

TROPICAL UPDATE



8:00 AM EDT Tuesday, July 6, 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

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



Overview/Recent Changes:

New Hurricane Watches are in effect for the Nature Coast/eastern Big Bend from Dixie County to Pinellas County. Elsa will be near hurricane strength at landfall. The track remains the same along with surge, wind, and rainfall impacts. There is the potential for several tornadoes to occur today across the Peninsula.





Elsa has moved back over water with the center just west of Key West. Elsa remains disorganized, with all of the showers, thunderstorms, and wind on the eastern half of the storm.



Current Florida Radar

ERGENCY

FDEM





Official Forecast Track – Elsa

From the National Hurricane Center – (LINK



- The center of Elsa is about 50 miles west of Key West,
 FL, or near the Dry Tortugas, and moving to the northnorthwest at 12 mph.
- Elsa remains a tropical storm with maximum sustained winds near 60 mph.
- Elsa is back over water and will continue northward just offshore of the West Coast of Florida.
- Some re-strengthening is possible to near hurricane strength, but it is not expected to be rapid or significant.
- Landfall appears most likely in the eastern Big Bend of Florida or Nature Coast north of Tampa Bay.
- The storm will remain 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) and inland Northeast Florida across the Suwannee Valley.

Still, tropical storm force wind gusts remain possible across any part of state except the Panhandle Tuesday-Wednesday in squalls.

> https://www.weather.gov/srh/tropical? <u>office=mfl</u> 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:

- Lower & Middle Keys (Craig Key to Dry Tortugas)
- Mainland Monroe, coastal Collier, coastal Lee, coastal Charlotte, Sarasota, Manatee, Pinellas, Hillsborough, Pasco, Hernando, Citrus, Levy, Dixie, Taylor, coastal Jefferson, and coastal Wakulla Counties
- Western Alachua, Gilchrist, Lafayette, Suwannee, western and central Marion, Sumter, Columbia, and Hamilton County

Tropical Storm Watches:

 Inland Lee, inland Charlotte, Lake, eastern Marion, eastern Alachua, Madison, Baker, Union, Bradford, inland Jefferson, and coastal Franklin Counties





Wind Watches and Warnings

In Effect Until Further Notice

Hurricane Watches:

 Coastal portions of Dixie, Levy, Citrus, Hernando, Pasco, and all of Pinellas County



Tropical Storm & Hurricanes Watches Versus Warnings





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

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

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





ther.gov/mob



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



FDE

City	Chance for TS Winds	Changes Since Last Packet
Key West	100%	ONGOING
Marathon	6%	-6%
Naples	60%	+20%
Miami	3%	+/-0%
West Palm Beach	6%	-2%
Ft. Myers	40%	+19%
Tampa	82%	+18%
Orlando	28%	+12%
Cedar Key	71%	+20%
Tallahassee	10%	-12%
Gainesville	62%	+21%
Jacksonville	44%	+16%

The odds of tropical storm force winds have increased along the West Coast and in Northeast Florida. Tropical storm force winds are ongoing in gusts in Key West, and **most likely** to begin after Noon this afternoon from Naples to Tampa, and tonight from Tampa to Cedar Key, and tomorrow morning across Northeast Florida.



Hurricane Wind Speed Probabilities

Probabilities of Sustained Hurricane Force Winds (>74 mph)



Cedar Key: 6% Tampa: 7% Venice: 6% Gainesville: 3% Jacksonville: 1%

Odds of hurricane force winds are low but not zero. The greatest chance (nearing 10%, or 1 in 10), is along the immediate coast from Clearwater to Cedar Key, where the Hurricane Watch is in effect.

If these winds were to occur, it would be late tonight, or first thing tomorrow morning as landfall occurs.



Key Messages

From the National Hurricane Center



Key Messages for Tropical Storm Elsa Advisory 24: 5:00 AM EDT Tue Jul 06, 2021

1. Heavy rain will impact Cuba today resulting in significant flooding and mudslides. As Elsa moves across the western Florida Peninsula through Wednesday, heavy rainfall may result in isolated flash, urban, and minor river flooding, with considerable flash and urban flooding possible in southwest and western portions of Florida. Mid to late week, heavy rainfall across coastal Georgia, South Carolina, North Carolina, and southeastern Virginia may result in isolated flash and urban flooding, with considerable flash and urban flooding possible across coastal Georgia and the Lowcountry of South Carolina.

2. There is a danger of life-threatening storm surge along portions of the west coast of Florida tonight and Wednesday, and a Storm Surge Warning is in effect for that area.

3. A Hurricane Watch has been issued for a portion of the west-central and Big Bend coast of Florida, where hurricane conditions are possible tonight and early Wednesday. Tropical storm conditions are expected across portions of the Florida Keys and much of the west coast of the state, where a Tropical Storm Warning is in effect.

