



TROPICAL UPDATE



8:00 AM EDT

Monday, July 5, 2021

Tropical Storm Elsa

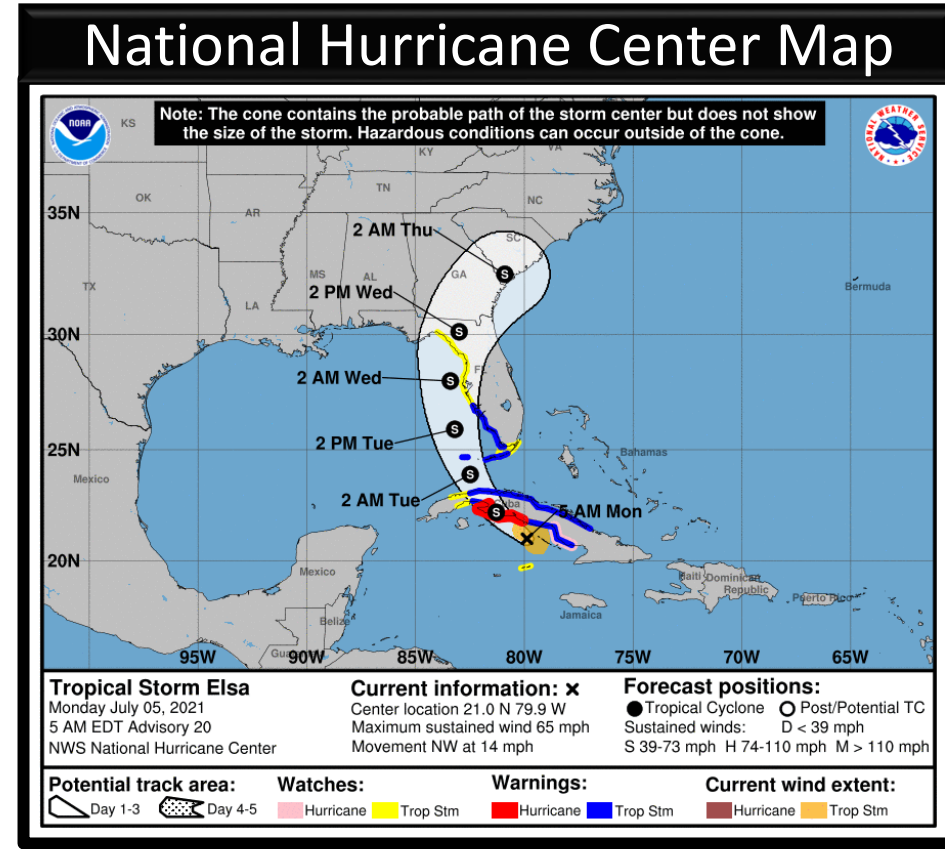
This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an active weather event please contact your County Emergency Management or Public Safety Office, local National Weather Service forecast office, or visit the National Hurricane Center website at www.hurricanes.gov.



Tropical Storm Elsa

5 AM ET Monday: Florida Threats & Changes Since Last Packet

	MINIMAL	LOW	MODERATE	HIGH	EXTREME
WINDS					
STORM SURGE					
FLASH FLOODING					
TORNADOES					
	LOW	MODERATE	HIGH		
RIP CURRENTS					



Overview/Recent Changes:

There have been no significant changes to the track or intensity forecast overnight. Additional Tropical Storm Watches and Warnings have been issued northward up the West Coast of Florida. Additional watches and warnings will be issued throughout the day.

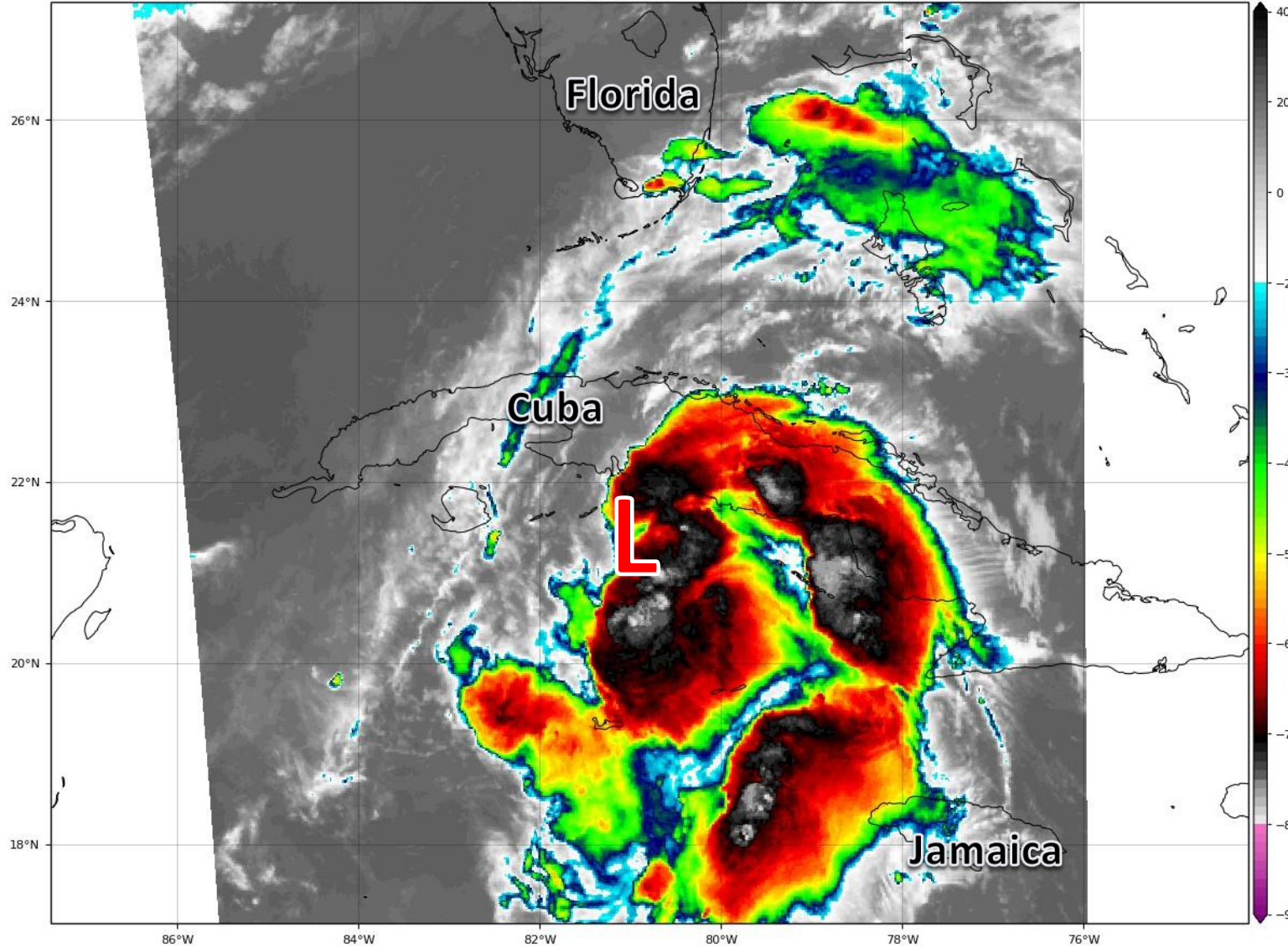


Satellite Imagery

Northwest Caribbean Sea – Tropical Storm Elsa

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 11:44:32Z Jul 05, 2021

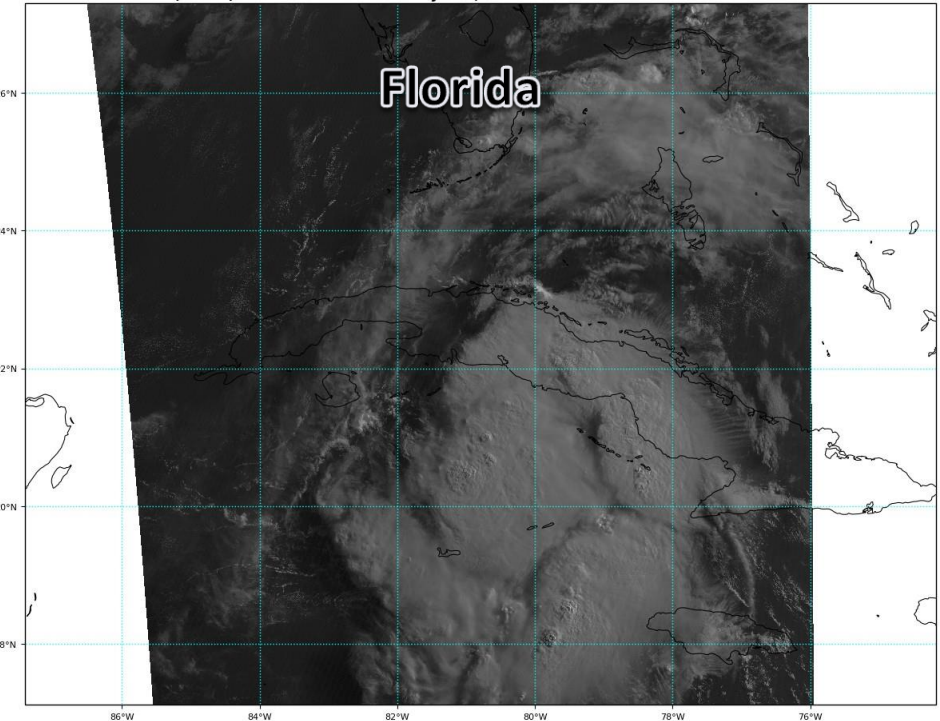
TROPICALTIDBITS.COM



Elsa remains very disorganized this morning, with most of the showers and thunderstorms on the eastern half of the storm.

GOES-16 Channel 2 (visible) Reflectance at 11:44:30Z Jul 05, 2021

TROPICALTIDBITS.COM

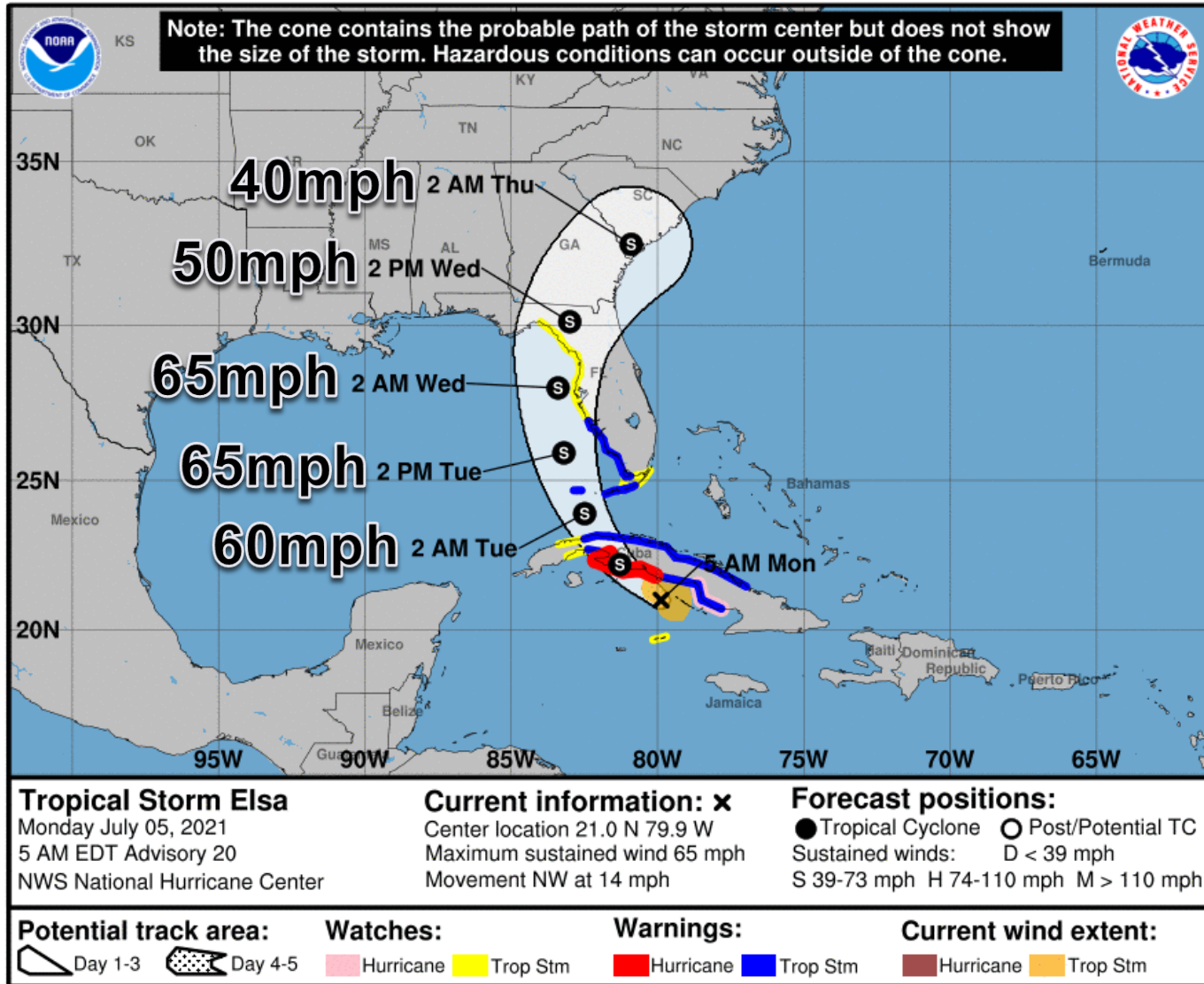




Official Forecast Track – Elsa

From the National Hurricane Center – ([LINK](#))

- The center of Elsa is about 225 miles south-southeast of Key West, FL and moving to the northwest at 14 mph
- Elsa remains a tropical storm with maximum sustained winds near 65 mph.
- Elsa is expected to traverse Cuba today and experience some weakening. Late tonight, Elsa will move back over water and head north over the eastern Gulf of Mexico.
- Little change in strength or some slight re-strengthening is possible after it emerges into the Gulf of Mexico.
- Landfall appears most likely in the eastern Big Bend of Florida. However, the storm will likely be lopsided with most of the rainfall to the east of the center impacting the entire West Coast as Elsa moves northward.





