Friday, August 16, 2024					5-Day Statewide Weather Outlook			
No Threat Low Threat					Moderate Threat		High Threat	
Day	Lightning	Tornado	Damaging Wind	Hail	Flash Flooding	Excessive Heat	Riverine Flooding	Rip Currents
Fri	Locally South Florida & W Panhandle		<mark>Locally</mark> Iso. South Florida		Locally South Florida	Panhandle & Keys West Florida	Santa Fe River N & W-Central Peninsula	East Coast & Panhandle <mark>West Coast</mark>
Sat	South Florida Iso. Elsewhere		<mark>Locally</mark> Iso. South FL		Locally South Florida	Panhandle West Florida & Florida Keys	Santa Fe River N & W-Central Peninsula	East Coast & Panhandle <mark>West Coast</mark>
Sun	North Florida South Florida		North Florida Iso. South FL		Iso. Florida Panhandle	W Panhandle North Florida South Florida	Santa Fe River N & W-Central Peninsula	East Coast & Panhandle <mark>West Coast</mark>
Mon	E Panhandle & Northeast FL Elsewhere		<mark>Locally</mark> Iso. Statewide		Locally Iso. Statewide	Locally Statewide	Santa Fe River N & W-Central Peninsula	East Coast & Panhandle <mark>West Coast</mark>
Tue	Peninsula Elsewhere		<mark>Locally</mark> Iso. Statewide		Locally Iso. Statewide	Florida Peninsula Panhandle	Santa Fe River N & W-Central Peninsula	East Coast & Panhandle West Coast
Afternoon Feels Like Temperatures: Sunday, Monday, Tuesday								
Highlighted Area: Florida Severe Weather Outlook Sunday, August 18, 2024 Pensacola Placksonville Destin Panima City City Control City Orlando Orla								



Severe Weather Outlook: Sunday



pivotal weather

5 High Risk
4 Moderate Risk
3 Enhanced Risk
2 Slight Risk
1 Marginal Risk
Thunderstorms

Localized Rainfall Totals 6-8+" South Florida

5 Day Rainfall Totals: Through Tuesday Evening

...Distant Ernesto Brings Rough Surf & Dangerous Rip Currents to Florida East Coast Beaches
This Weekend...Scattered to Numerous Thunderstorms Capable of Producing Flash & Urban
Flooding in Southern Florida Peninsula...Relief from the Heat & Humidity Arriving
Overnight...Cold Front Bring Increased Thunderstorm Chances to North Florida Sunday...

Friday & Saturday:

An area of high pressure along the eastern U.S. seaboard will influence unseasonably drier and rain-free conditions across North and Central Florida today into Saturday (less than 15% chance of rain). Even as the afternoon sea breezes move onshore, the ignition of the typical summertime thunderstorm activity will be confined to the southern Florida Peninsula and Florida Keys (60-80% chance of rain). A few thunderstorms during the peak heating hours of the day may produce gusty winds and lightning; however, the greatest concern with this activity will be heavy rainfall rates accompanying multiple rounds of heavy rain and thunderstorms. Showers and thunderstorms will be capable of producing heavy rainfall rates (2-3"/hour). The trailing frontal boundary over the southern Florida Peninsula combined with ample moisture will bring additional rounds of heavy shower and thunderstorm activity to the flood-prone Southeast Florida I-95 corridor and west towards the Everglades and Southwest Florida Coast; recent heavy rainfall will likely lead to a quicker onset to flash flooding and urban flooding this afternoon and Saturday afternoon.

Abundant sunshine will allow afternoon high temperatures to rise into the upper 80s to middle 90s statewide; however, the drier conditions across North and Central Florida will keep the recent oppressive heat index values lower this afternoon. **Heat index values** approaching **100 to 105-degrees** will develop outside of shower and thunderstorm activity along the Florida Keys. Temperatures **feeling like the triple digits (99 to 105-degrees)** return across the I-10 corridor, interior North-Central Florida, and the Florida Keys Saturday afternoon.

Rain and thunderstorm activity both today and Saturday will gradually subside through the evening hours, giving way to additional relief from heat and humidity overnight. Temperatures reaching the upper 60s and lower 70s can be expected from the eastern Florida Panhandle, Northeast Florida, and over interior portions of the Florida Peninsula! Elsewhere, temperatures in the middle 70s to lower 80s can be expected tonight. Drier air will continue to filter further south into the interior Florida Peninsula on Saturday evening, with locations along the Space and Treasure Coasts and inland to Lake Okeechobee will experience the lower 70s overnight!

