



Hurricane Helene Briefing

Thursday, Sept 26, 2024
8:30 AM EDT

Major Hurricane Conditions JUST west of our AOR
Any Shift to the East Could Cause Hurricane Conditions



Situation Overview

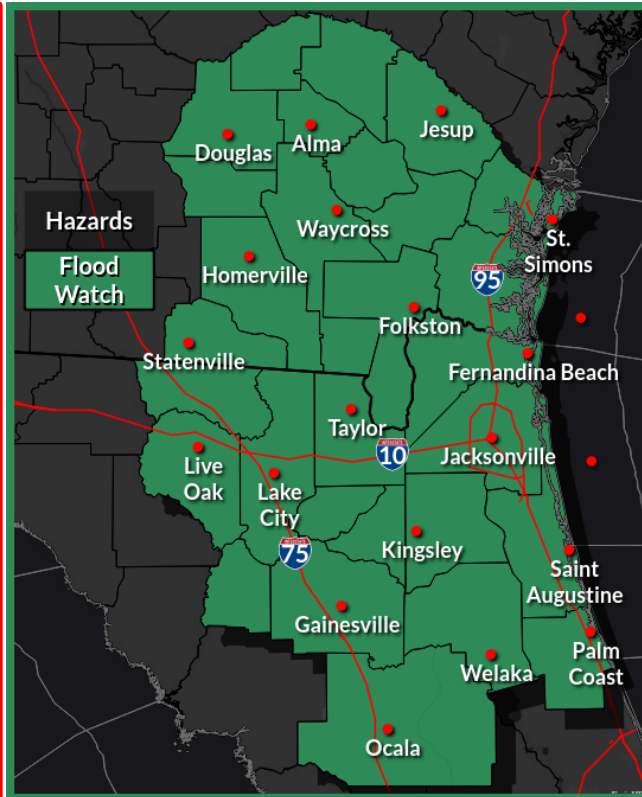
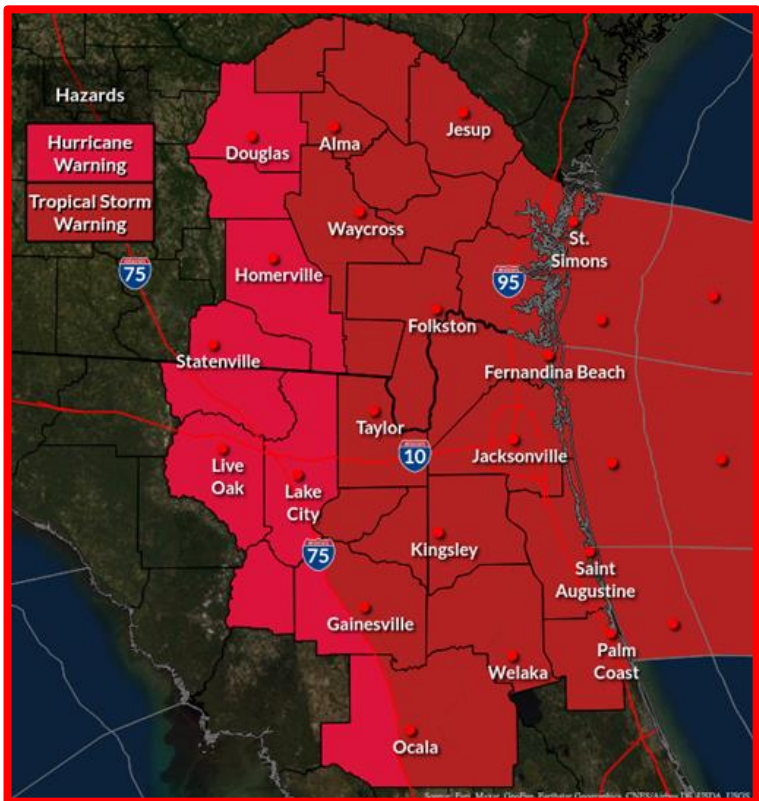
Hurricane Helene

- **New Information:** Helene strengthening over the Gulf of Mexico
- The system is expected to be a category four hurricane at landfall
- Acceleration to the north or north-northeastward WILL bring major hurricane winds WELL INLAND
- ***A shift of only 10 to 20 miles to the east would bring HURRICANE CONDITIONS to portions of our inland SE Georgia and Suwannee Valley counties.*** We have several models doing just that! **DO NOT LET YOUR GUARD DOWN!**