Damaging Wind Threat Overview

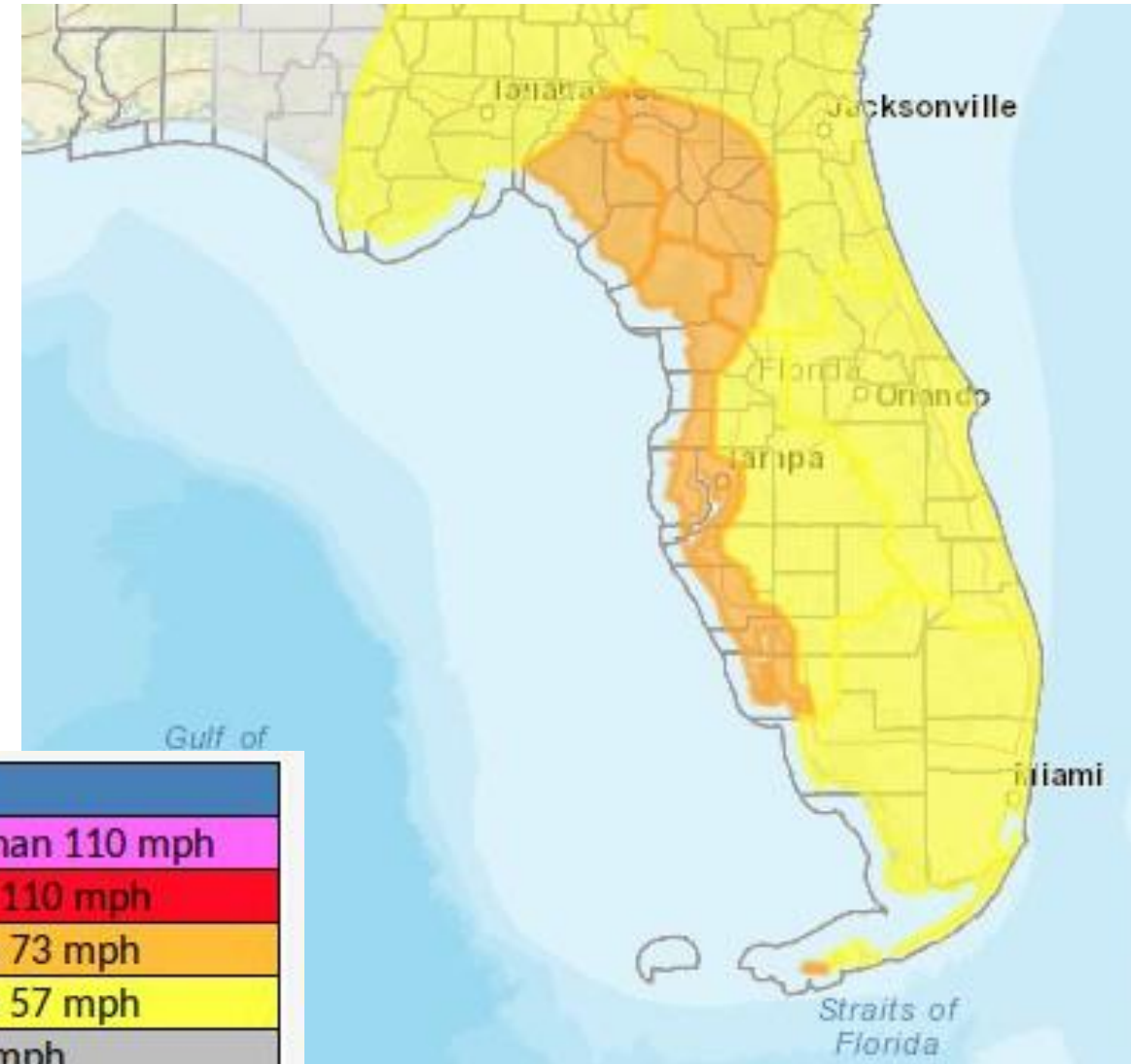
Tropical Storm Elsa

The greatest wind threat is along the immediate West Coast of Florida (west of I-75 and north of Naples), the Lower Keys, and inland Northeast Florida.

Still, tropical storm force winds remain possible across any part of state except the Panhandle Tuesday-Wednesday.

[https://www.weather.gov/srh/tropical?
office=mfl](https://www.weather.gov/srh/tropical?office=mfl)

Click on "Threats and Impacts" Tab



Wind Threat
Potential for wind greater than 110 mph
Potential for wind 74 to 110 mph
Potential for wind 58 to 73 mph
Potential for wind 39 to 57 mph
Wind less than 39 mph



Wind Watches and Warnings

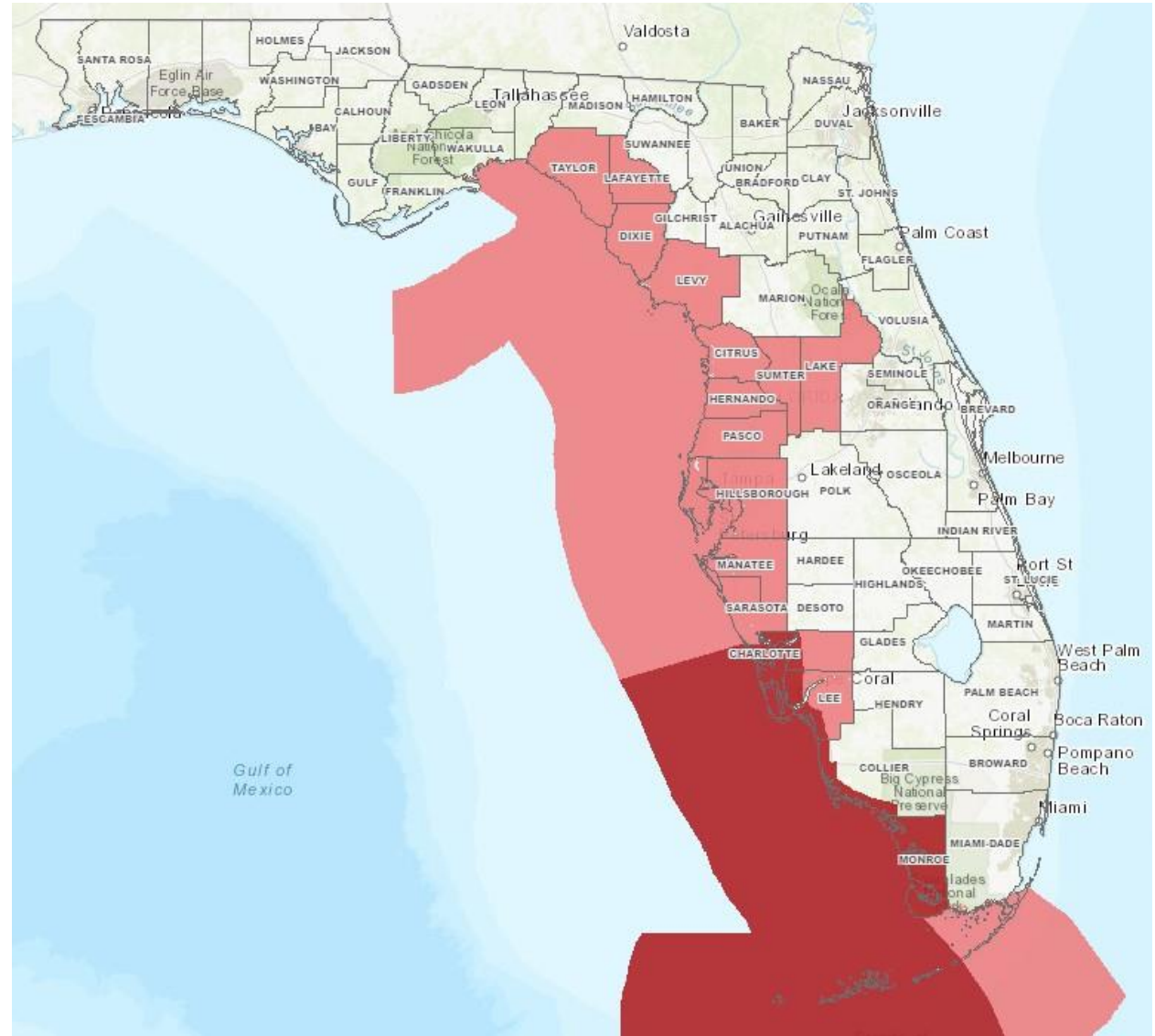
In Effect Until Further Notice

Tropical Storm Warnings:

- Middle and Lower Keys (Craig Key to Key West & Dry Tortugas)
- Mainland Monroe
- Coastal portions of Charlotte, Collier, and Lee

Tropical Storm Watches:

- Upper Keys (Craig Key to Ocean Reef)
- Inland portions of Lee and Charlotte
- Citrus, Dixie, Hernando, Hillsborough, Lafayette, Lake, Levy, Manatee, Pasco, Pinellas, Sarasota, Sumter, and Taylor



Tropical Storm & Hurricanes

Watches Versus Warnings

WATCH

Tropical storm and/or hurricane conditions are **POSSIBLE** in Watch area

Issued up to 48 hours in advance of tropical storm force winds

WARNING

Tropical storm and/or hurricane conditions are **EXPECTED** in Warning area

Issued up to 36 hours in advance of onset of tropical storm force winds

Hurricane preparedness activities become difficult once winds reach tropical storm force. **Watches & Warnings are issued in advance of onset of tropical storm force winds, 39-73mph**



NWSMobile



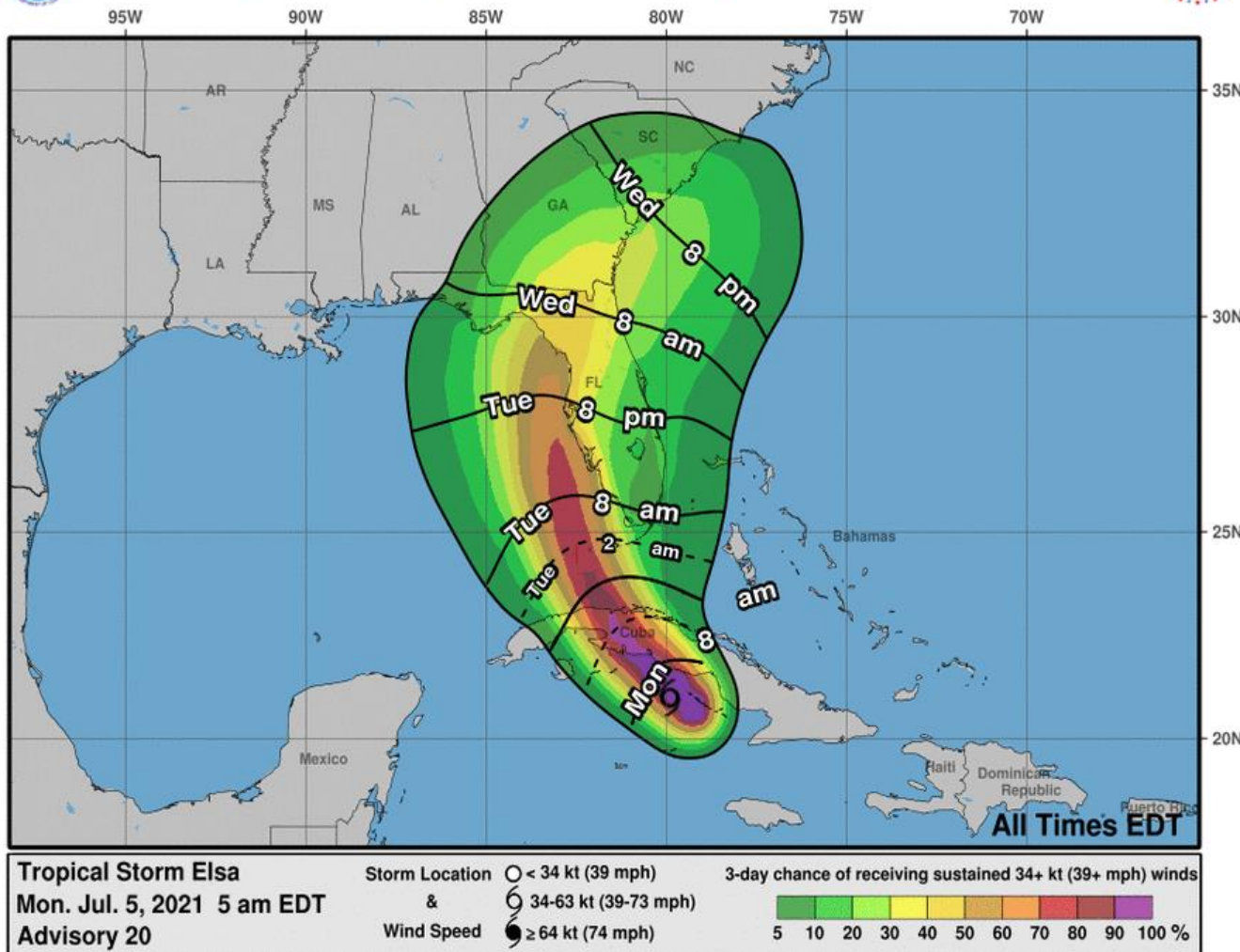
weather.gov/mob



Time of Arrival & Wind Speed Probabilities

MOST LIKELY Time of Arrival of Tropical Storm Force Winds (>39 mph)

0-3 Day Most Likely Arrival Time of Tropical-Storm-Force Winds



City	Chance for TS Winds	Changes Since Last Packet
Key West	62%	-5%
Marathon	29%	-20%
Naples	46%	+1%
Miami	7%	-4%
West Palm Beach	12%	-3%
Ft. Myers	27%	+2%
Tampa	58%	+17%
Orlando	21%	+3%
Apalachicola	23%	+13%
Tallahassee	22%	+13%
Gainesville	41%	+20%
Jacksonville	33%	+13%

Odds of tropical storm force winds have increase over the Big Bend and Northeast Florida, and decrease in Southeast Florida/Keys. Tropical storm force winds are **most likely** to begin after midnight tonight in the Florida Keys, after daybreak tomorrow in Southwest Florida, Tuesday night across Central Florida, and early Wednesday morning in Northeast Florida.