Sunday - Tuesday:

A deepening upper-level disturbance will send a cold front toward North Florida later this weekend, bringing an increased risk for showers and thunderstorms Sunday afternoon along the I-10 corridor (35-50% chance of rain). A cluster of showers and thunderstorms arriving from the north may pose a risk for a few **stronger to locally severe thunderstorms**, as the Storm Prediction Center (SPC) is outlooking a **Marginal Risk (level 1 of 5) for Severe Weather** along the Florida-Alabama border as isolated thunderstorms could be capable of producing strong wind gusts (45-60 mph), increased lightning, and locally heavy downpours. As trends within the computer forecast models are monitored, adjustments to the outlined severe weather risk can be expected. Showers and thunderstorms will still be possible Monday across North Florida (mainly for locations along and north of the I-4 corridor) where rain chances reach 50-70% as the aforementioned cold front advances further south.

Over the southern Florida Peninsula, the brief relief from the heat for the weekend will end as the moisture increases early in the week; rain chances remain isolated to scattered in nature south of the I-4 corridor (30-40% chance of rain). As typical with summertime shower and thunderstorm activity, a few during the peak heating hours of the day may be strong and capable of producing gusty winds, lightning, and locally heavy rainfall. On Tuesday, the frontal boundary from North Florida will continue to inch its way southward, influencing more widespread rain chances to return to the Florida Peninsula (45-65% chance of rain). Computer forecast models suggest the cold front will become stationary, now where the frontal boundary stalls will greatly dictate the northern extent of shower and thunderstorm

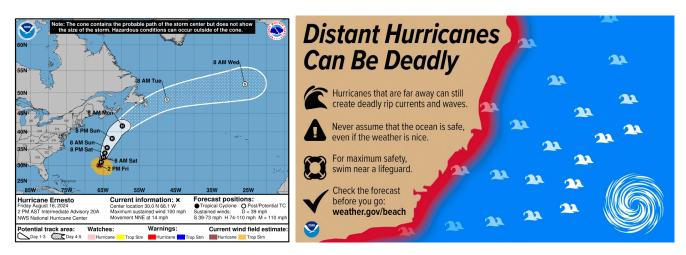




activity next week. Most guidance this afternoon shows the front stalling just south of the Florida Big Bend, keeping rain chances across North Florida confined to the seabreeze Tuesday along the immediate coastline (10-20% chance of rain).

With the return of widespread rain chances, humid conditions quickly reintroduce themselves to the forecast later this weekend and into early next week. Afternoon high temperatures in the upper 80s to middle 90s can be expected statewide, with **triple digit heat index values** retuning to the Sunshine State. **Dangerous heat and humid conditions** arrive to the Florida Panhandle Sunday, with **heat index values** reaching **105 to 111-degrees**; **Heat Advisories** will likely be warranted. Additional **Heat Advisories** could be raised for the eastern Florida Panhandle, Florida Big Bend, and Nature Coast Monday as **heat indices** of **105 to 108-degrees** are forecast.

Tropical Weather:



Hurricane Ernesto: As of 2:00 PM EDT, Ernesto is located about 180 miles south-southwest of Bermuda, and is moving north-northeastward at 14 mph. This general motion is expected to continue with a gradual slower forward speed by Saturday, bringing the center of Ernestor near or over Bermuda Saturday morning. A faster northeastward motion is expected late this weekend into early next week. Maximum sustained winds remain near 100 mph. Some gradual weakening is forecast over the next 24 hours or so, though some re-intensification is possible by early next week. Ernesto remains a large tropical cyclone; hurricane-force winds extend outward 75 miles from the center, and tropical stormforce winds extend outward up to 275 miles. Ernesto poses no direct threat to Florida; please see the "Rip Currents & Marine Hazards" section for additional details. For the latest on the tropics, please visit the National Hurricane Center website.

Hydrology & Flooding:

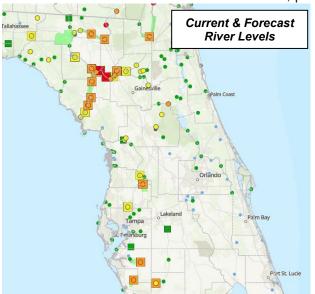
An Areal Flood Warning remains in effect for southeastern Madison County as gradually rising water levels continue to be reported between SR-53 and the Suwannee River. Due to high groundwater levels, locations near small creeks, springs, or sinks in southeast Madison County, several locations could be prone to flooding on relatively short notice. Expect new flooded areas as water continues to slowly move to the south and east throughout the county. Forecast rainfall amounts over the next 5 days with the late-weekend cold front, do not pose a risk for new areas of concern for flooding.