NWS WFO Jacksonville Watches/Warnings

Hurricane Helene

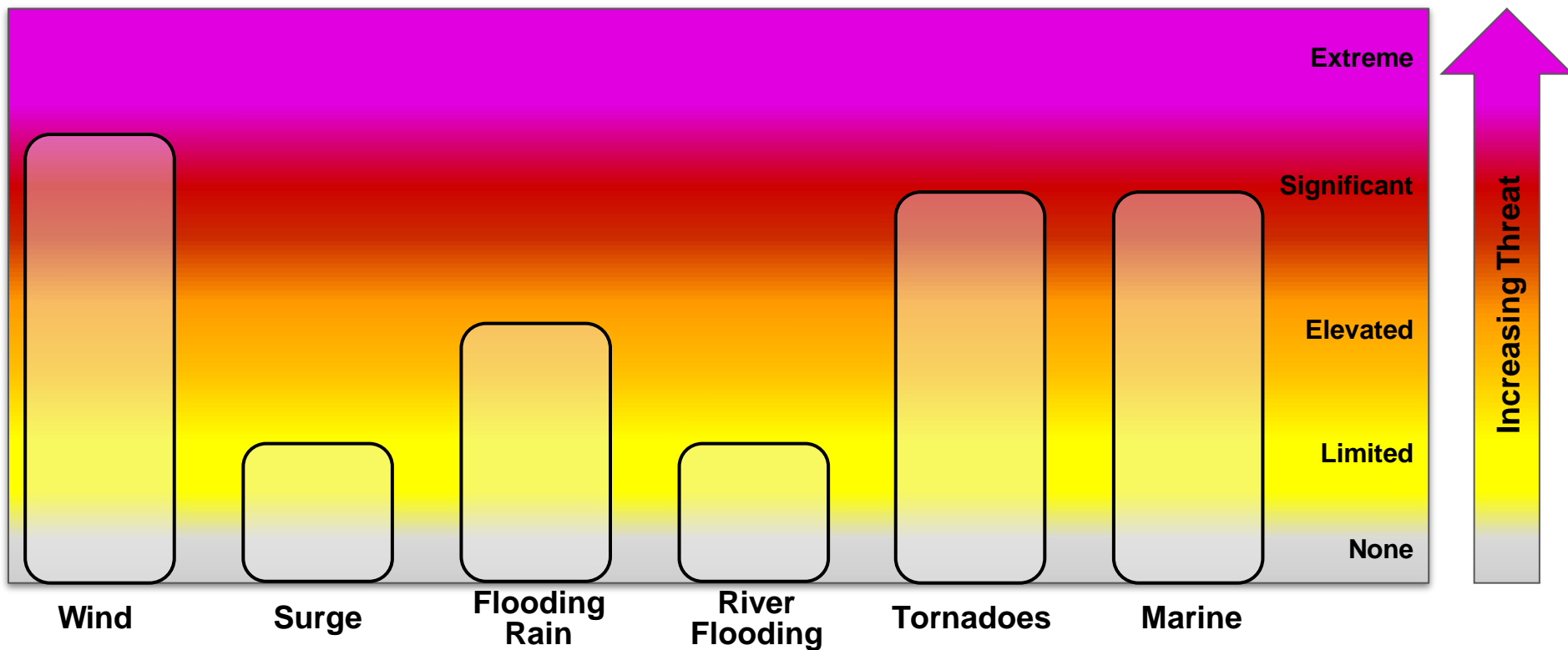




Threat Levels

Hurricane Helene

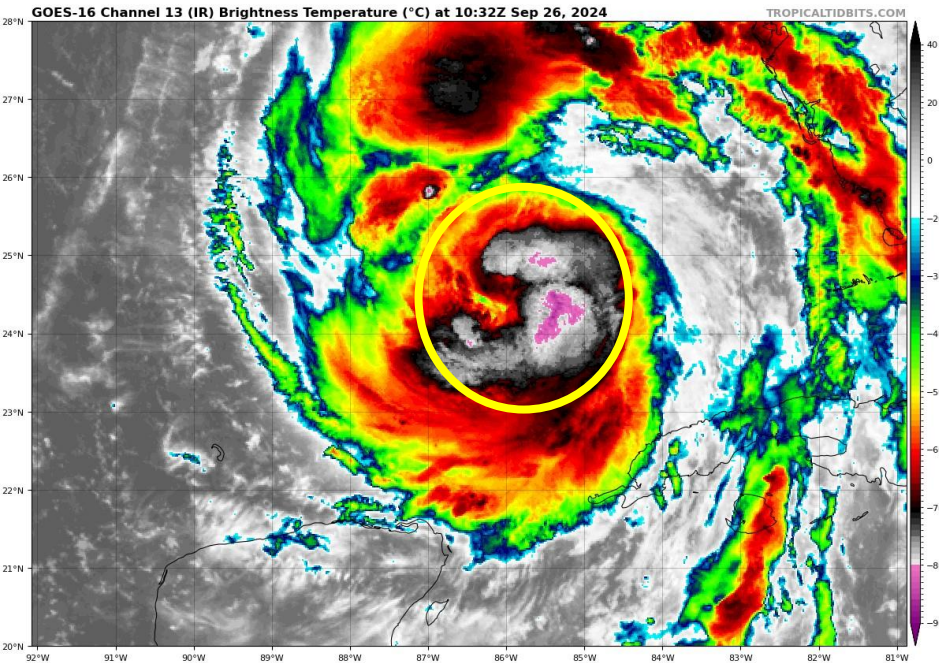
For information on specific hazards in this area, please go to: <https://www.weather.gov/srh/tropical?office=jax>