The odds of hurricane force winds are less than 5% in the Florida Keys and along the West Coast.



Key Messages

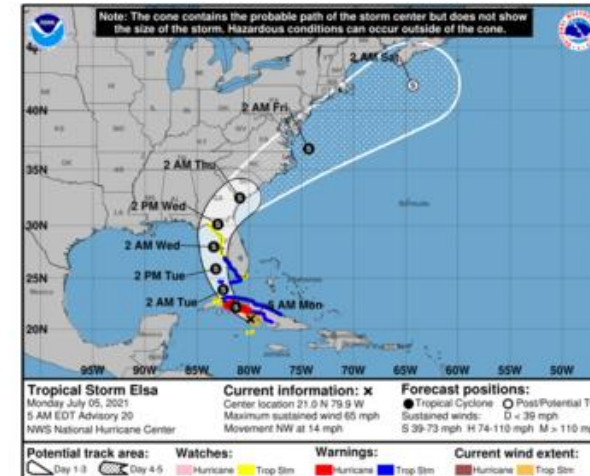
From the National Hurricane Center



Key Messages for Tropical Storm Elsa Advisory 20: 5:00 AM EDT Mon Jul 05, 2021



1. Heavy rain will impact the Cayman Islands and Cuba today resulting in significant flooding and mudslides over Cuba. As Elsa approaches the Florida Keys, Florida Peninsula, and coastal Georgia Monday through Wednesday, heavy rainfall may result in isolated flash, urban, and minor river flooding. Mid to late week, heavy rains across coastal South Carolina and North Carolina may result in isolated flash and urban flooding.
2. Tropical storm conditions and a dangerous storm surge are expected to continue across portions of central and western Cuba today. Hurricane conditions are also possible along the south coast this morning.
3. Tropical storm conditions are expected in portions of the Florida Keys and southwestern Florida tonight and Tuesday, where a Tropical Storm Warning is in effect. A Tropical Storm Watch and a Storm Surge Watch are in effect for much of the west coast of Florida.
4. There is a risk of tropical storm conditions and storm surge impacts along the coasts of Georgia and the Carolinas Wednesday and Thursday.

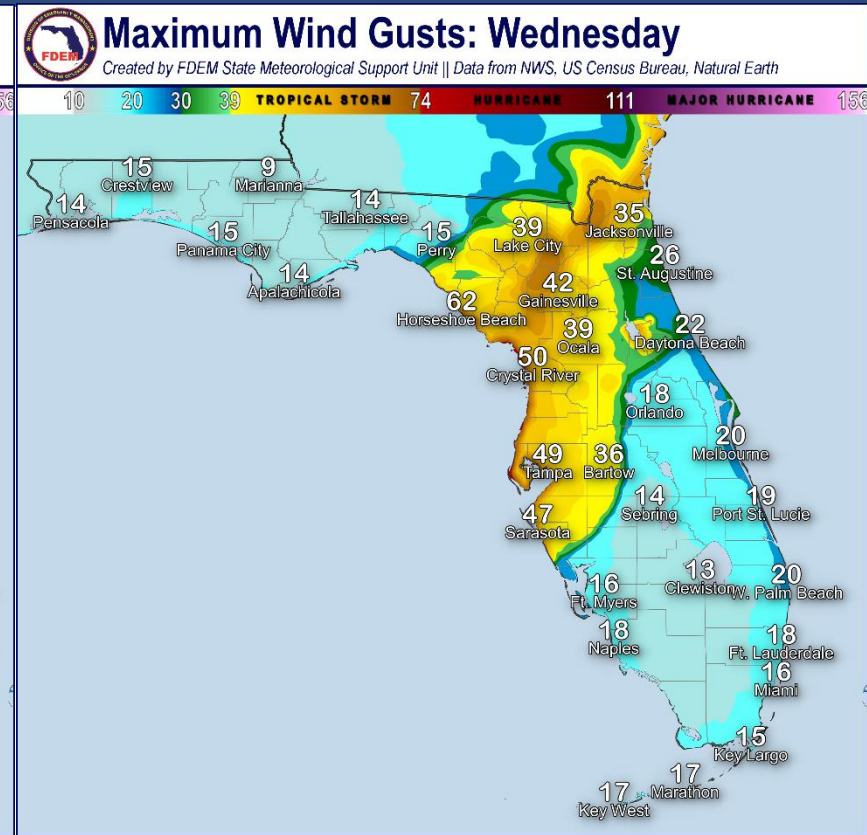
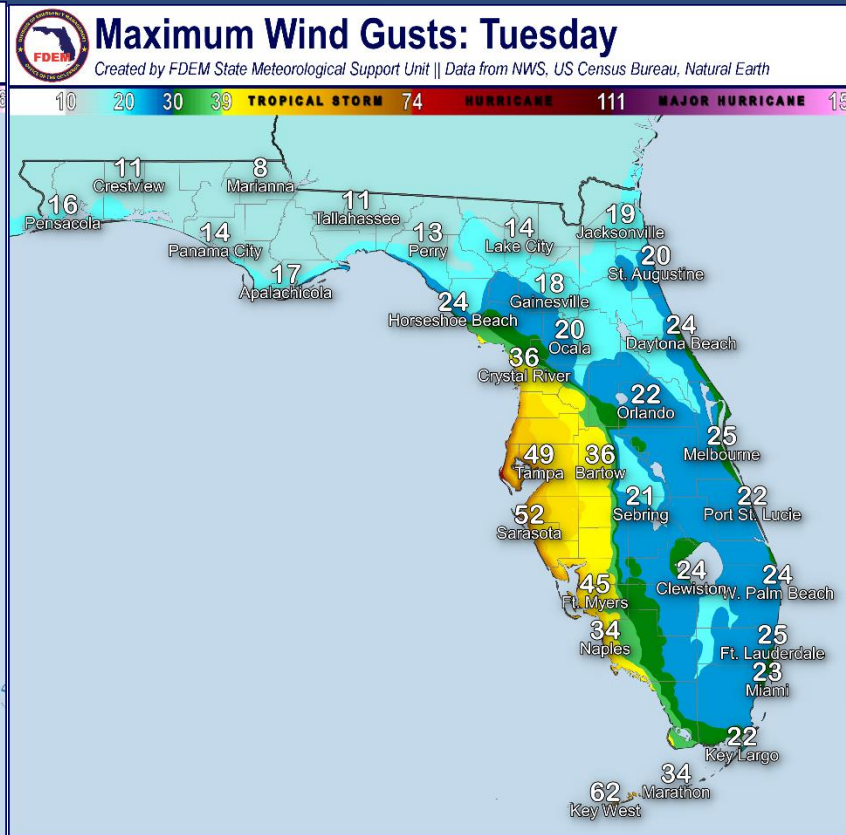
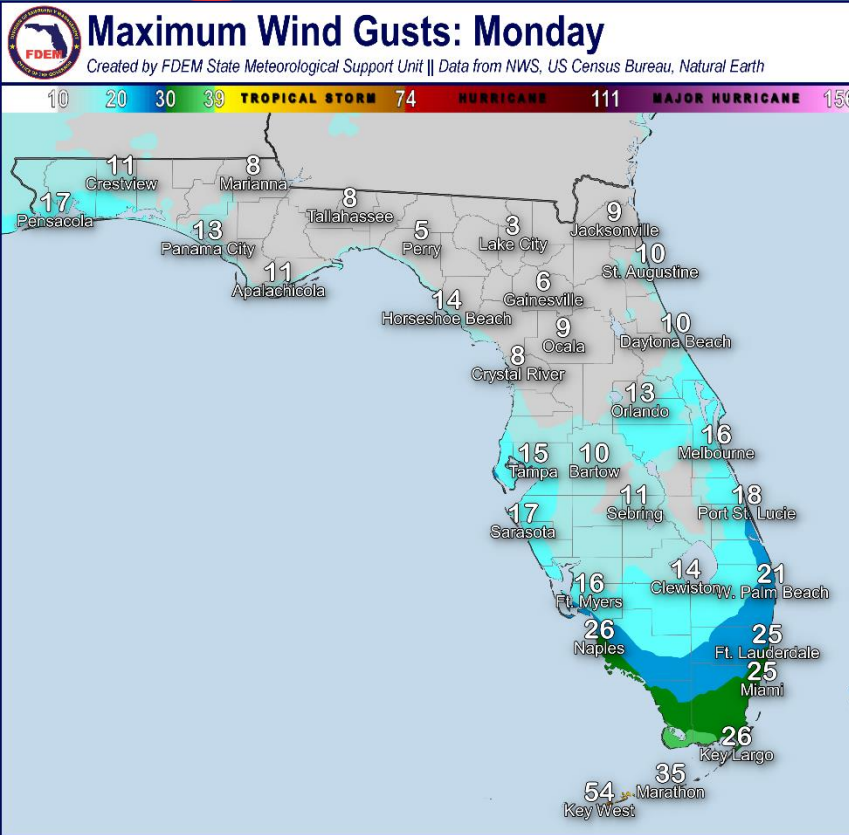


For more information go to hurricanes.gov



Max Wind Gusts Next 3 Days

Higher Gusts Possible in Thunderstorms



Winds will increase late today in far southern Florida and the Keys, across the western Florida Peninsula on Tuesday, and Northeast Florida on Wednesday.



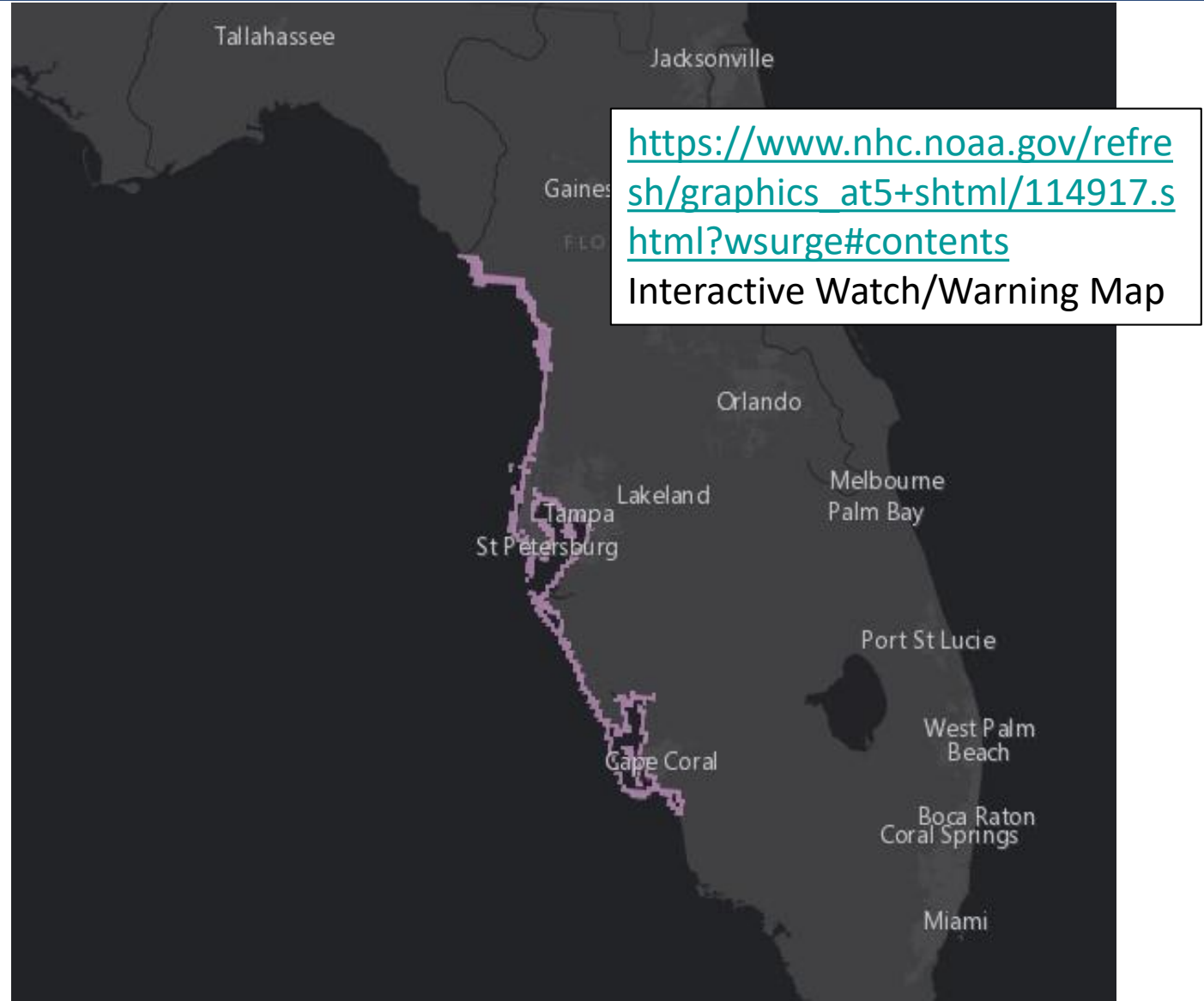
Surge Watches and Warnings

In Effect Until Further Notice

https://www.nhc.noaa.gov/refresh/graphics_at5+shhtml/114917.shtml?inundation#contents

Interactive P-Surge Inundation Map

A Storm Surge Watch has been issued for the West Coast of Florida, from Bonita Beach to the Suwannee River, which includes coastal portions of the Lee, Charlotte, Sarasota, Manatee, Hillsborough, Pinellas, Pasco, Hernando, Citrus, and Levy County.



https://www.nhc.noaa.gov/refresh/graphics_at5+shhtml/114917.shtml?wsurge#contents

Interactive Watch/Warning Map

Storm Surge Warning

There is a **danger of life-threatening inundation** from rising water moving inland from the shoreline generally **within 36 hours**.

