Climate Summary for Florida – May 2022

Prepared by the Florida Climate Center, The Florida State University, Tallahassee, Florida
Online at: http://climatecenter.fsu.edu/products-services/summaries

Key Points

- Monthly average temperatures in May were near to above normal across the state.
- Rainfall totals for the month were above normal for many areas across the state, particularly in the Panhandle and southwest regions.
- As of May 24, severe drought (D2) has been removed for most places, while moderate drought (D1) and abnormally dry (D0) conditions continue to impact parts of the state.
- La Niña conditions are favored to continue into the summer and fall, with a 58% chance in August-October 2022. The chances of La Nina occurring this fall and into early winter have increased to 61%.

Average temperatures in May continued to be near to above normal across the state. Average temperature departures from normal ranged from 0.0℉ in Key West to +2.5℉ in Orlando for the month (see Table 1 and Appendix 1 for select cities). Many stations across Florida recorded one of their top 5 warmest Mays on record, including Tampa (2nd-warmest), Jacksonville Beach (2nd-warmest), Orlando (3rd-warmest), Pensacola (4th-warmest), and Miami (5th-warmest). Several daily high maximum temperature records were tied or broken throughout the month, though more daily high minimum temperature records were set (see appendix 2).

Table 1. May average temperatures and departures from normal (℉) for selected cities.

Station	Mean Temperature	Departure from Normal
Pensacola	78.2	+2.2
Tallahassee	76.5	+1.3
Jacksonville	75.5	+0.6
Orlando	79.8	+2.5
Tampa	81.6	+2.1
Miami	81.6	+1.5
Key West	81.1	+0.0

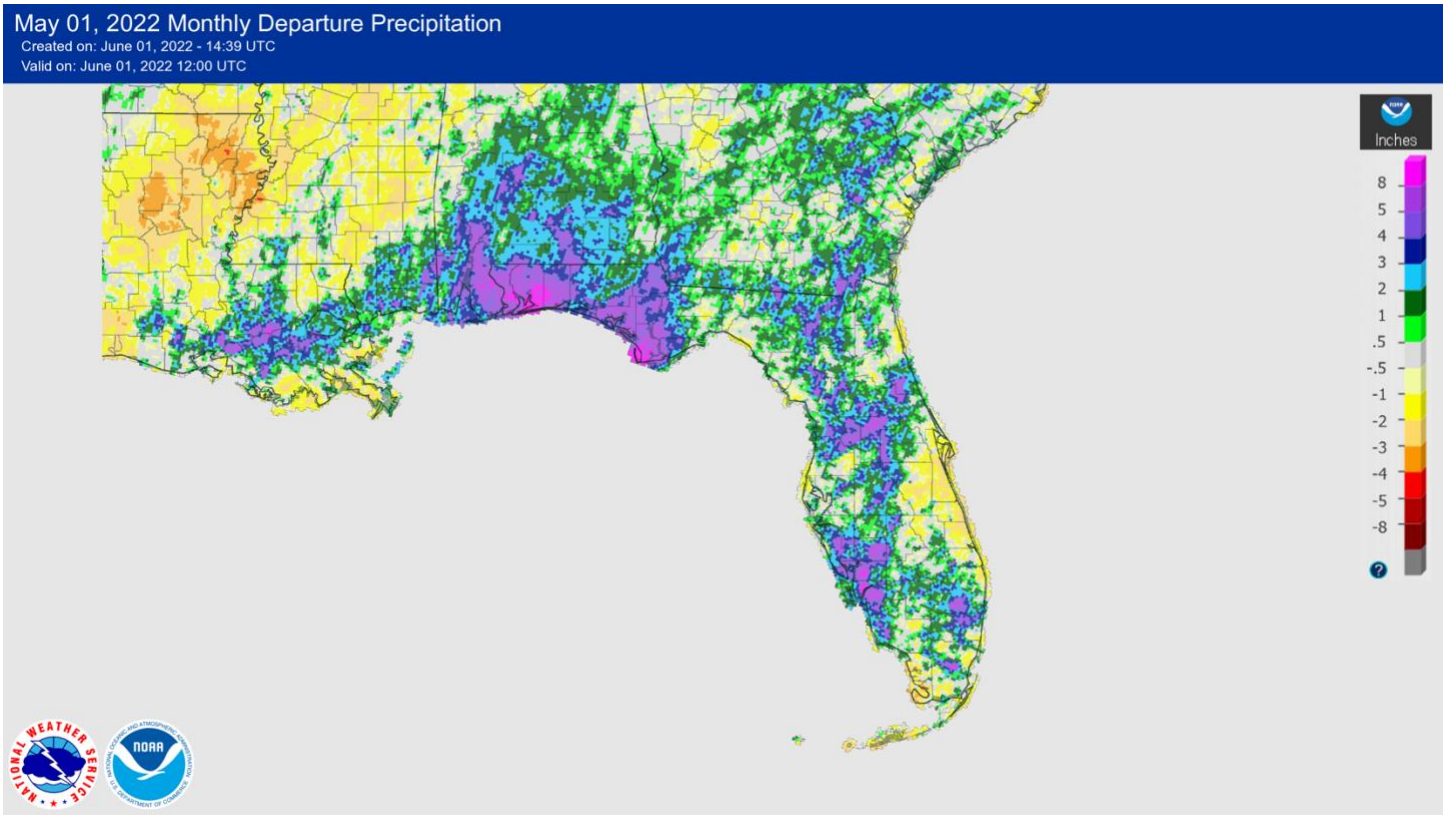
Rainfall totals in May were above normal across much of the state, particularly the western Panhandle, as well as parts of the Peninsula. The monthly precipitation departures from normal ranged from -1.87 inches in Orlando to +8.15 inches in Pensacola (Table 2 and Appendix 1). Pensacola recorded its wettest May on record (based on a 74-year record from the Pensacola Regional Airport station) at 12.05 inches. The surplus of