Current Satellite View

Hurricane Helene

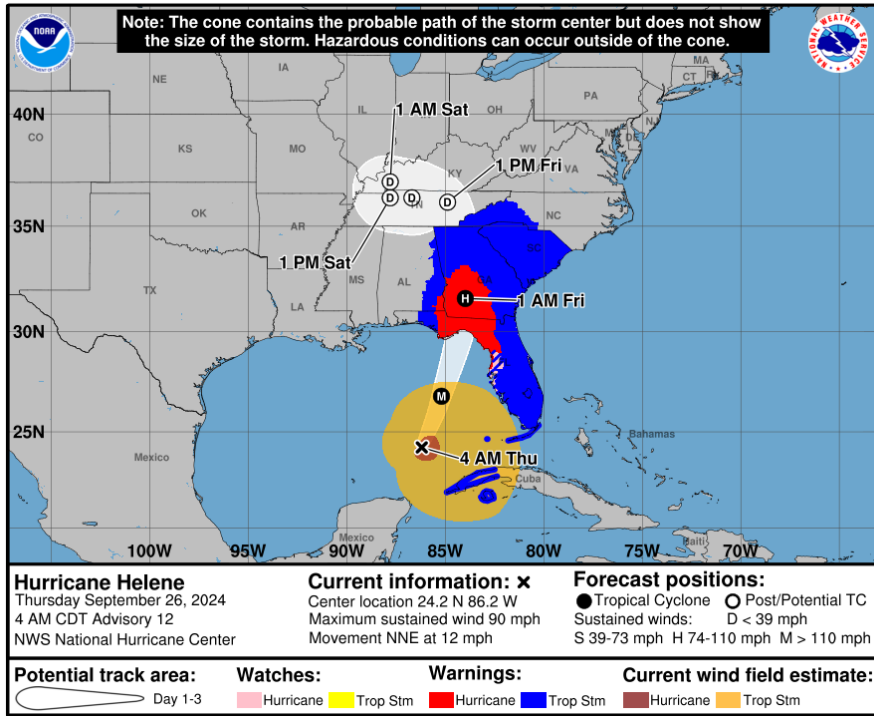


- NNW of Western Tip of Cuba
- Moving north-northeast at 12 mph
- Impressive organization in inner core area and outflow



Situation Overview

Hurricane Helene



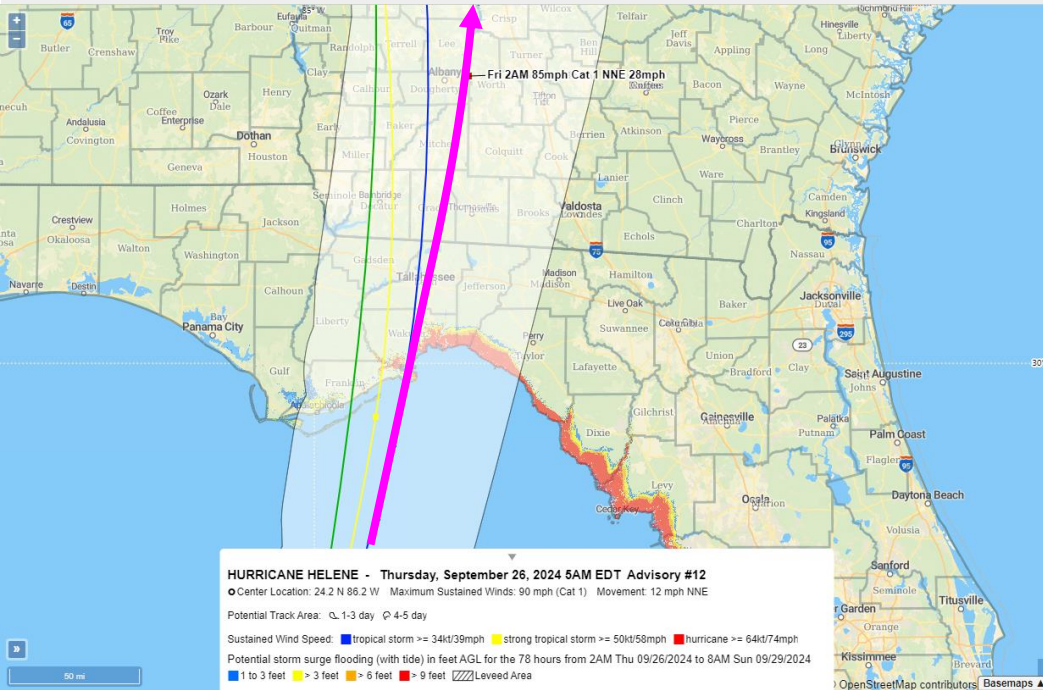
NOTE: Do not focus on the exact track.
Impacts can occur well outside the area enclosed by the cone.

- Aircraft recon indicate Helene is close to major hurricane status
- The system will ACCELERATE to the north-northeast making landfall somewhere between Keaton Beach and Apalachicola
- **THIS ACCELERATING SYSTEM WILL BRING HURIBANE CONDITIONS WELL INLAND AND DANGEROUSLY CLOSE TO OUR AOR**