Promptly follow evacuation and other instructions from local officials.

Storm Surge Watch

There is a **possibility of life-threatening inundation** from rising water moving inland from the shoreline generally **within 48 hours**.

Promptly follow evacuation and other instructions from local officials.





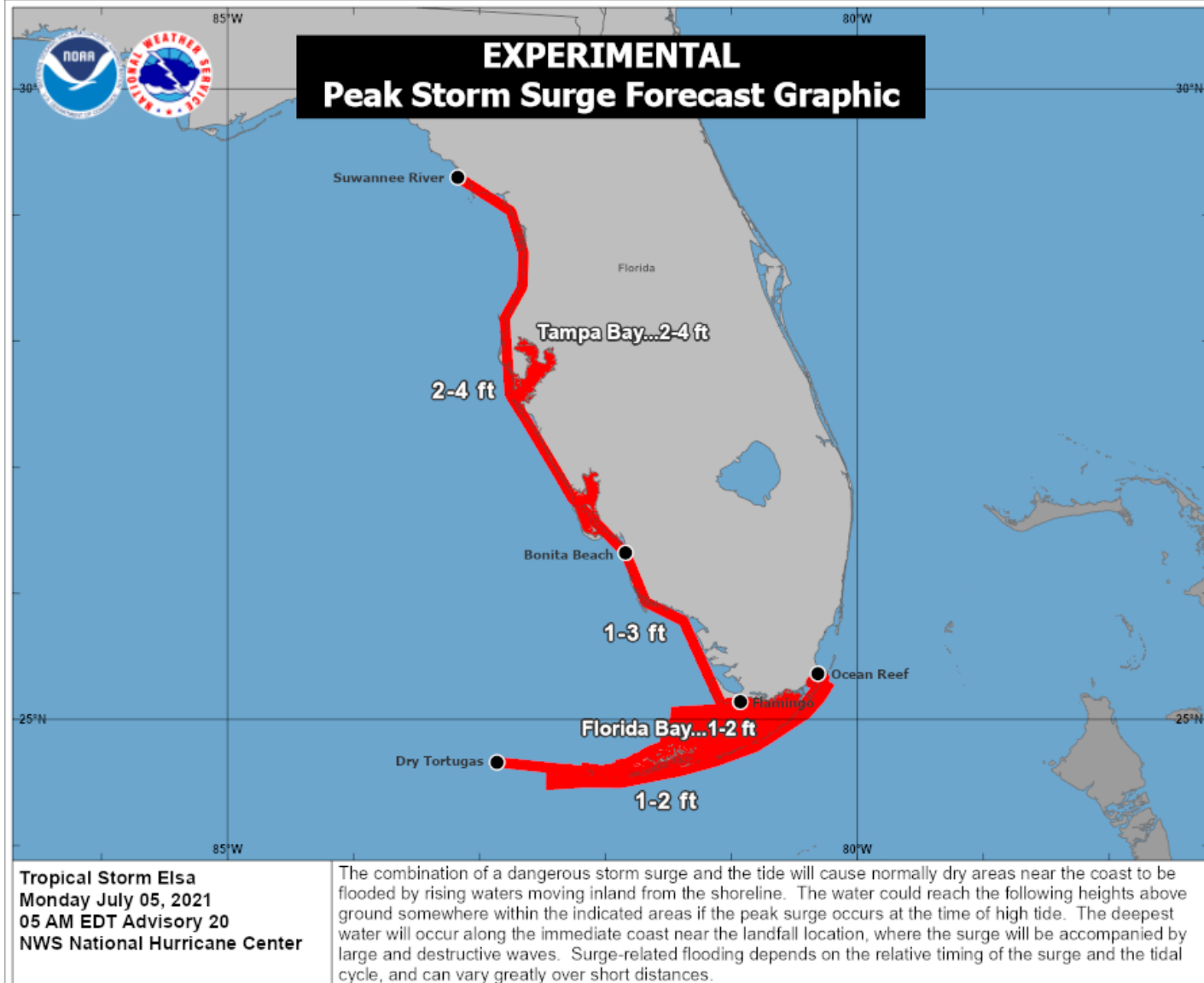
Storm Surge/Coastal Flooding

Tropical Storm Elsa

The official forecast calls for 1-3 feet of storm surge along Collier and Mainland Monroe Counties with 1-2 feet in Florida Bay and the Florida Keys.

Higher surge values of 2-4' are forecast for the West Coast of Florida, including Tampa Bay, where Storm Surge Watches are in effect.

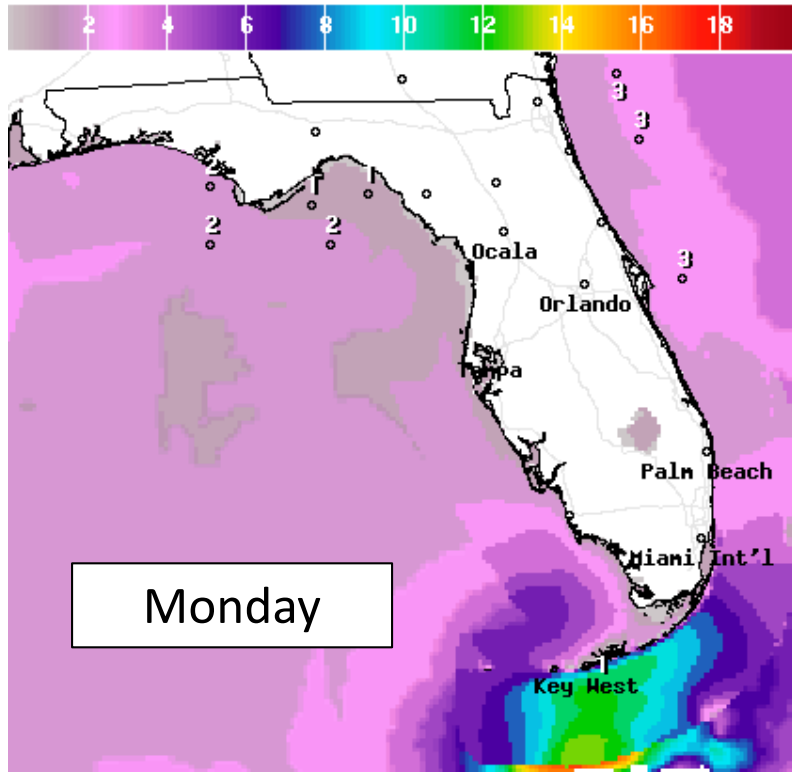
If Elsa remains in the western portions of the forecast track and makes landfall in the Big Bend, similar storm surge values of 2-4' would be possible north of the Suwannee River. Storm Surge Watches would likely be issued with this become a great possibility.





Forecast Wave Heights

Monday through Wednesday



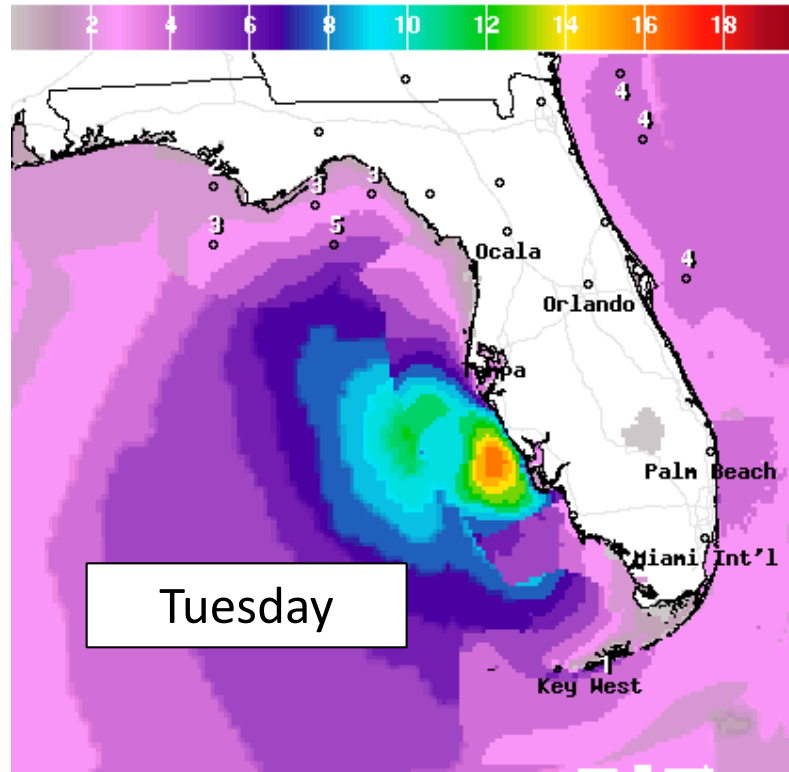
Wave Height(ft) Ending Mon Jul 05 2021 8PM EDT
(Tue Jul 06 2021 00Z)



National Digital Forecast Database

11z issuance

Graphic created-Jul 05 7:21AM EDT



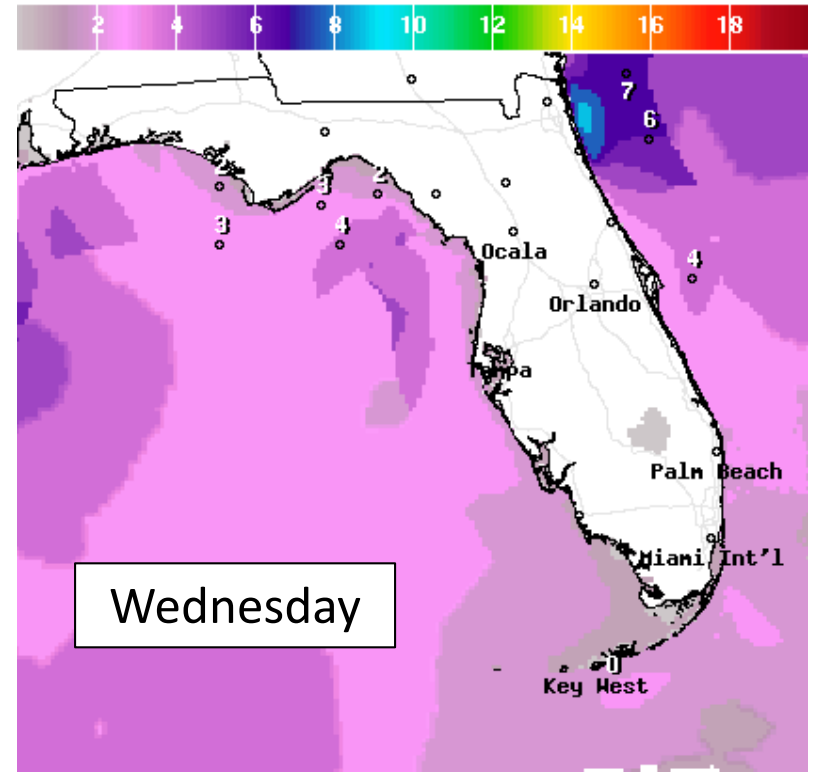
Wave Height(ft) Ending Tue Jul 06 2021 8PM EDT
(Wed Jul 07 2021 00Z)



National Digital Forecast Database

11z issuance

Graphic created-Jul 05 7:22AM EDT



Wave Height(ft) Ending Wed Jul 07 2021 2PM EDT
(Wed Jul 07 2021 18Z)