rainfall across the western Panhandle brought Pensacola out of its deficit for the year, with a year-to-date departure from normal of +2.6 inches currently. However, several locations continue to see rainfall deficits for the year, including Venice at -3.5 inches of rainfall to date and Vero Beach at -7.8 inches to date. Ample rainfall during May helped to alleviate drought in some areas of southwest Florida, though abnormally dry conditions and moderate drought persist in some areas (see below).

Table 2. May precipitation totals and departures from normal (inches) for selected cities.

Station	Total Rainfall	Departure from Normal
Pensacola	12.05	+8.15
Tallahassee	3.29	-0.07
Jacksonville	4.88	+1.46
Orlando	2.15	-1.87
Tampa	2.71	+0.11
Miami	4.47	-1.85
Key West	1.72	-1.40

Figure 1. A graphical depiction of the monthly rainfall departure from normal (in inches) for May (courtesy of NOAA).



La Niña Advisory.

Chances for La Niña, the cool phase of the ENSO climate pattern, to return this fall and early winter for a third year in a row have increased (61% chance). La Niña is still favored to continue into the late Northern Hemisphere summer (58% chance in August-October 2022). Over the past month, the Niño index values ranged from -1.1°C and -1.5°C, and subsurface temperature anomalies remained negative reflecting a large area of below-average temperatures from the surface down to ~100m depth across the central and eastern equatorial Pacific Ocean. Overall, the coupled ocean-atmosphere system continues to reflect the presence of La Niña.

Hazardous Weather Events in May.

According to the Local Storm Reports issued by the local National Weather Service offices serving Florida, there were 399 individual local reports of hazardous weather events recorded across the state during the month of May (see Table 4 for a breakdown by event type). Severe storms with high wind gusts, hail, and localized heavy rain affected many areas throughout the month. A severe storm on May 6th produced straight line winds that were reported at 80-90 mph in Taylor County, resulting in damages to trees and structures in the vicinity. Heavy rain was reported across Gulf County on the 24th-26th, with rainfall totals as much as 13.6 inches over the three-day period. There was no tropical cyclone development in May, the first time in seven years since 2015, though Invest 90L came close on the 22nd as it formed in the Gulf of Mexico just before moving inland near Pensacola.

Table 4. Breakdown of storm reports submitted in Florida during the month of May (compiled from Iowa State University/Iowa Environmental Mesonet).