Current and Previous NHC Official Forecast Tracks

Hurricane Helene



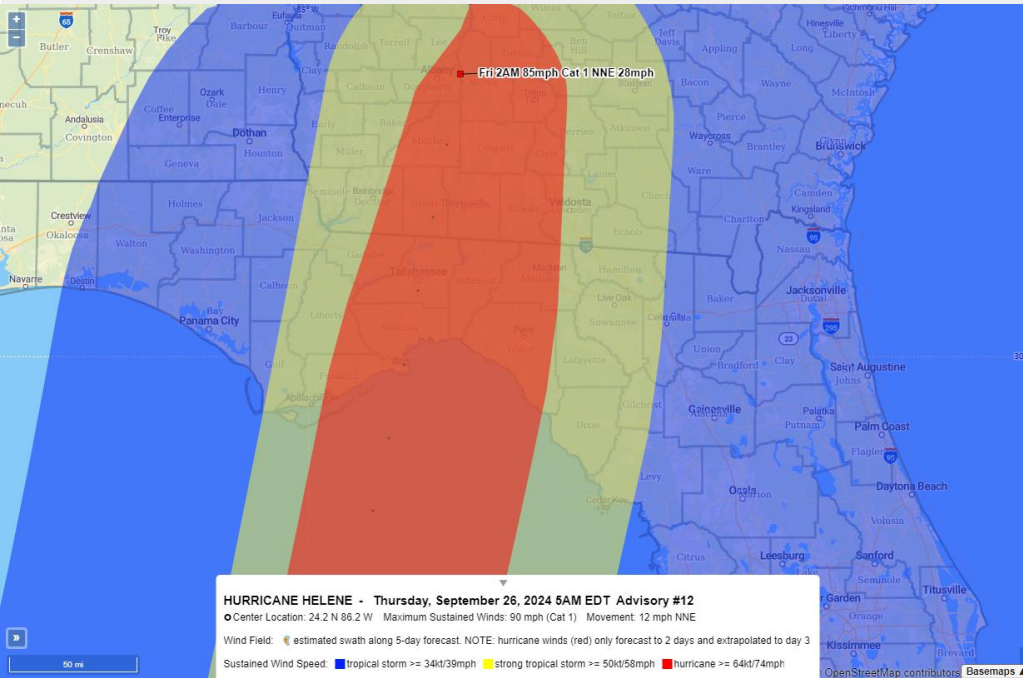
- **Current Forecast Track**
- Six (6) Previous Tracks in other colors
- Note the consistency of the forecasts
- **Trends are somewhat better for us but we still have to consider the potential of the storm being on the eastern portion of the cone (some models still do)**

NOTE: Do not focus on the exact track.
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Situation Overview

Hurricane Helene



NOTE: Do not focus on the exact track.

Impacts can occur well outside the area enclosed by the cone.

- Hurricane Warning area, IN CASE the storm shifts to the eastern side of Cone
- In the Hurricane Warning area **expect** 50 to 70 mph sustained with frequent gusts to hurricane strength
- **Prepare for sustained hurricane conditions**

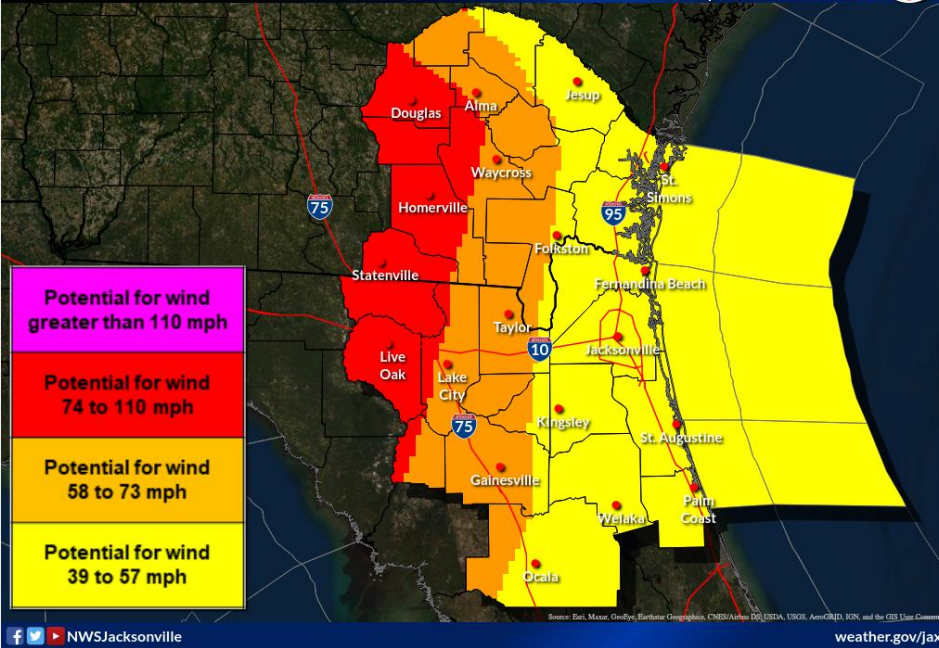


Wind Threat

Hurricane Helene

Wind Threat

Weather Forecast Office
Jacksonville, FL
Issued Sep 26, 2024 7:13 AM EDT



NOTE: Do not focus on the exact track.