National Digital Forecast Database

11z issuance

Graphic created-Jul 05 7:22AM EDT

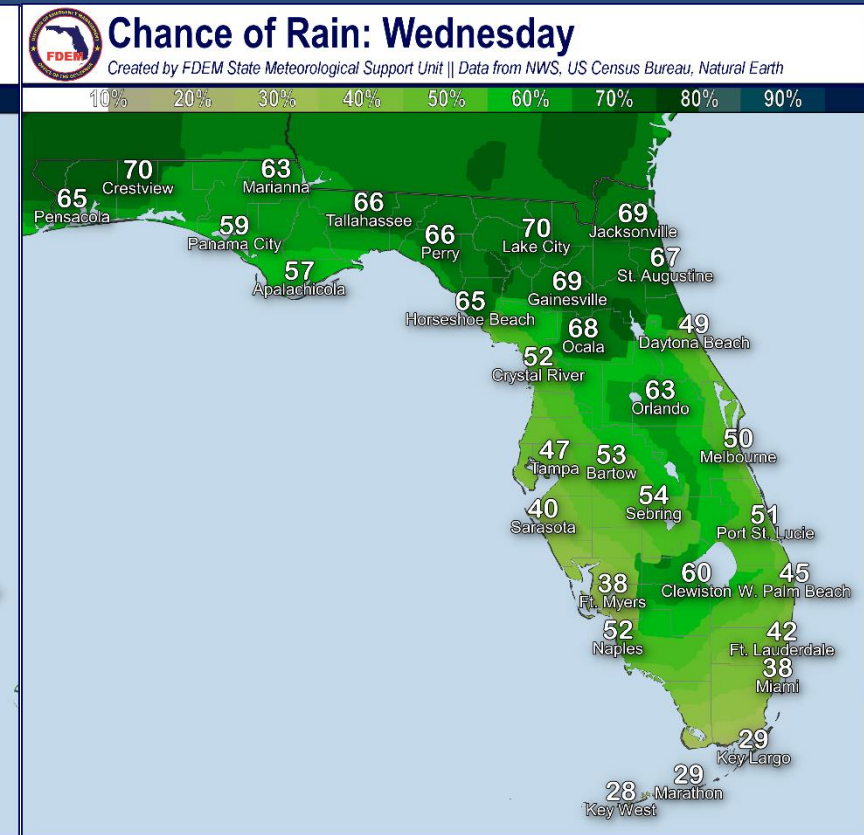
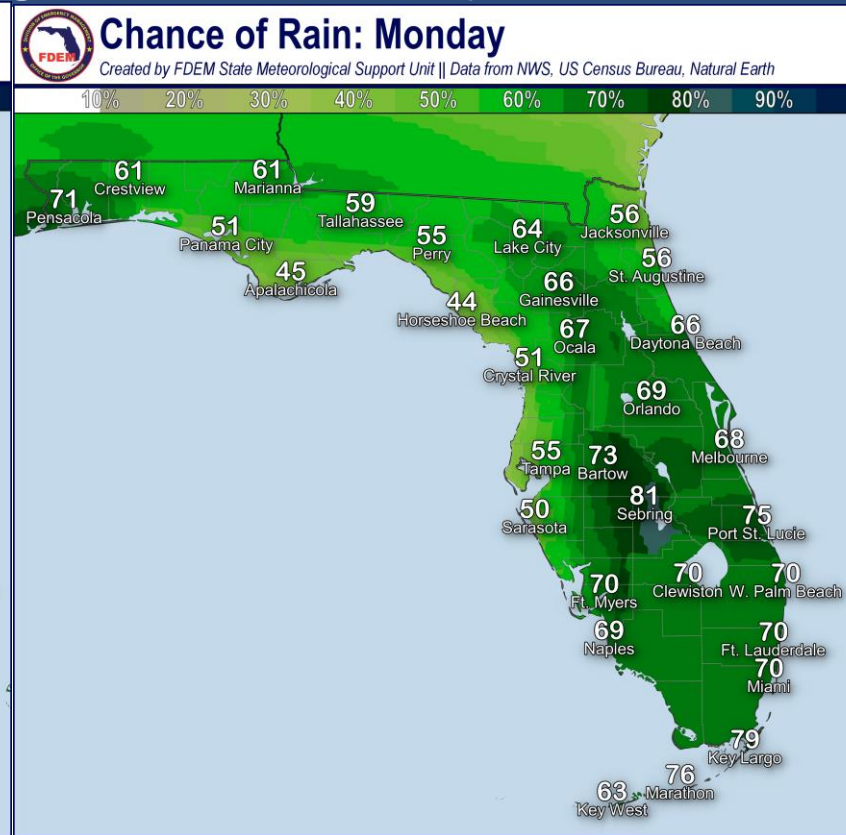
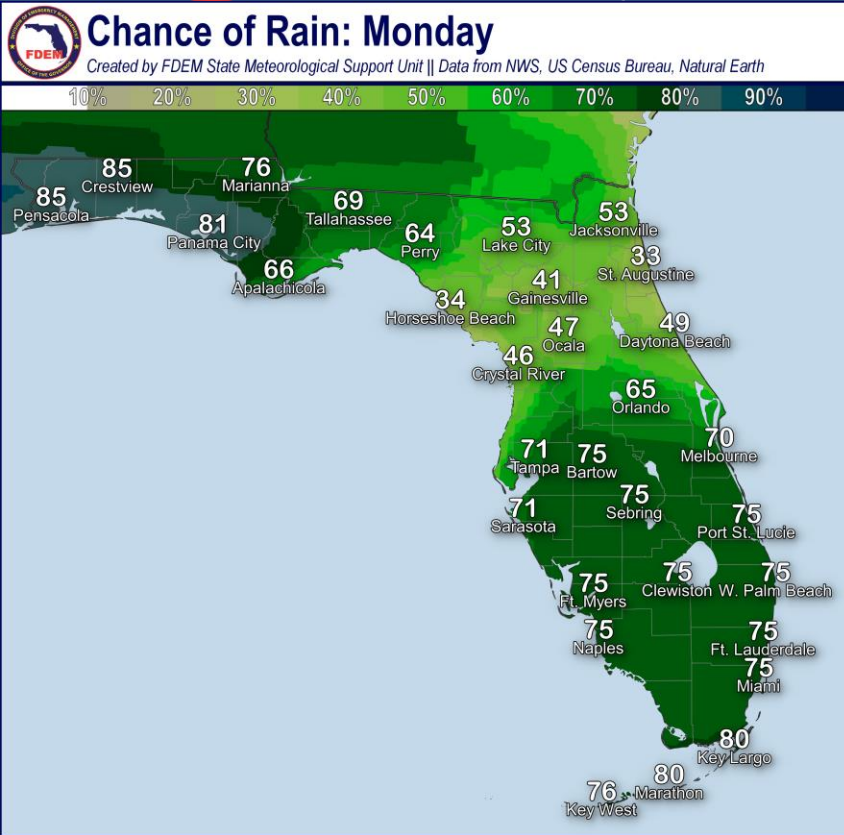


Surf will build along many Florida beaches as Elsa moves near and over the state. This will result in dangerous rip currents at nearly all Florida beaches. Minor to moderate beach erosion should be expected along parts of the West Coast with dune overwash possible in a few locations. High surf will shift to Northeast Florida by Wednesday.



Forecast Rain Chances

Monday through Wednesday – Tropical Storm Elsa



Rain chances will increase across the state on Monday, but particularly in South Florida. High rain chances will overspread much of the state as Elsa moves northward. Some decrease in rain chances is possible by Wednesday as Elsa departs the state, but will remain high across North Florida.



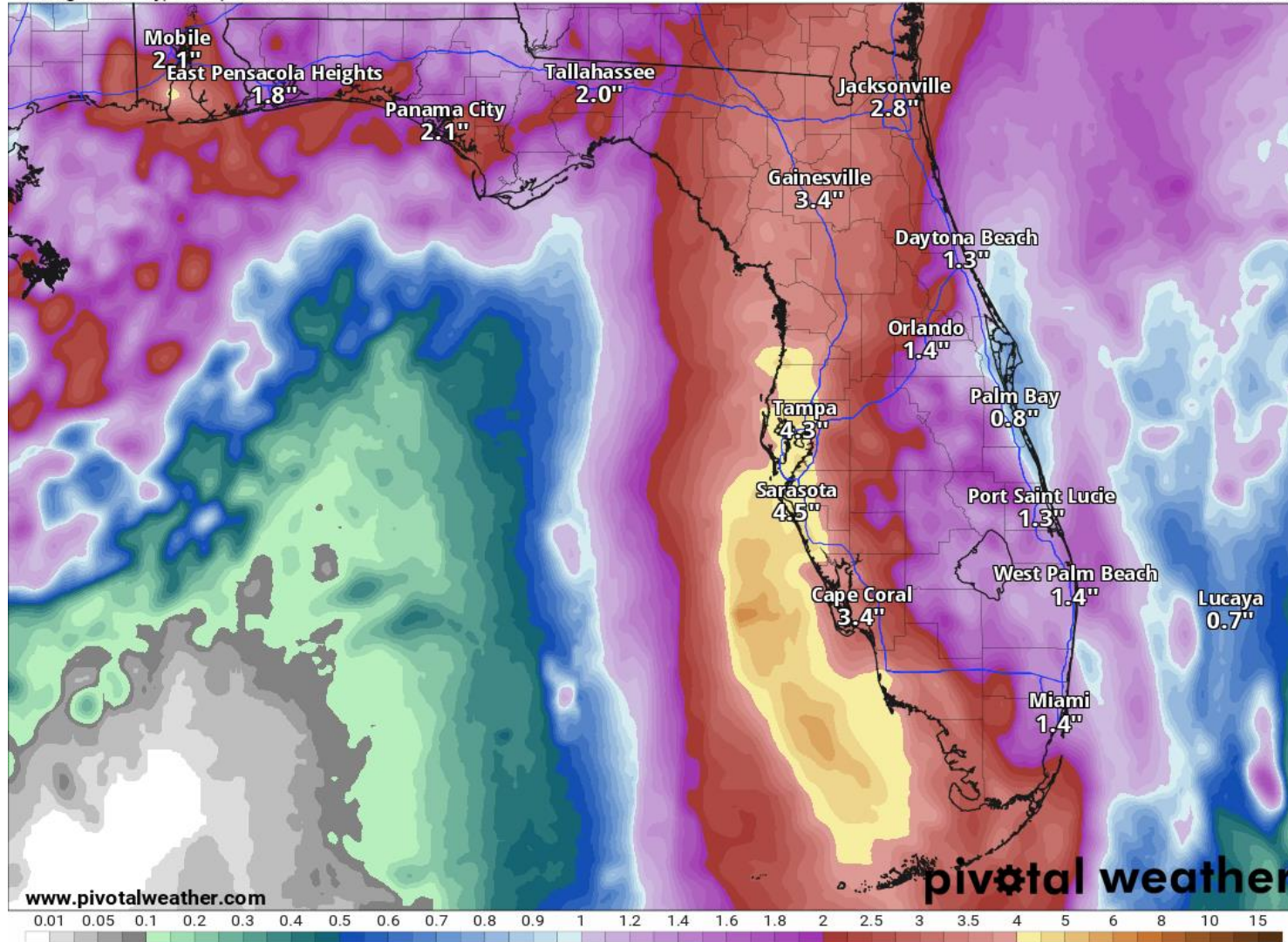
Rainfall Totals Next 72 Days

Ending 8 AM ET Thursday

72-Hour Precipitation (in)

Ending Thursday, Jul. 8, 2021 at 8 a.m. EDT

Init: Mon 2021-07-05 12z WPC



Through the next 3 days, rainfall totals of 3-5" are expected along the West Coast & Northeast Florida with localized totals of 6-8" possible.

Rainfall totals will be less along the East Coast and Panhandle- from 1-3".

Areal Flood Watch for the Eastern Panhandle from NWS Tallahassee:

<https://forecast.weather.gov/wwama/p/wwatxtget.php?cwa=tae&wwa=flood%20watch>

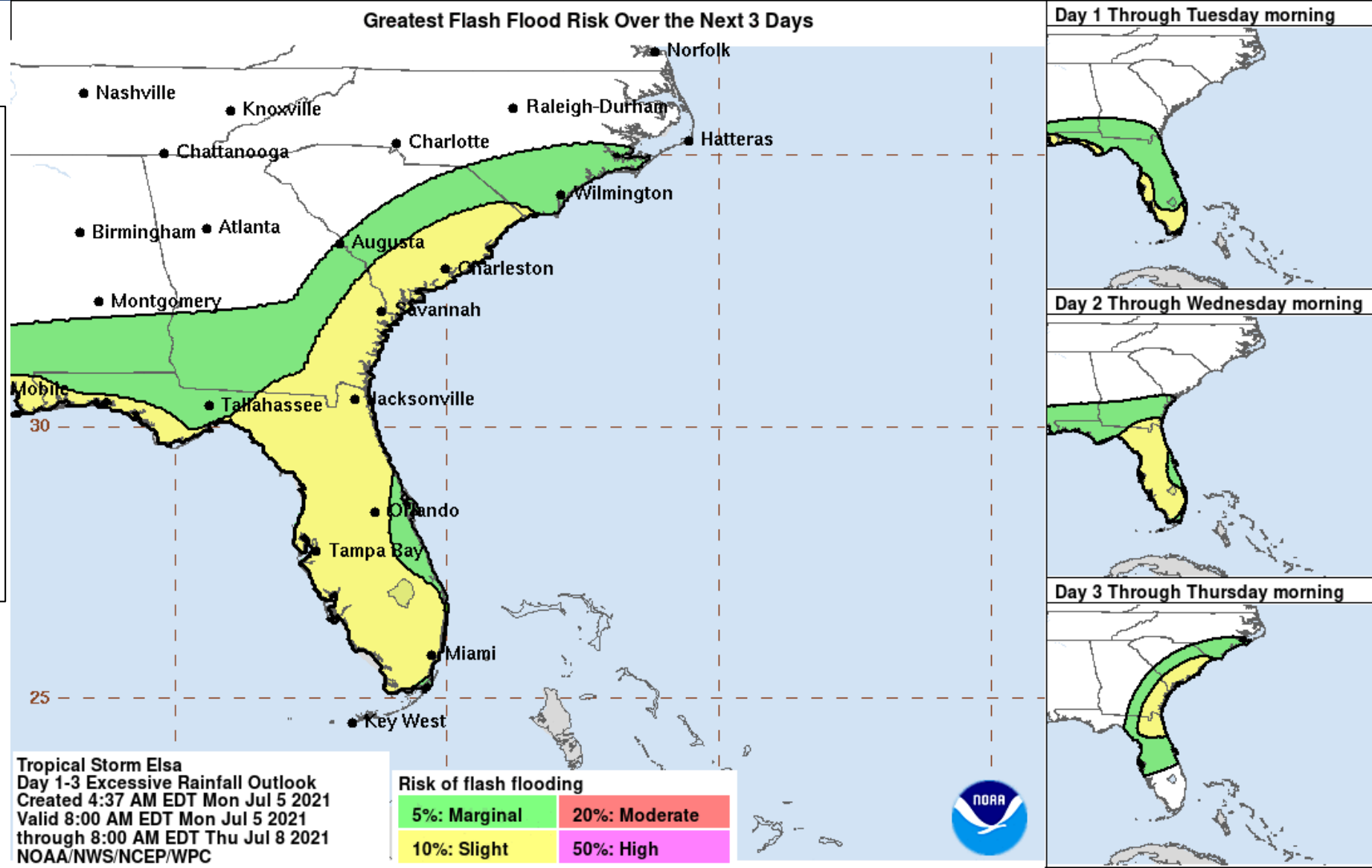


Flash Flood Outlook

3-Day Event Summary

Recent heavy rainfall across the Peninsula combined with the heavy rain potential from Elsa will result in an increased risk of flash flooding through Wednesday.