4. A Tropical Storm Watch has been issued for the Georgia coast and portions of the South Carolina coast, where tropical storm conditions are possible late Wednesday and early Thursday.



For more information go to hurricanes.gov



Higher gusts are possible in heavy thunderstorms and along the immediate coastline of the eastern Big Bend and Nature Coast!



Surge Watches and Warnings

In Effect Until Further Notice

https://www.nhc.noaa.gov/refresh/graphics_at5+sh tml/114917.shtml?inundation#contents Interactive P-Surge Inundation Map

Storm Surge Warning:

 From Bonita Beach to the Aucilla River, including Tampa Bay: Taylor, Dixie, Levy, Citrus, Hernando, Pasco, Pinellas, Hillsborough, Manatee, Sarasota, Charlotte, Lee Counties

Storm Surge Watch:

 From the Aucilla River to the Ochlockonee River: Jefferson, Wakulla Counties





Storm Surge Warning

Storm Surge Watch

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.

There is a **possibility of lifethreatening 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 highest storm surge is expected from the Aucilla River to Englewood where 3-5 feet of storm surge is now expected, including in Tampa Bay.

2-4 feet of storm surge is expected along the Big Bend coast from the Aucilla River to the Ochlockonee River and along the West Coast from Englewood to Bonita Beach.

Storm surge will be around 3 feet or less along the remainder of the Big Bend from Indian Pass to the Ochlockonee River, Southwest Florida from Bonita Beach southward to Flamingo, and across the Florida Keys.



Forecast Wave Heights

Tuesday through Wednesday



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.



Rip Current Outlook



Dangerous rip currents statewide!

Dune overwash possible along the West Coast!





As Elsa moves up the West Coast, rain bands will move up the Peninsula Tuesday. Rain chances will decrease on Wednesday as Elsa exits, but tropical moisture will remain across the state, leading to scattered to numerous storms both Wednesday and Thursday.



Rainfall Totals Next 48 Hours

Ending 2 AM ET Thursday



Through the next 48 hours, 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".



Flood Watches

WS Tampa NWS Miami NWS Jacksonville NWS Tallahassee NWS Melbourne

Areal Flood Watch:

• Until Late Tuesday Night: All of Northeast Florida, the West Coast, the eastern Big Bend, and Orlando metro area.



Flash Flood Outlook

3-Day Event Summary

Very heavy rainfall is expected with Tropical Storm Elsa, especially along the West Coast.

FDF

There is now a **Moderate Flash Flood Risk** (level 3 of 4) for the West Coast Tuesday into Wednesday morning.





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
www.wpc.ncep.noaa.gov @NWSWPC	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.
Flash flooding near me?	$1 \le 1 \le 2$	$\{(\lambda, \lambda, \lambda)\}$	<u>restats:</u>	235,635
WEATHER PREDICTION CENTER	withi HIG		ling flash flood gu bint to the right of SLGT: 10%-20° MRGL: 5%-109	a line %

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.



Rainfall Departures

How Wet Has It Been Compared to Normal?



PIPER OF THE GOVERNOR

Current & Forecast River Flooding

Southeast River Forecast Center

Rivers Currently in or Forecast to Reach Flood Stage:

- <u>St. Marys River near Macclenny</u> MINOR
- <u>Santa Fe River at Worthington Springs</u> MINOR
- <u>Santa Fe River at O'leno State Park</u> MINOR
- Santa Fe River near Fort White MINOR
- <u>Cypress Creek at Worthington Gardens</u> MINOR
- <u>Little Manatee River near Wimauma</u> MINOR
- <u>Manatee River near Myakka Head</u> MINOR

Additional rises are possible depending on where Elsa's rain bands set up.

More details on river levels available at the <u>Southeast River Forecast Center website.</u>





Manatee River at Myakka Head

lydrograph Link

MANATEE RIVER (FL) NEAR MYAKKA HEAD AT SR 64



- 22 Water reaches the roadbed level of the State Road 64 bridge.
- 15 Low sections of State Road 64 start to flood.
- 11 Private road and bridge 1 mile downstream flood. Agricultural, rural Kibler area begins to flood.



Santa Fe River near Fort White

Hydrograph Link



- 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.
- 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.
 - Minor damage to dwellings is possible due to boat wash.



Santa Fe River near O'Leno

lydrograph Link



- A barn floods upstream of O'leno State park in Alachua County at this level.
- 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.
- 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.
- Boat ramp at the end of Bible Camp Road begins to flood.