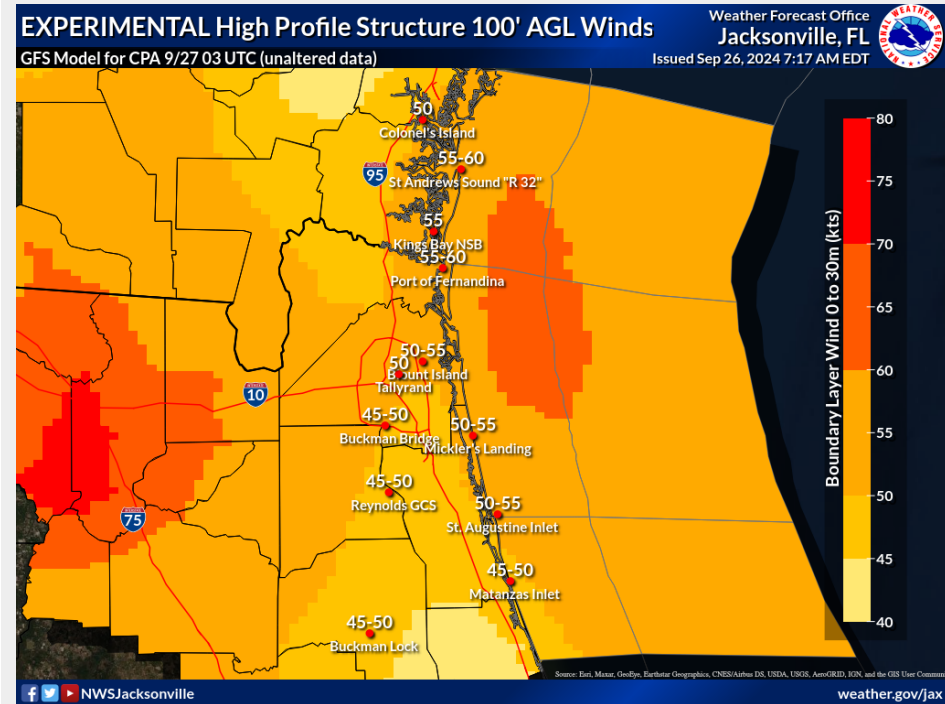
Impacts can occur well outside the area enclosed by the cone.

- Prepare for **POTENTIAL** hurricane conditions
- Prepare for 58 to 73 mph sustained winds with gusts to hurricane strength
- Prepare for 39 to 57 mph winds with gusts 58 to 73 mph
- **The NHC official forecast track continues to trend better for our areas but we still have to consider the potential of the storm being on the eastern portion of the cone**

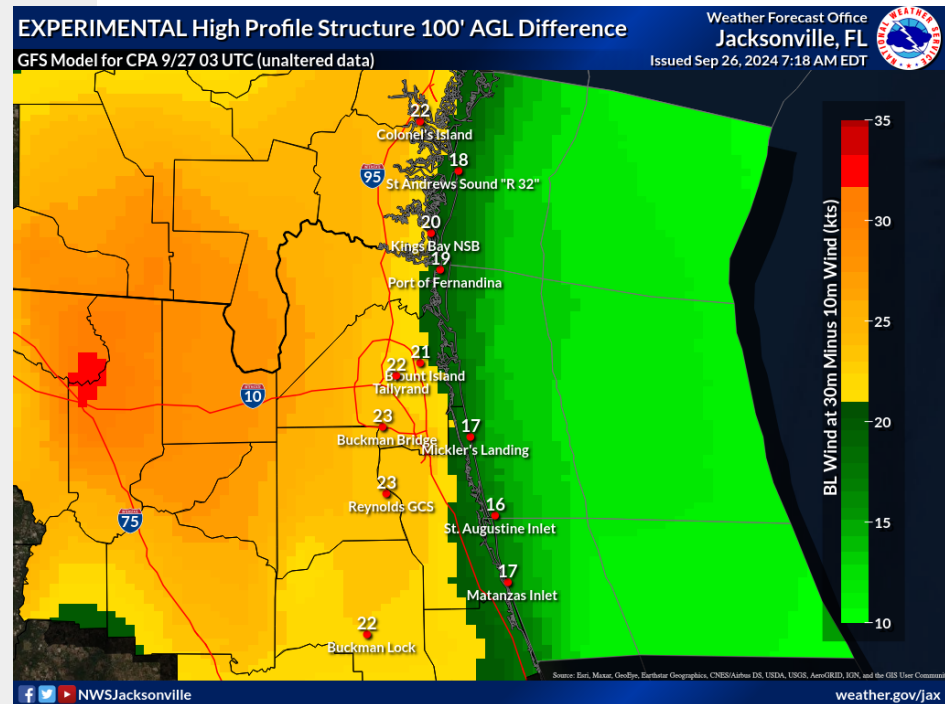


Higher Level Winds at 100 FT - Above Ground level (AGL)