The flash flood risk in the Panhandle today is associated with a stalled front.



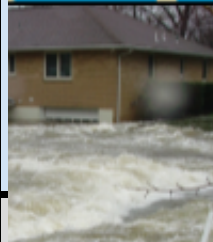




Flash Flood Risk Categories

Understanding the Weather Prediction Center Risk Scale

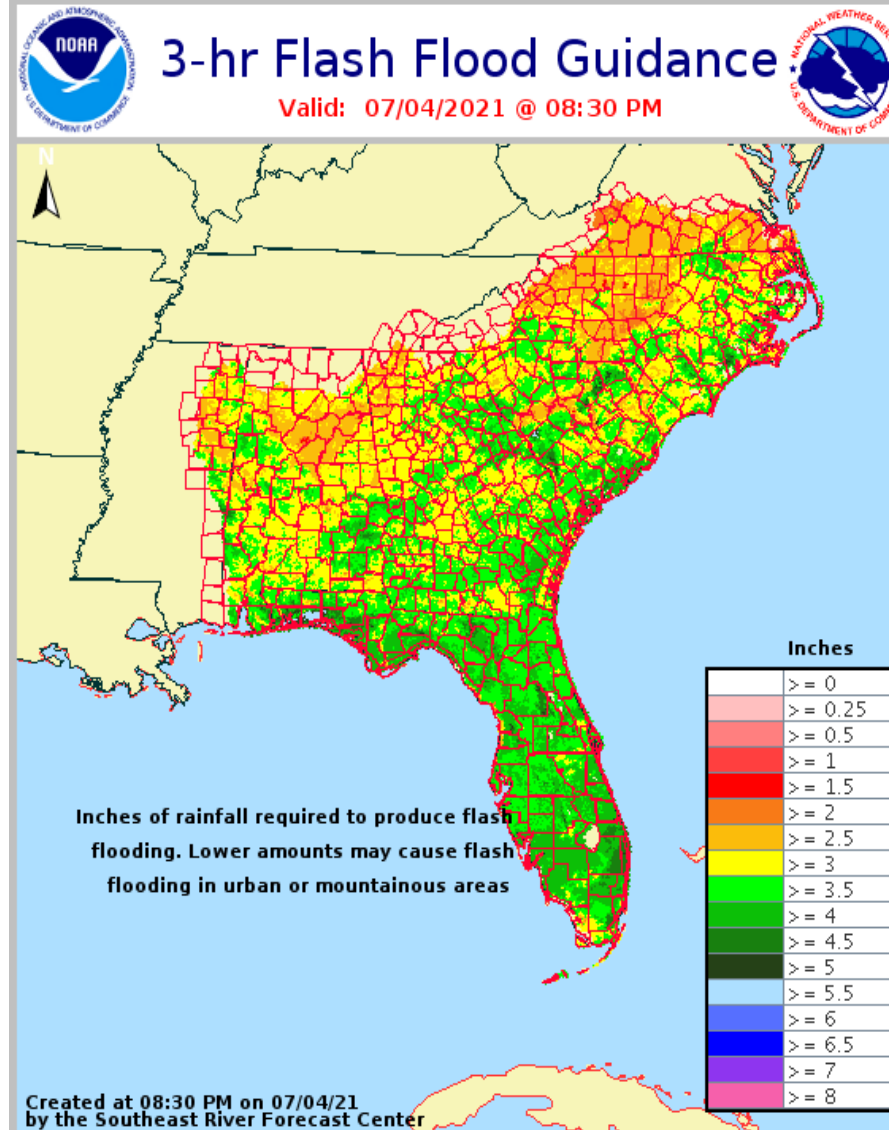
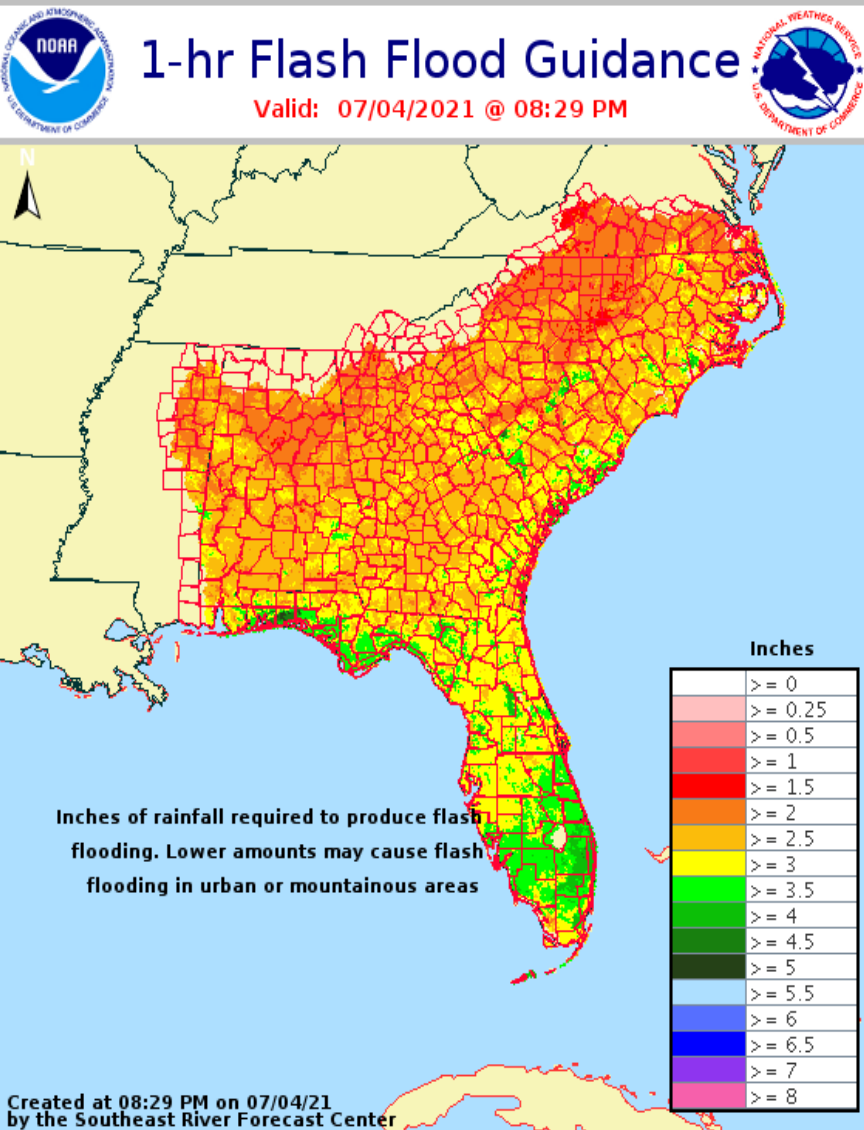
Understanding WPC Excessive Rainfall Risk Categories

No Area/Label	MARGINAL (MRGL)	SLIGHT (SLGT)	MODERATE (MDT)	HIGH (HIGH)
Flash floods are generally not expected.	Isolated flash floods possible	Scattered flash floods possible	Numerous flash floods likely	Widespread flash floods expected
Localized and primarily affecting places that can experience rapid runoff with heavy rainfall.	Mainly localized. Most vulnerable are urban areas, roads, small streams and washes. Isolated significant flash floods possible.	Numerous flash flooding events with significant events possible. Many streams may flood, potentially affecting larger rivers.	Severe, widespread flash flooding. Areas that don't normally experience flash flooding, could. Lives and property in greater danger.	
www.wpc.ncep.noaa.gov @NWSWPC				
Flash flooding near me?	Flash Flooding			
	NO Flash Flooding			
 WEATHER PREDICTION CENTER		Risk of rainfall exceeding flash flood guidance within 25 miles of a point to the right of a line HIGH: > 50% MDT: 20%-50%		 SLGT: 10%-20% MRGL: 5%-10%



Flash Flood Guidance

How Much Rain is Needed to Create Flash Flooding?

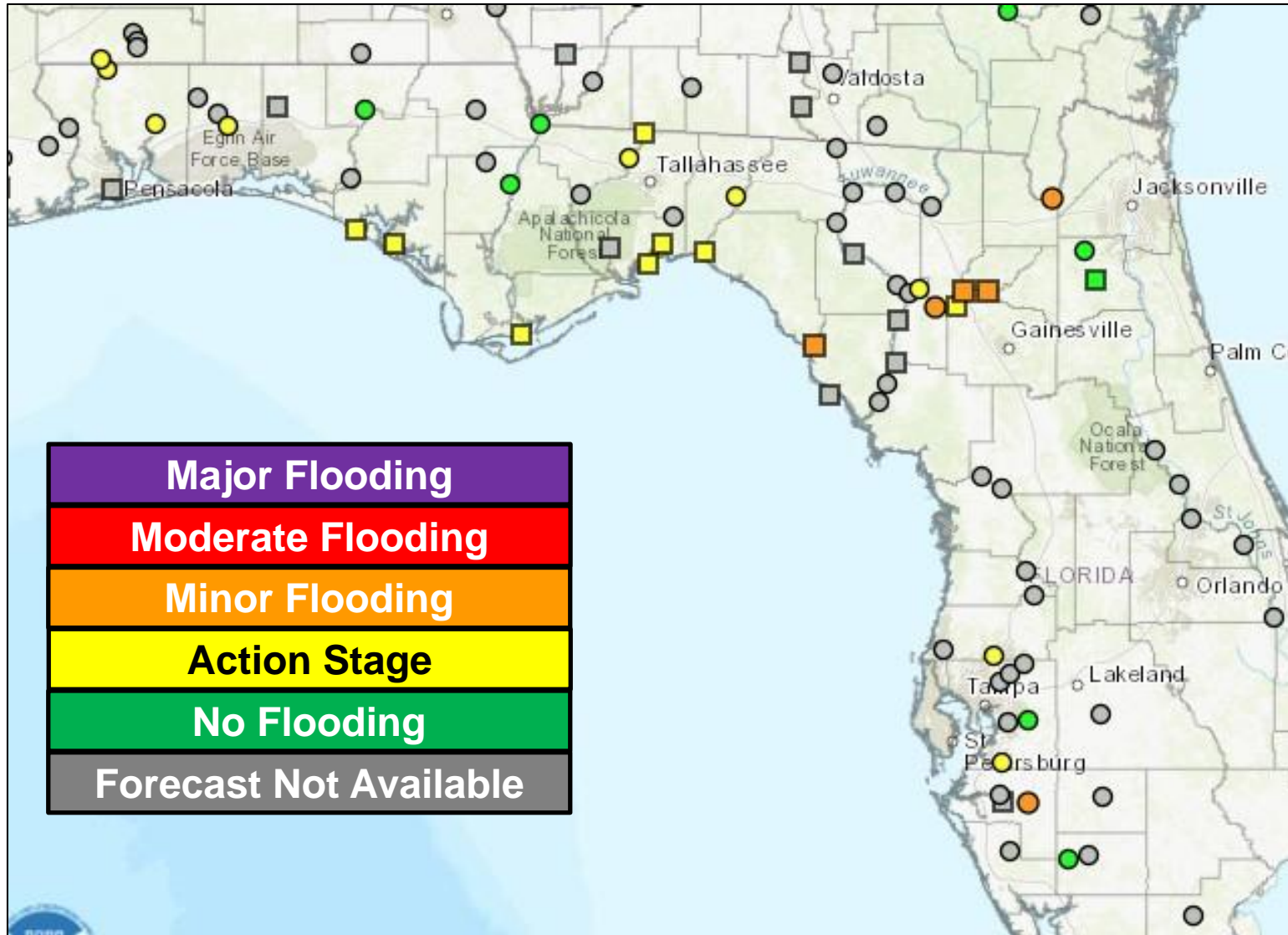


3-4" of rain in 3 hours will be enough to cause flash flooding across most of the state, or more than 2-3" in an hour.