St. Marys River near Macclenny ST. MARYS RIVER NEAR MACCLENNY Universal Time (UTC) 11Z Jul 9 Jul 10 Jul 11 Jul 5 Jul 6 Jul 7 Jul 8 Jul Jul Jul 3 Jul - 4 -10.8 Latest observed value: 11.21 ft at 5:45 AM

- 19 EDT 6-Jul-2021. Flood Stage is 12 ft - 8.2 18 -17 -- 6.4 16 - 4.9 Moderate: 150' 15 - 3.7 Flow (kcfs) - 2.8 13 2.1 Minor: 12 12 -- 1.7 11 -- 1.3 10.010 - 1.1 9 -0.9 7am 7am 7am 7am 7am 7am 7am 7am 7a'm 7am 7a'm Fri Fri Sat Sat Mon Tue Wed Thu Sun Thu Sun Jul 1 Jul 2 Jul 3 Jul 4 Jul 5 Jul 6 Jul 7 Jul 8 Jul 9 Jul 10 Jul 11 Site Time (EDT) Graph Created (7:08AM Jul 6, 2021) - Observed - Forecast (issued 9:33PM Jul 5)
- 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 inlcuding 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.

Stage (ft)

Observations courtesy of US Geological Survey

Severe Weather Outlook Tuesday

From the Storm Prediction Center



FDEM

As the outer bands from Elsa move across Northeast Florida and the Peninsula today and tonight, there is the potential for several tornadoes.

1 - MARGINAL	2 - SLIGHT
(MRGL)	(SLGT)
Isolated severe	Scattered
thunderstorms	severe storms
possible	possible
Limited in duration and/or coverage and/or intensity	Short-lived and/or not widespread, isolated intense storms possible

Severe Weather Outlook Wed.

From the Storm Prediction Center



FDEM

As Elsa moves northward and make landfall Wednesday morning, a few tornadoes will remain possible across Northeast Florida.

1 - MARGINAL	2 - SLIGHT
(MRGL)	(SLGT)
Isolated severe	Scattered
thunderstorms	severe storms
possible	possible
Limited in duration and/or coverage and/or intensity	Short-lived and/or not widespread, isolated intense storms possible



Overall Summary

Tropical Storm Elsa

- The center of Elsa is about 50 miles west of Key West, FL and moving to the north-northwest at 12 mph with max sustained winds around 60 mph.
- Elsa has moved back over water and some gradual strengthening to near hurricane strength is possible over the next 24 hours. Landfall is expected along the Nature Coast early tomorrow morning. The storm remains lopsided with nearly all of the wind, rain, surge, and tornado threat on the eastern half of the storm.
 Florida Outlook:
- Hurricane Watch: Coastal portions of Citrus, Dixie, Hernando, Levy, Pasco, and all of Pinellas County
- Tropical Storm Warnings: Middle and Lower Keys (Craig Key to Key West & Dry Tortugas); Citrus, Columbia, Dixie, Hamilton, Hernando, Hillsborough, Gilchrist, Lafayette, Levy, Manatee, Pasco, Pinellas, Sarasota, Sumter, Suwannee, and Taylor; western portions of Alachua; western and central portions of Marion; Coastal portions of Charlotte, Collier, Lee, Jefferson and Wakulla; Mainland Monroe.
- Tropical Storm Watch: Baker, Bradford, eastern Alachua, eastern Marion, Lake, Madison, Union; coastal portions of Franklin' Inland portions of Jefferson, Lee, and Charlotte.
- Tropical storm force winds from 40-70 mph are possible, particularly along the immediate coastline with gusts in squalls across inland areas.
- Storm Surge Warning: Bonita Beach to the Aucilla River, or the coastal areas of Charlotte, Citrus, Dixie, Hernando, Hillsborough, Lee, Levy, Manatee, Pasco, Pinellas, Sarasota, Taylor.
- Storm Surge Watches: Coastal areas of Jefferson and Wakulla County.
- Storm Surge values of 3-5' are expected from the Aucilla River to Englewood with 2-4' from the Ochlockonee to the Aucilla and from Englewood to Bonita Beach.
 1-3' elsewhere in Southwest Florida and the Keys.
- Flood Watch: All of Northeast Florida, the West Coast, the eastern Big Bend, and the Orlando metro landfall
- 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.
- Saturated soils due to 200-300% of normal rainfall over the last two weeks will make trees more susceptible to falling in strong winds.
- Dangerous rip currents are expected at all Florida beaches. Minor to moderate beach erosion is also possible along West Coast beaches with dune overwash.
- A few to several tornadoes are expected across Northeast, Central, and South Florida today, tonight, and Wednesday morning.
- The next briefing packet will be issued mid-day after the 11 AM ET advisory, unless significant changes warrant an update tonight. For the latest information on the tropics, please visit the National Hurricane Center website at <u>www.hurricanes.gov</u>.



TROPICAL UPDATE



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