EXPERIMENTAL Winds for High Profile Bridges, Port Facilities & Tall Structures



Estimated Sustained Wind Speed



Increase in the Winds from the SFC to 100' AGL

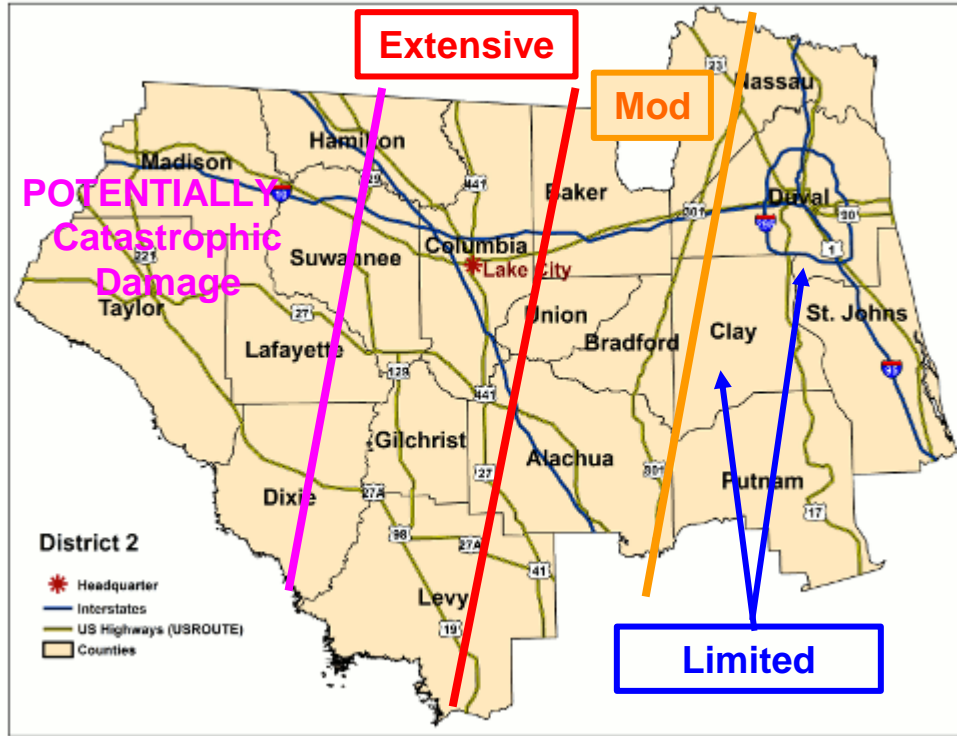
Last updated: 9/26/2024 9:29 AM

National Weather Service - Jacksonville, FL



FDOT District Two POTENTIAL Wind Impacts (Non-Tornadic)

EXPERIMENTAL Areas of Potential Major Roadway Impacts



Potentially Catastrophic (should Helene track further east than the current track):

extensive tree blow down, many highway signs destroyed, tall light poles possibly damaged/destroyed

Extensive: Numerous trees blown down, large highway signs with large surface areas damaged or destroyed

Moderate: Some trees blown down, large limbs splinted and down on roadways, some sign damage

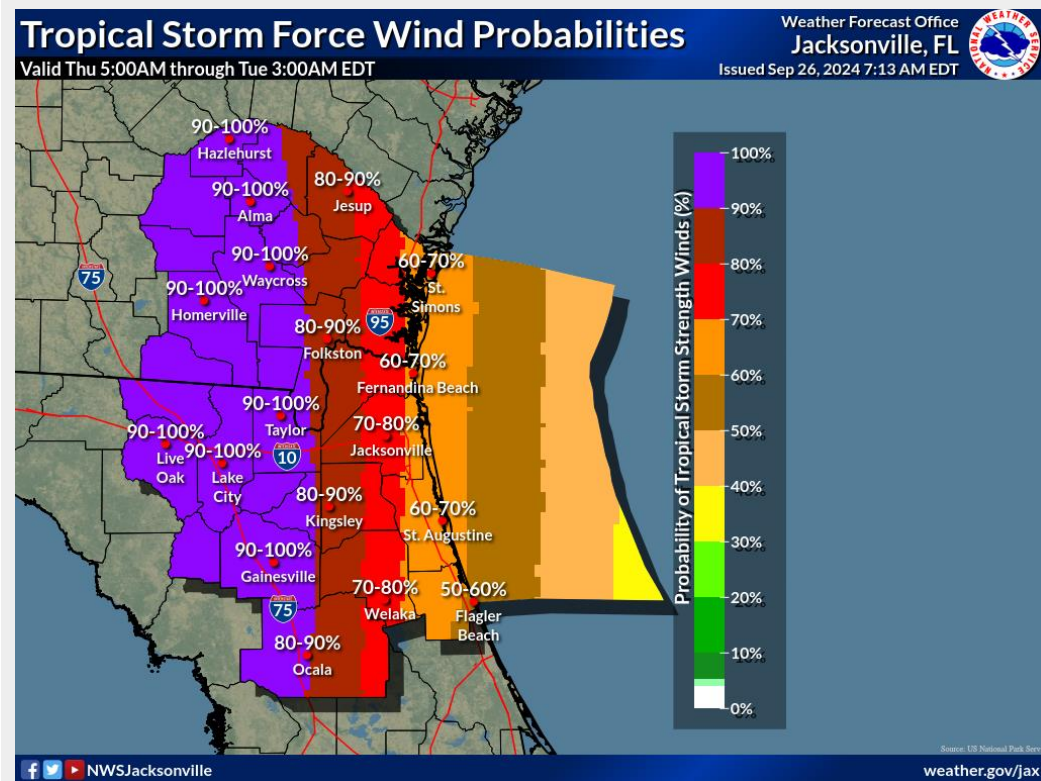
Limited: A few trees blown down, limbs and leaves on roadways

This is based on the current Official NHC Forecast Track, any deviation to the east or west and we would have to adjust these