The Weather Prediction Center (WPC) is outlooking a Marginal Risk (level 1 of 4) for Flash Flooding across the southern Florida Peninsula today and Saturday as showers and thunderstorms will be capable of producing heavy rainfall rates (2-3"/hour). A trailing frontal boundary over the region combined with ample moisture will bring additional rounds of heavy shower and thunderstorm activity to the flood-prone Southeast Florida I-95 corridor, towards the Everglades and Southwest Florida Coast;





recent heavy rainfall will likely lead to a quicker onset to flash flooding and urban flooding this afternoon. There was some discussion of highlighting a Slight Risk (level 2 of 4) for Flash Flooding for coastal and metro portions of Southeast Florida; trends through the afternoon will be monitored as there could be some slowing or training of intense heavy rainfall rates along both urban coastlines. The WPC maintains a Marginal Risk (level 1 of 4) over the southern Florida Peninsula on Saturday as repeating heavy shower and thunderstorm activity, and the cumulative effect of recent heavy rainfall may raise further concern for flash flooding. Throughout the remainder of the forecast period, there is no organized risk for flash flooding; however, as typical with any summertime shower or thunderstorm, locally heavy rainfall may lead to localized flooding and ponding water – especially in low-lying/poor drainage and urban areas. The heaviest rainfall over the next 5 days is forecast to occur over the southern Florida Peninsula, with widespread 3-5" possible; locally higher amounts reaching in excess of 6-8" cannot be ruled out, particularly for areas that see multi-day shower and thunderstorm activity. Elsewhere, widespread 0.5-1" of rainfall can be expected, with locally 2-3" possible within the stronger and more organized thunderstorm activity across North Florida later this weekend. For the latest Excessive Rainfall Outlook/Flash Flood Risk, please visit the Weather Prediction Center.



Past heavy rainfall from Hurricane Debby continue to promote elevated water levels along several North and West Florida rivers, and waterways. River Flood creeks/streams, Warnings remain in effect for much of the Suwannee and Santa Fe Rivers as observations are forecast to crest over the next several days. The unseasonable dry weather early this forecast period will allow for water levels to continue to recede. A cold front arriving late Sunday afternoon into Monday is forecast to bring showers and thunderstorms to the region. This may prolong the duration of these rivers remaining in flood stage, but rainfall totals associated with this activity are not anticipated to worsen flood conditions. Moderate riverine flooding is ongoing along the Santa Fe River at Three Rivers Estates and near Fort White. Minor flooding is ongoing along the St. Mary's River near Macclenny, Myakka River at

Myakka River State Park, Manatee River near Myakka Head (SR-64), Withlacoochee River at US-301 Trilby, Santa Fe River near Hildreth, near High Springs, and at O'leno State Park, Suwannee River at White Springs, at Rock Bluff, near Wilcox, at Manatee Springs, and near Suwannee Springs. Long-term minor flooding can be expected along the Suwannee River as the crest wave gradually propagates through the basin; we are seeing a lower secondary crest from water routed from the upper reaches of the basin (Fargo, Georgia) near White Springs, which will result in a slower level recession along the Upper Suwanee River. The interplay between the Suwannee and Santa Fe Rivers near the Suwannee, Columbia, and Gilchrist County borders will result in backwater effects observed upstream the Santa Fe River (near Three Rivers Estates and Fort White). For more details, please visit the River Forecast Center.

Lake Okeechobee's average elevation is 13.98', which is within the operational band and 0.04' <u>above</u> normal. Lake elevations have risen about 0.14' over the past week and 0.45' over the past 30 days.

Drought & Fire Weather:

Moderate drought conditions have been eliminated on this week's <u>Drought Monitor</u> update (8/15) courtesy of locally heavy rainfall in East-Central Florida increasing streamflow and decreasing rainfall deficits. A pocket of abnormally dry (*emerging drought*) conditions lingers near Melbourne (Brevard





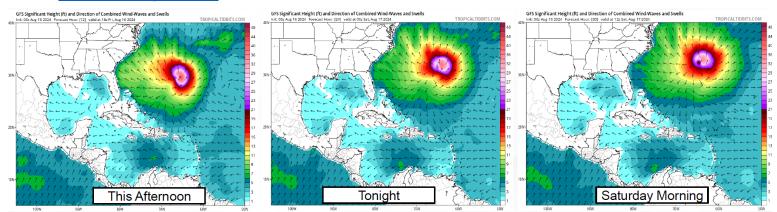
County) where 90-day rainfall totals remain near 4-8" below normal. Abnormally dry conditions have been introduced to the far western Panhandle as relatively dry weather over the past few weeks have led to worsening soil moisture and streamflow conditions. 30-day rainfall deficits along the western Panhandle are near 1-3". Near to below normal rainfall and above normal temperatures are anticipated over the next week.

<u>The Keetch-Byram Drought Index</u> average for Florida is **197** on a scale from 0 (very wet) to 800 (very dry). There are <u>no</u> Florida Counties with an average KBDI over 500 (drought/increased fire danger).