Forecast River Flooding

Forecast River Levels Based on Rainfall Next 48 Hours



Based on current forecasts, the Manatee River at Myakka Head and the St. Marys River near Macclenny may reach minor flood stage. Additionally, the Santa Fe River will likely remain in minor flood stage over the next few days.

Several other rivers across the state are forecast to rise into Action Stage.

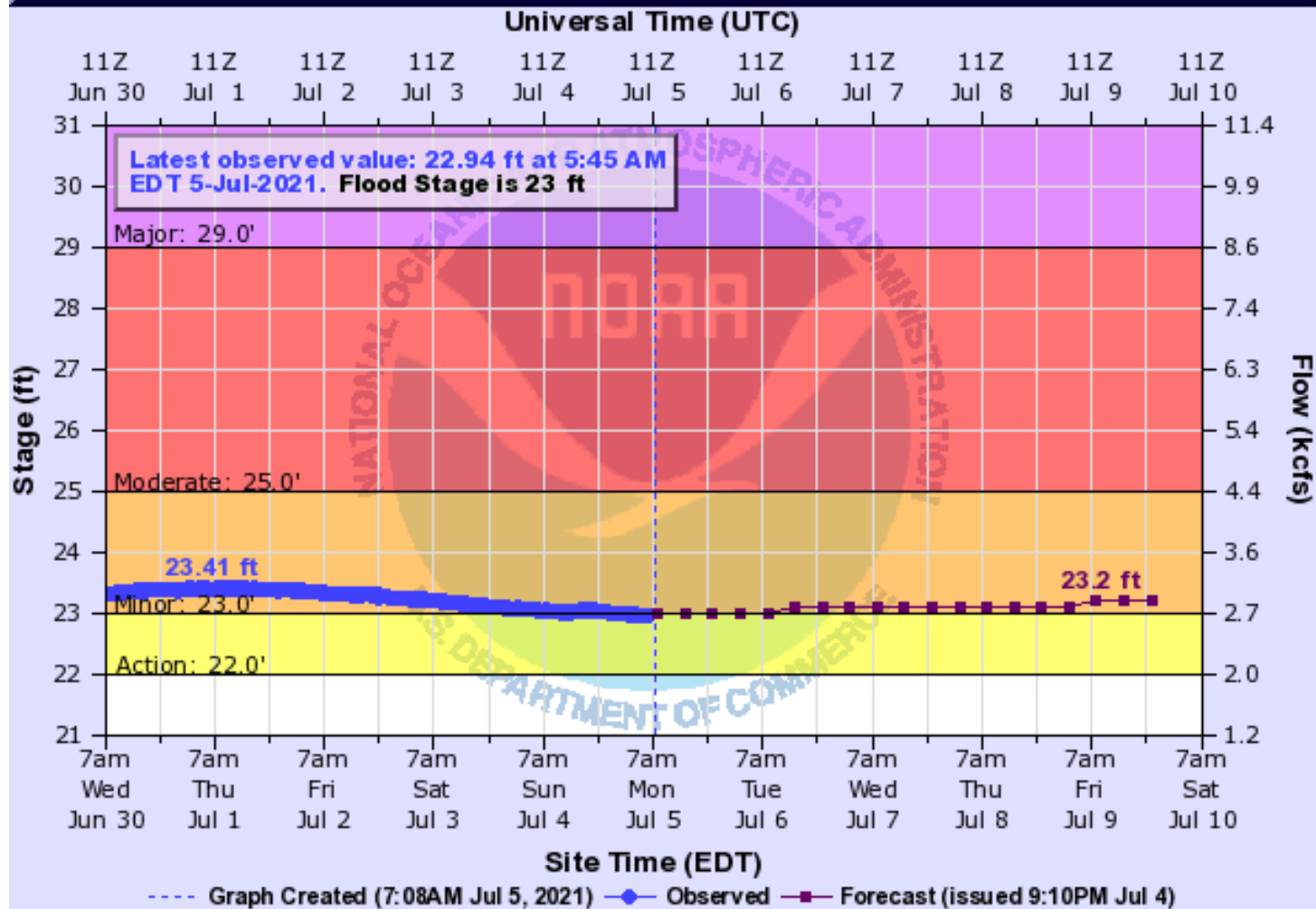
Note that the river levels will depend greatly on where the heaviest rainfall sets up. Smaller, flashier creeks not shown here could see quick rises in heavy rain bands.



Santa Fe River near Fort White

[Hydrograph Link](#)

SANTA FE RIVER NEAR FORT WHITE (IN NAVD88)



FWHF1(plotting HGIRG) "Gage 0" Datum: 0'

Observations courtesy of US Geological Survey

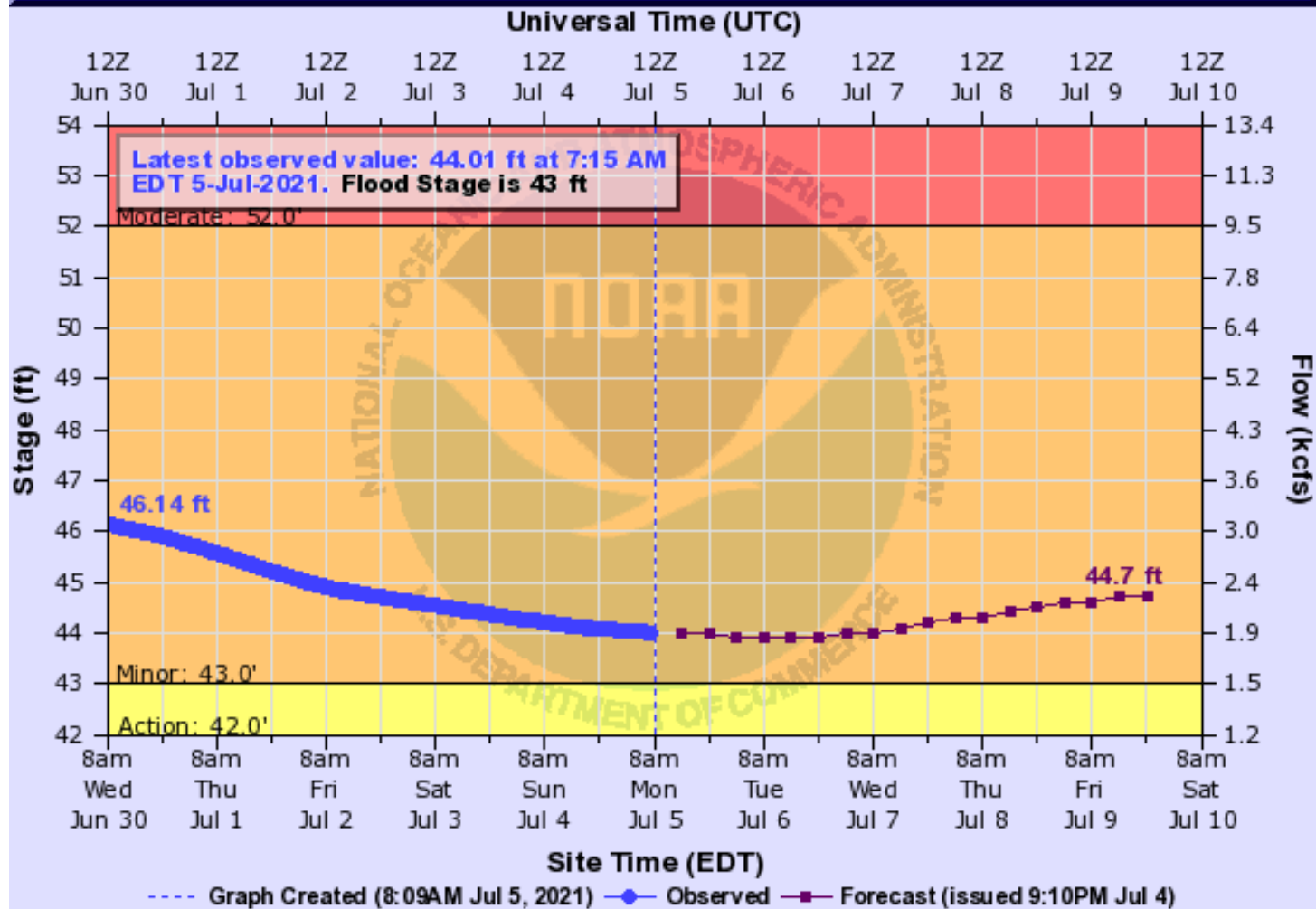
- 29 Major damage and disruption to the community is expected. Roads will be cut off and many homes will be surrounded by water. Boat wash damage to homes will be severe.
- 25 Damage to homes at low elevation as well as basement areas underneath homes on stilts is likely.
- 23.25 Florida Fish and Wildlife Commission begins enforcement of a no wake zone on the Santa Fe River from the centerline of the US 27 Bridge downstream to one-half mile upstream from the State Road 47 Bridge.
- 23 Minor damage to dwellings is possible due to boat wash.



Santa Fe River near O'Leno

[Hydrograph Link](#)

SANTA FE RIVER AT O'LENO STATE PARK (IN NAVD88)



OLPF1(plotting HGIRG) "Gage 0" Datum: 0'

Observations courtesy of US Geological Survey

- 52 A barn floods upstream of O'leno State park in Alachua County at this level.
- 45 Numerous walking trails in O'leno State Park are flooded on the Alachua County side of the river. Flooding begins to affect local roads north of Buzzard Roost Prairie in Columbia County.
- 43 Access to river gage becomes limited as the Bible Camp Road boat ramp becomes flooded and the last half mile of Bible Camp Road begins to flood in Columbia County. Overland flooding begins past the Santa Fe River sink in the park and will cut-off access road to south end of the park.
- 42 Boat ramp at the end of Bible Camp Road begins to flood.

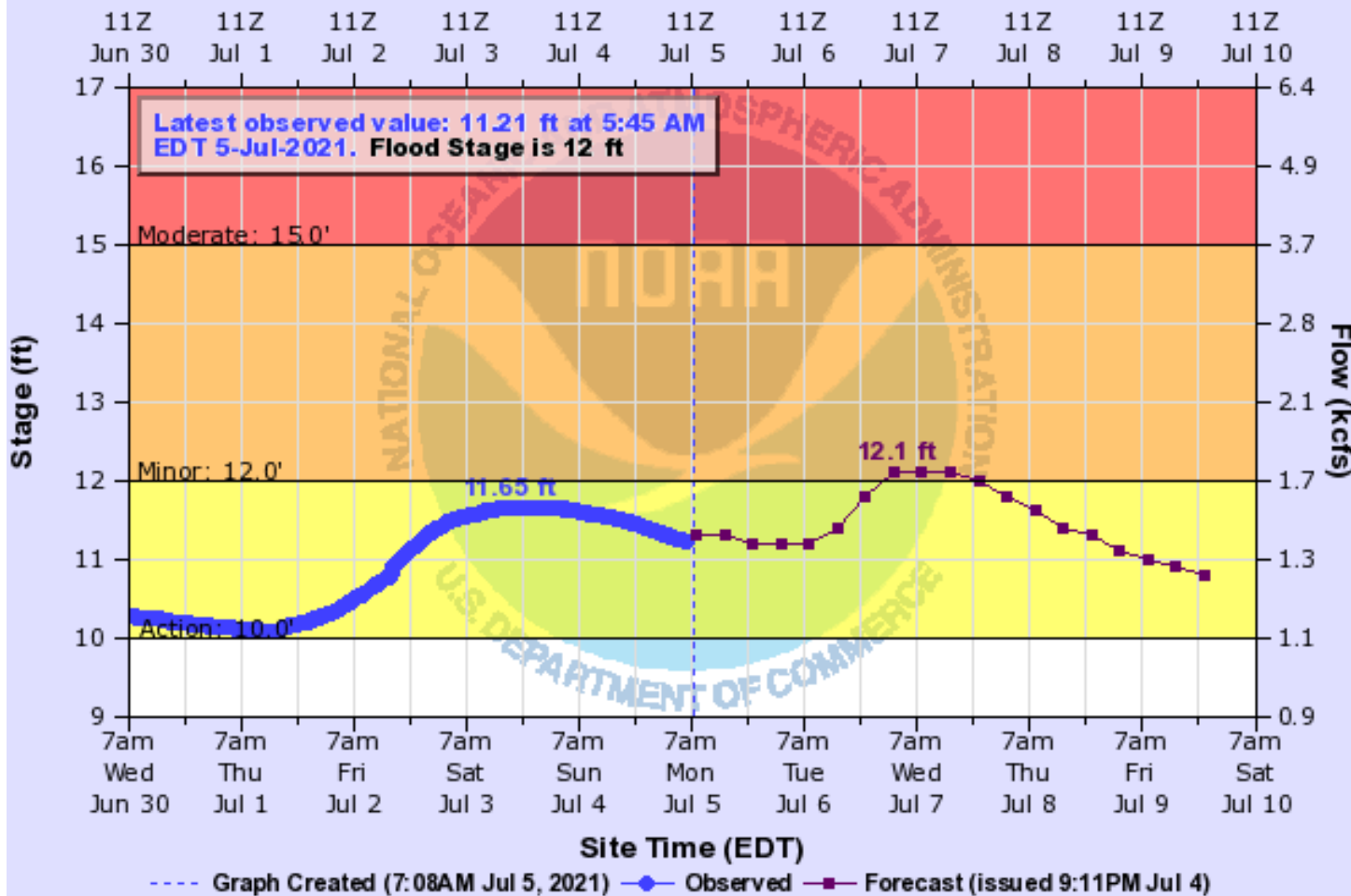


St. Marys River near Macclenny

[Hydrograph Link](#)

ST. MARYS RIVER NEAR MACCLENNY

Universal Time (UTC)



MACF1(plotting HGIRG) "Gage 0" Datum: 40'

Observations courtesy of US Geological Survey

- 16 Access roads on both sides of the river in Florida and Georgia are flooded, including the entire low lying stretch of St. Mary's River Bluff Road on the Georgia side which cuts off 40 to 50 homes. On the Florida side, the lower end of St. Mary's Cove Road past the public boat ramp becomes flooded and cuts off access to 20 to 30 homes. The Stokes Road Bridge over the river is generally closed due to high water.
- 15 Flooding begins to impact the lower end of Steel Bridge Road on the Florida side and cuts off access to the river gage as well as access to several homes.
- 14 Flooding of bottomlands along the river and some lower access roads including the lower half of St. Mary's River Bluff Road which cuts off 15 to 20 homes on the Georgia side.
- 12 Minor flooding of low lying areas and timber lands including some properties along St. Mary's River Bluff Road and the Cypress Landing Resort on the Georgia side.