Tropical Storm Wind Speed Probabilities

Hurricane Helene



- There is a 99 (100)% chance of seeing tropical storm force or greater winds over the Suwannee Valley
- There is a 8 in 10 of seeing tropical storm force or greater winds in the Jacksonville Metro area
- The greatest risk will be over the Suwannee Valley and interior south Georgia but will also increase along the coast



Most Likely Time of Arrival

Hurricane Helene

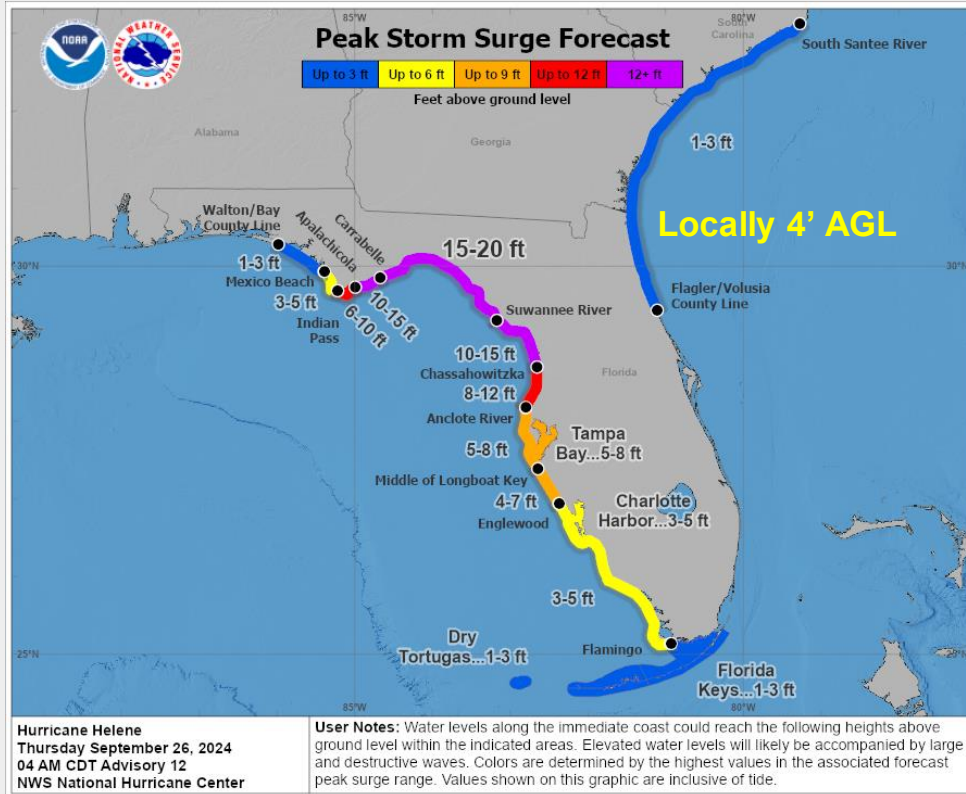


- The most likely time of arrival of Tropical Storm Force Winds for the Ocala Area is mid Afternoon
- Most likely time of ceseation of tropical storm force winds in Ocala is between 2 a.m. and 5 a.m. on Friday.
- Duration in ALL areas 12 to 14 hours