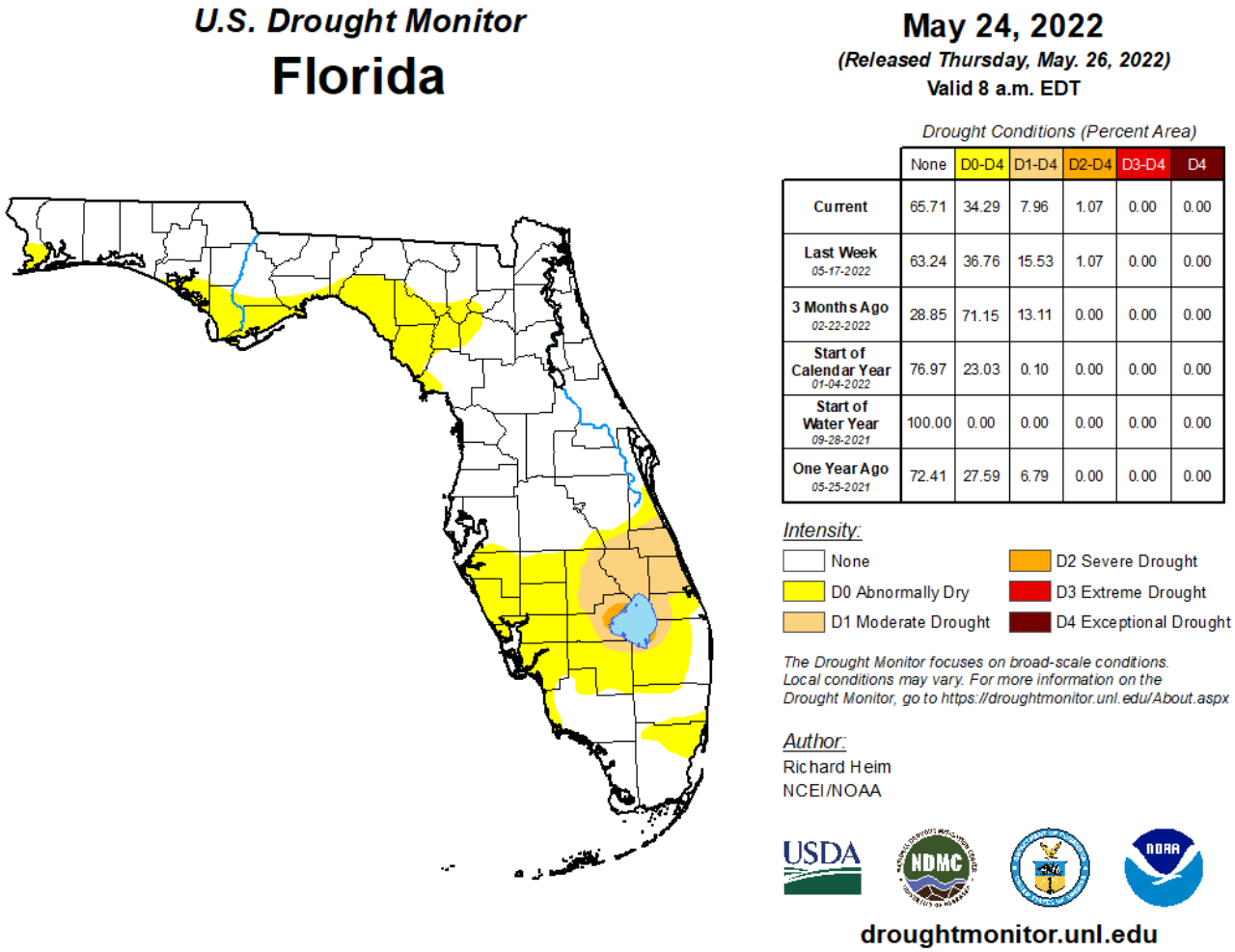
Report Type	Number of Reports
Flash Flood	6
Heavy Rain	15
Flood	11
Hail	106
Lightning	5
Dense Fog	0
Marine Thunderstorm Wind	59
Non-Thunderstorm Wind Gust	1
Non-Thunderstorm Wind Damage	0
Tornado/Waterspout/Funnel Cloud	9 / 33 / 6
Thunderstorm Wind Damage	48
Thunderstorm Wind Gust	91
Rip Currents	1
Wildfire	7

Drought-Related Impacts.