Saturated grounds and isolated to scattered afternoon showers and thunderstorms will keep wildfire concerns minimal throughout much of the state over the next 5 days. *Any thunderstorm that develops will be capable of producing frequent lightning and gusty winds*. Even with the drier air mass, relative humidity will remain above critical thresholds statewide with only a few locations across the Florida Panhandle and Big Bend experiencing relative humidity values reaching 35-45% today into the weekend. Increasing rain chances become more widespread Sunday into Monday, limiting the extent of further wildfire concerns. In the wake of the southward moving frontal system, portions of the western Florida Panhandle could see relative humidity values drop into the 35-45% range; however, the lighter overall wind regime will keep the wildfire risk low. According to the Florida Forest Service fire dashboard, there are 11 active wildfires across the state burning approximately 200 acres (as of 1:15 PM EDT).

Rip Currents & Marine Hazards:

Onshore winds from distant Hurricane Ernesto will produce long-period ocean swell and dangerous beach conditions along the Florida Atlantic Coast today and into the weekend. A moderate to high risk of rip currents can be expected along all Florida East Coast beaches through the forecast period; even despite winds gradually subsiding later in the forecast period, dangerous rip current conditions will continue to reside along the Florida East Coast through early next week due to lingering chop. Dominant easterly winds will yield a moderate to high risk of rip currents for several Florida Panhandle beaches, with the locally greater risk expected for southeast-facing beaches (Franklin County). As winds develop a westerly pattern later this weekend and into early next week, the elevated rip current risk will continue along Florida Panhandle beaches with locally high risk conditions now residing along southwest-facing beaches. A low risk of rip currents can be expected along the Florida West Coast through the forecast period; however, onshore westerly winds developing Tuesday may lead to localized enhancements to the rip current risk. For the latest Rip Current Outlook, visit www.weather.gov/beach.



Distant Ernesto will influence rough surf along the Florida East Coast to persist today and into the weekend, with wave heights reaching 5-7' in the surf zone this afternoon at Treasure/Space Coast and Northeast Florida beaches. Dangerous boating conditions can also be expected near the East-Central Florida inlets around times of outgoing tide this afternoon. Elevated wave heights of 3-5' can be expected along the Southeast Florida coastline. As Ernesto advances north of Bermuda Saturday,





onshore winds will gradually subside along the Atlantic Coast; however, waves of 3-5' can still be expected along Northeast and East-Central Florida beaches. By Sunday, breakers in the surf zone of 2-4' and 3-5' will be possible along the Florida East Coast with wave heights reducing along the Southeast Florida coast to 2-3' early next week. Wave heights of 1-2' can be expected along all Florida Gulf Coast beaches during the next 5 days.

While organized coastal flooding is not outlooked, the combination of breezy onshore winds and long-period swells arriving from distant Hurricane Ernesto may lead to **elevated water levels** at times of high tide along portions of the Florida Atlantic Coast today and Saturday. Additionally, we are approaching the 2024 King Tide Season – the first of these occurrences will peak with the Full Moon phase 8/19-8/23/2024. The term "king tide" is a non-scientific term people often use to describe exceptionally high tides. Tides are long-period waves that roll around the planet as the ocean is "pulled" back and forth by the gravitational pull of the moon and the sun as these bodies interact with the Earth in their monthly and yearly orbits. Higher than normal high tides and lower than normal low tides can be expected; **minor tidal flooding** along the coast will occur, particularly in low lying areas. If a storm occurs at this time, increased levels of **tidal flooding** and instances of **minor coastal erosion** may occur.

Red Tide has not been observed at or above background levels over the past week (as of 8/9). There have been no reports of fish kills or respiratory irritation suspected to be related to Red Tide.

<u>Blue-Green Algae</u> was observed on the most recent satellite imagery from 8/7, although partially obscured by cloud cover, at low to <u>moderate bloom potential</u> in the visible portions of the lake, primarily in the northern half. Satellite imagery of the St. Johns River obtained on 8/8 and partially obscured by cloud cover showed <u>moderate bloom potential</u> from Lake George downstream to Hastings and in Doctors Lake. Satellite imagery obtained on 8/6 and partially obscured by cloud cover showed no bloom potential in visible portions of the Caloosahatchee or St. Lucie Estuaries.

NWS Mobile Daily Hazards
NWS Jacksonville Daily Hazards
NWS Tampa Daily Graphical Hazards

NWS Tallahassee Daily Graphical Hazards
NWS Melbourne Daily Graphical Hazards
NWS Miami Daily Graphical Hazards
NWS Key West Daily Hazards

For the official National Weather Service forecast, please click on the following cities:

Pensacola Danama City Dalahassee Dalahassee

Have a wonderful weekend!
Caitlyn Gillespie, Deputy State Meteorologist
Melissa James, Assistant State Meteorologist
Florida Division of Emergency Management
www.FloridaDisaster.org/Weather