Storm Surge / Tidal Flooding Estimates

Hurricane Helene

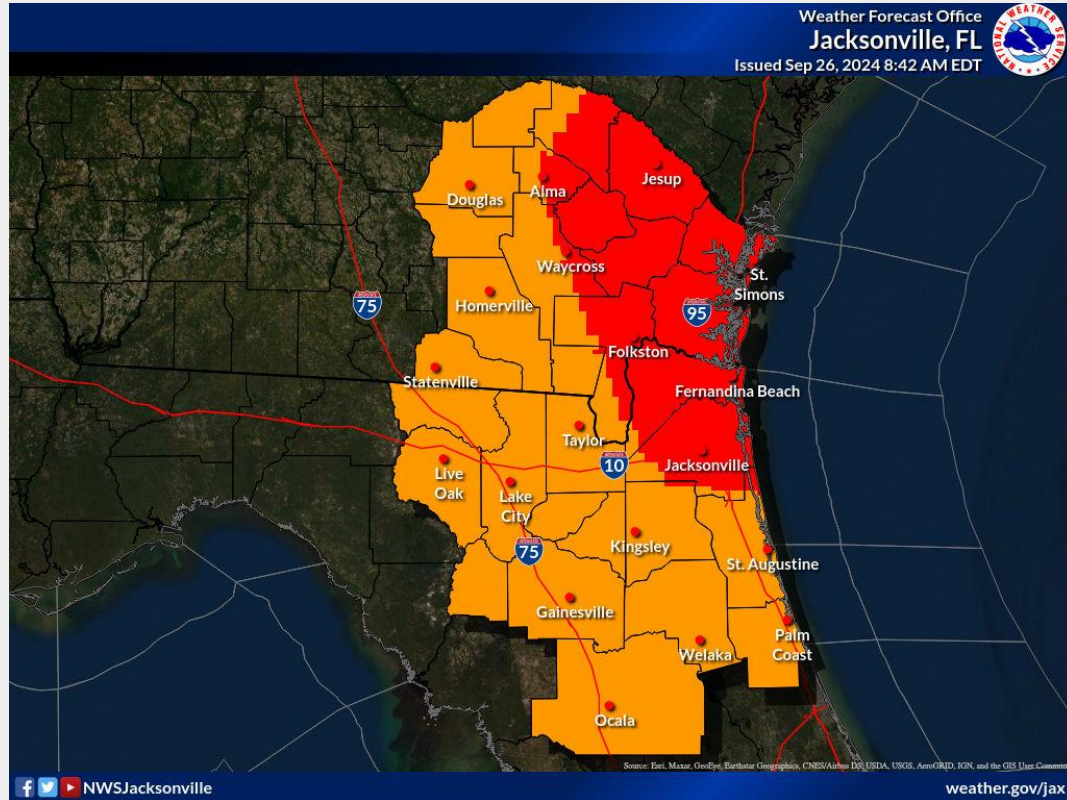


- General water levels up to 3 feet Above Ground Level (AGL)
- Normally flood prone locations up to 4 feet AGL, for the St Johns River and the estuaries of Nassau, Camden and Glynn Counties
- Highest water levels in the usually flood prone areas near the trime of high tide



Tornado Potential

Hurricane Helene



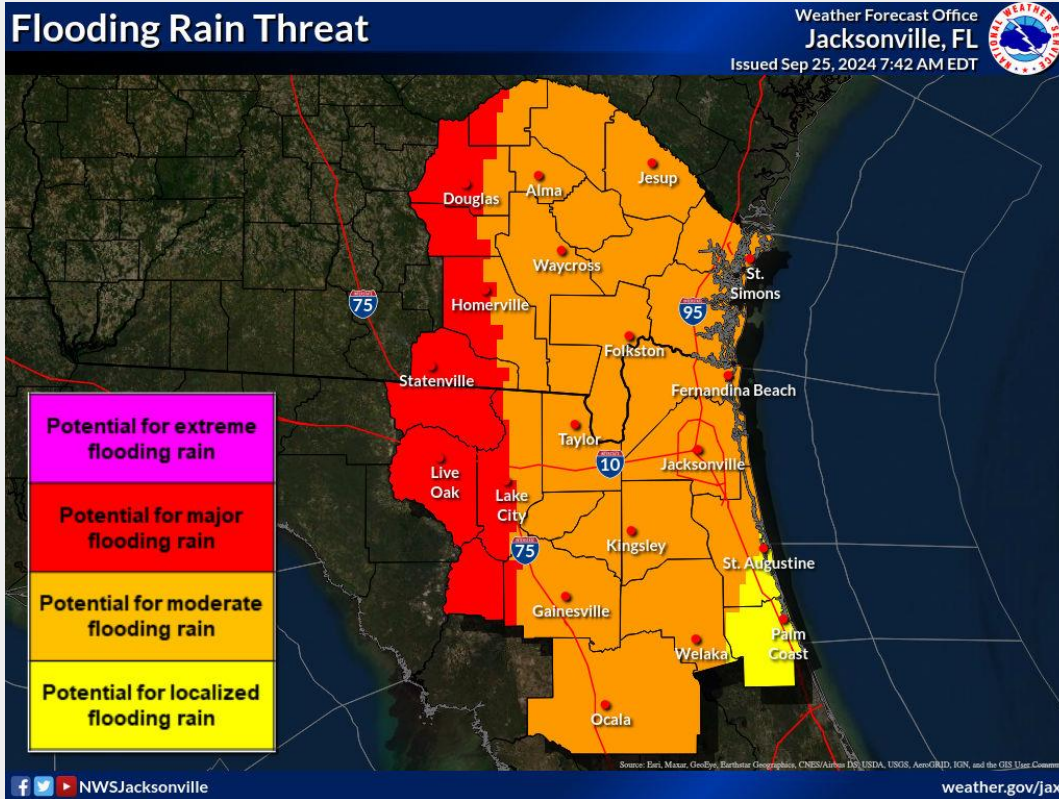
- Main threat of tornadoes would be from midnight Thursday to sunrise Friday
- Most likely areas along the coast, St Johns River and then in the Suwannee Valley and Interior South Georgia near storm track



Excessive Rainfall Outlook

Hurricane Helene

Flooding Rain Threat



- Areas outlined in red have the greatest potential for flash flooding on Thursday
- Flash Flooding most likely in Suwannee Valley and near the Pearson, Homerville, Douglas Baxley, Hazlehurst areas



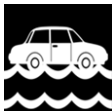
Key Take-Aways

Hurricane Helene

Confidence is HIGH that the event will occur
Confidence is MODERATE regarding impacts



The inner core is expected to make landfall somewhere between Dixie and Franklin Counties with the strongest winds near/right of the storm track. **These strong winds may penetrate well inland and have the potential to bring hurricane conditions well inland near and to the right of the track**



Currently surge flooding should be limited in our area. General surge 1-3 ft AGL. For the normally flood prone areas of the St Johns River and coastal Georgia, locally up to 4' feet AGL.



Rainfall flooding likely, mainly Suwannee Valley and Interior SE Georgia



This will be a very dynamic system and we believe significant tornadoes are possible east of the storm track, Especially the coastal areas and St Johns River



Dangerous marine conditions expected across the coastal waters.