Severe Weather Outlook Monday

From the Storm Prediction Center

5 - High

Widespread severe storms expected

4 - Moderate

Widespread severe storms likely

3 - Enhanced

Numerous severe storms possible

2 - Slight

Scattered severe storms possible

1 - Marginal

Isolated severe storms possible

Thunderstorms

No severe storms expected

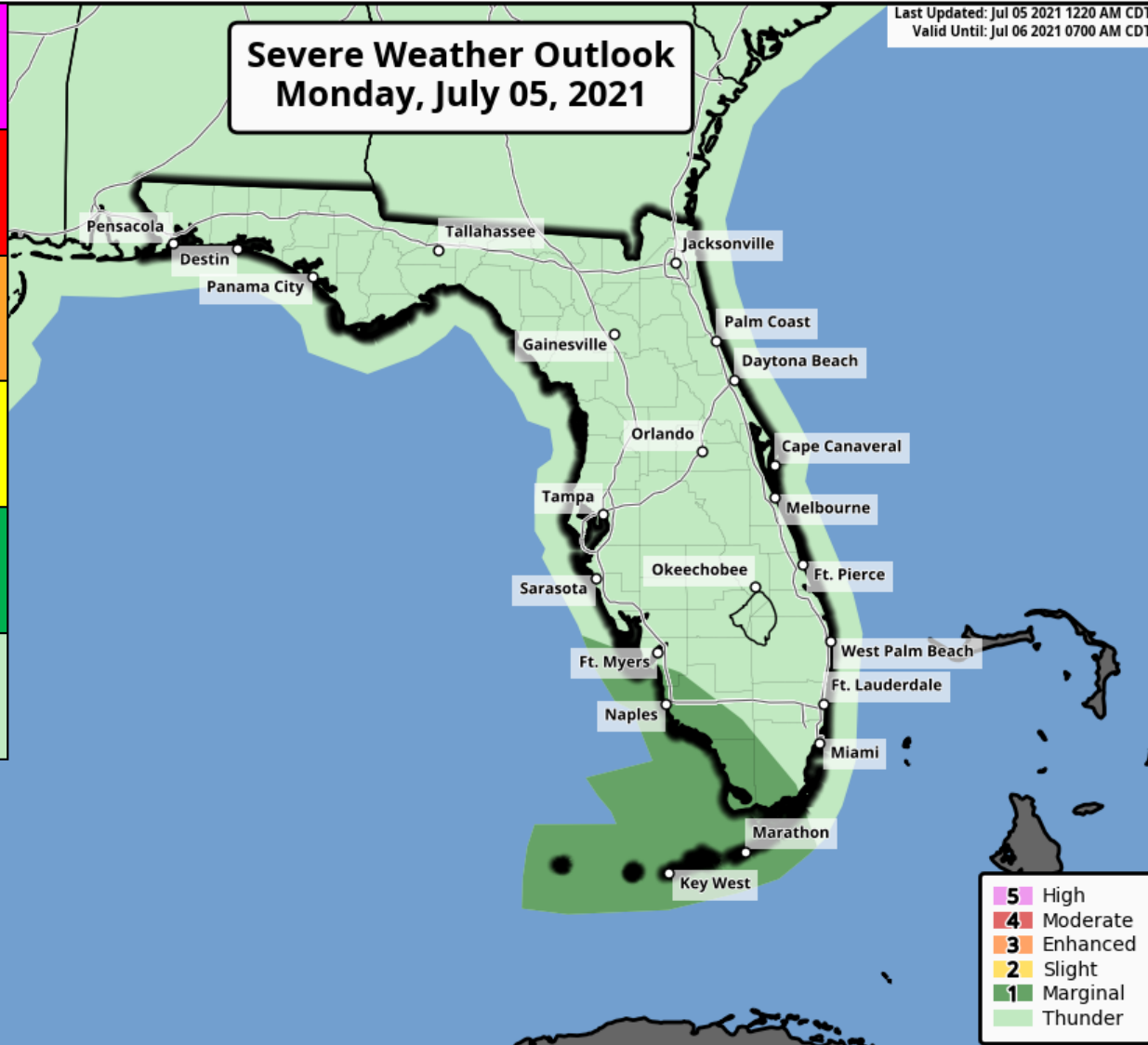


National Weather Service
Storm Prediction Center

<http://www.spc.noaa.gov>

Severe Weather Outlook Monday, July 05, 2021

Last Updated: Jul 05 2021 1220 AM CDT
Valid Until: Jul 06 2021 0700 AM CDT



As the outer bands from Elsa move into South Florida and the Florida Keys today/tonight, isolated tornadoes are possible. There is a **Marginal Risk** (level 1 of 5) of Severe Weather.

THUNDERSTORMS
(no label)

No severe*
thunderstorms
expected

Lightning/flooding
threats exist with all
thunderstorms

1 - MARGINAL
(MRGL)

Isolated severe
thunderstorms
possible

Limited in duration
and/or coverage
and/or intensity



Severe Weather Outlook Tuesday

From the Storm Prediction Center

5 - High

Widespread severe storms expected

4 - Moderate

Widespread severe storms likely

3 - Enhanced

Numerous severe storms possible

2 - Slight

Scattered severe storms possible

1 - Marginal

Isolated severe storms possible

Thunderstorms

No severe storms expected

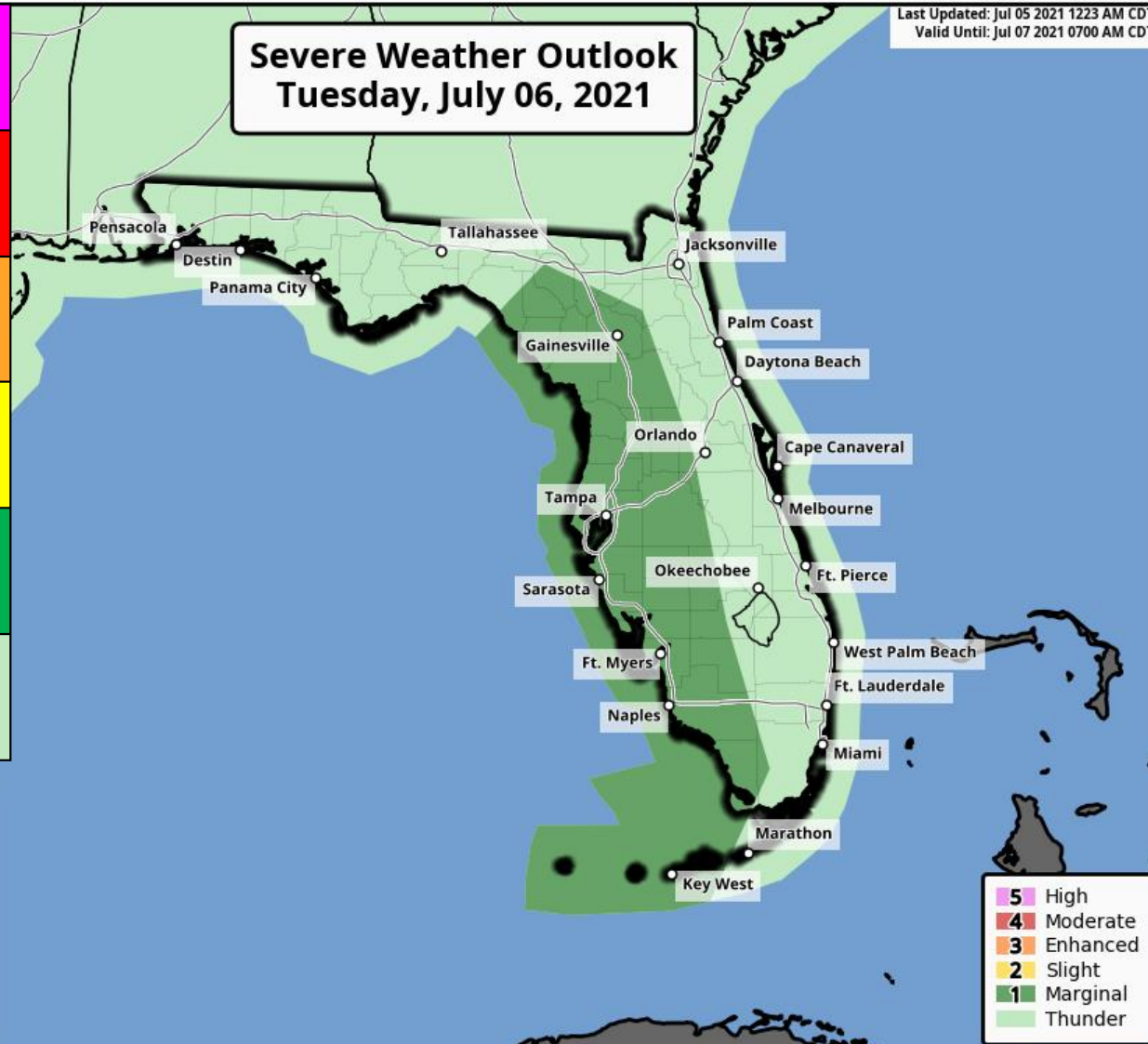


National Weather Service
Storm Prediction Center

<http://www.spc.noaa.gov>

Severe Weather Outlook Tuesday, July 06, 2021

Last Updated: Jul 05 2021 1223 AM CDT
Valid Until: Jul 07 2021 0700 AM CDT



As Elsa moves northward, rain bands will move across the western half of the Peninsula. Isolated tornadoes will be possible and there is a **Marginal Risk** (level 1 of 5) of Severe Weather.

THUNDERSTORMS (no label)

No severe*
thunderstorms
expected

Lightning/flooding
threats exist with all
thunderstorms

1 - MARGINAL (MRGL)

Isolated severe
thunderstorms
possible

Limited in duration
and/or coverage
and/or intensity



Overall Summary

Tropical Storm Elsa

- The center of Elsa is about 225 miles south-southeast of Key West, FL and moving to the northwest at 14 mph
- Elsa remains a tropical storm with maximum sustained winds near 65 mph.
- Elsa is expected to traverse Cuba today and experience some weakening. Late tonight, Elsa will move back over water and head north over the eastern Gulf of Mexico. Little change in strength or some slight re-strengthening is possible after it emerges into the Gulf of Mexico.
- Landfall appears most likely in the eastern Big Bend of Florida. However, **the storm will be lopsided with most of the rainfall to the east of the center impacting the entire West Coast as Elsa moves northward.**

Florida Outlook:

- Do not focus on the exact forecast points as impacts will extend well outside of the forecast cone.
- **Tropical Storm Warnings:** Lower and Middle Keys (Dry Tortugas to Craig Key), Mainland Monroe, and coastal portions of Charlotte, Collier, and Lee
- **Tropical Storm Watches:** Upper Keys (Craig Key to Ocean Reef), Inland portions of Charlotte and Lee, and Citrus, Dixie, Hernando, Hillsborough, Lafayette, Lake, Levy, Manatee, Pasco, Pinellas, Sarasota, Sumter, and Taylor
- Tropical storm force winds from 40-60 mph are possible, particularly in gusts with bands of showers/thunderstorms on Tuesday and Wednesday.
- **Storm Surge Watches:** Bonita Beach to the Anclote River, or the coastal areas of Charlotte, Citrus, Hernando, Hillsborough, Lee, Levy, Manatee, Pasco, Pinellas, and Sarasota County.
- Storm Surge values of 2-4' are forecast in the watch area. Storm surge values of 1-2' are expected across the Keys and Collier County.
- A widespread 3-5" of rain is possible across the eastern Big Bend, Northeast Florida, and West Coast over the next 3 days with localized totals of 6-8". This could result in some urban or flash flooding early next week due to wet/saturated soils as well as some minor river flooding. Flood Watches may be needed.
- Saturated soils will make trees more susceptible to falling in strong winds.
- Dangerous rip currents are expected at most Florida beaches. Minor to moderate beach erosion is also possible along West Coast beaches with dune overwash.
- There is a threat of isolated tornadoes beginning this afternoon in South Florida and the Keys, spreading up the Peninsula through Tuesday.

The next briefing packet will be issued mid-day with the 11 AM ET advisory. For the latest information on the tropics, please visit the National Hurricane Center website at www.hurricanes.gov.



TROPICAL UPDATE



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State Meteorological Support Unit

Florida Division of Emergency Management

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