At the beginning of May, nearly 4% of the state was in severe drought (D2), 14% was in moderate drought (D1), and 20% was abnormally dry (D0), according to the U.S. Drought Monitor. As of May 24, drought conditions had improved with only 1% of the state in severe drought (D2), roughly 7% in moderate drought (D1), and 26% of the state was experiencing abnormally dry conditions. Moderate drought and abnormally dry conditions continue to impact areas of the south-central Peninsula, and abnormally dry conditions exist in the coastal Panhandle and Big Bend regions (Figure 2 below).

As of May 31, the Lake Okeechobee water level was 12.60 ft. above sea level (Feet-NGVD29**)**, which is below average for this time of the year. The water level declined throughout the month but remains well above the water shortage management threshold. At the first of the month, the water level was around 12.98 ft. above sea level.

Figure 2. A graphical depiction of the current drought conditions in Florida according to the U.S. Drought Monitor (courtesy of the National Drought Mitigation Center, University of Nebraska-Lincoln).



Agriculture-Related Impacts.

During mid-May, topsoil moisture conditions were adequate in 55% of the state, short in 32%, and very short in 10% of the state, while just 3% of the state had surplus moisture conditions. By the end of May, topsoil moisture had improved with levels adequate in 70% of the state, short in 15%, and very short in 2% of the state; 13% of the state was in surplus. For more information, consult the Crop Progress and Conditions report, which is published by the USDA's National Agricultural Statistics Service.

Appendix 1. Additional May departures from normal data for select Florida locations (source: NWS).

Station	Average Temperature (ºF)	Departure from Normal (ºF)	Total Rainfall (in.)	Departure from Normal (in.)
Gainesville	76.0	+1.0	3.77	+0.69
Sarasota	78.8	+1.0	4.26	+1.68
Melbourne	78.5	+0.4	0.78	-2.75
Fort Myers	80.3	+1.0	8.67	+5.21
West Palm Beach	80.1	+1.4	1.88	-3.03

Appendix 2. Select daily record high minimum temperatures broken or tied during May (compiled from NOAA).

Location	Date	Record (ºF)	Broken/Tied	Last
Key West	6	83	Broken	82 in 1967
Orlando	7	75	Broken	74 in 1984
Key West	7	84	Broken	80 in 1978
Lakeland	7	71	Broken	70 in 1995
Key West	9	83	Broken	81 in 2019
Orlando	18	74	Broken	73 in 2003
Tampa	19	77	Broken	76 in 2016
Pensacola	19	76	Tied	76 in 2017
Jacksonville Beach	20	79	Broken	77 in 2017
Melbourne	20	75	Broken	74 in 1985
Pensacola	20	78	Broken	75 in 1957
Niceville	21	76	Broken	75 in 1938
Perrine	21	78	Broken	73 in 2021
Wewahitchka	21	73	Broken	72 in 1990
Marianna	21	74	Broken	73 in 2008
Miami	21	82	Broken	80 in 1991
West Palm Beach	21	79	Tied	79 in 1991
Pensacola	21	78	Broken	77 in 1957
Fort Lauderdale	22	79	Broken	77 in 2018
Hialeah	22	80	Broken	79 in 2001
Perrine	22	79	Broken	75 in 2018
Royal Palm (RS)	22	77	Broken	73 in 2018
Stuart	22	79	Broken	78 in 1957
Ochopee	22	76	Broken	73 in 2016
Fort Myers	22	78	Broken	75 in 2008
Miami	22	81	Broken	79 in 2011
Vero Beach	22	77	Broken	75 in 1964
West Palm Beach	22	80	Broken	78 in 2011
Clermont	23	74	Broken	72 in 2017
Fort Lauderdale	23	79	Broken	78 in 1957
Kissimmee	23	76	Broken	74 in 2015
Titusville	23	77	Broken	76 in 2001
Vero Beach	23	77	Broken	76 in 2020

Daytona Beach	23	75	Broken	74 in 1997
Fort Lauderdale	24	79	Broken	78 in 1915
Hastings	24	72	Broken	71 in 1991
Inverness	24	75	Broken	74 in 2017
Tampa	24	79	Broken	78 in 2020
West Palm Beach	24	79	Broken	78 in 2019
Key West	25	85	Broken	81 in 1961
Tampa	26	74	Broken	72 in 2020
Key West	26	85	Broken	82 in 2020
Orlando	27	77	Broken	76 in 2000