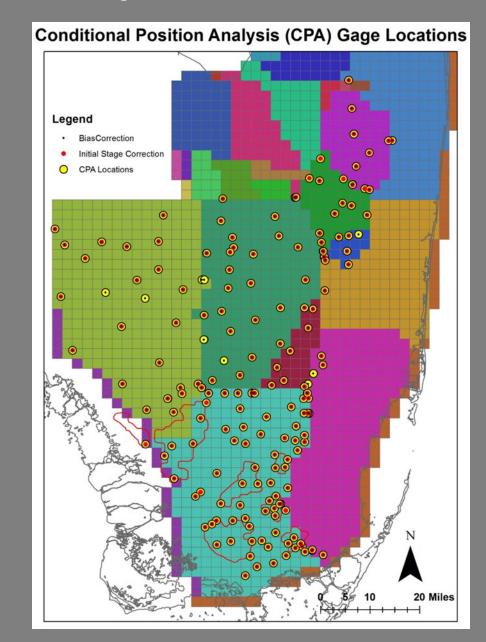




(See assumptions on the Position Analysis Results website)

Conditional Position Analysis Overview

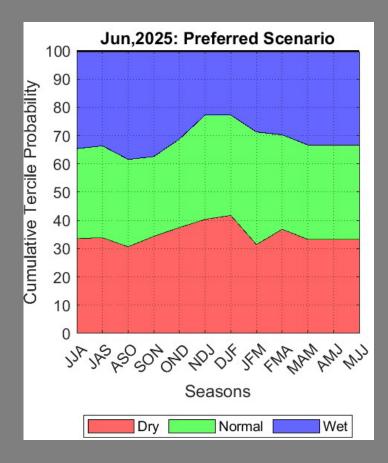
- CPA is a stochastic
 framework that transforms
 stages obtained from
 Dynamic Position Analysis
 (DPA) based on forecasted
 rainfall conditions over the
 next twelve months (Ali,
 2016).
- DPA stage outputs are used as inputs to CPA.
- CPA is implemented for Lake Okeechobee and 200+ locations in the Everglades.



June 2025 CPA: Preferred Rainfall Scenario

Rainfall probabilities are calculated based on historical data and projected Niño-3.4 Index published by CPC. Preferred Scenario directly captures ENSO strength and is typically more aggressive in terms of shifts from Climatological probabilities compared to CPC.

https://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/strengths/index.php



Lake Okeechobee – The LOSOM CPA implementation shows that all percentile lines shift upward from the respective DPA percentile lines by ~ 0.1 to 0.4 ft by the beginning of Nov 2025. Under PrefScenario, the median trace projects stage of ~13.8 ft NGVD, representing a 0.2 ft increase from the LOSOM DPA.

