



Hurricane Beryl Briefing

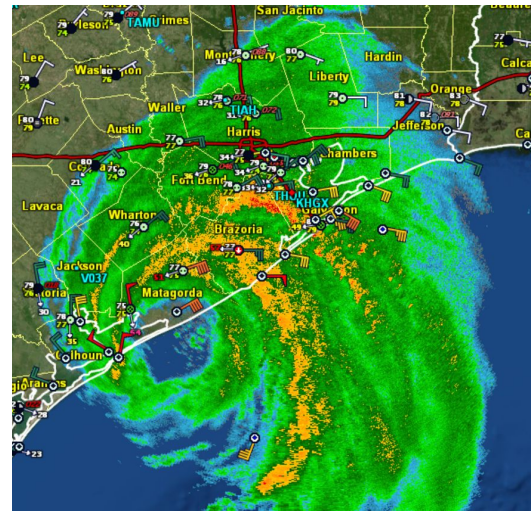
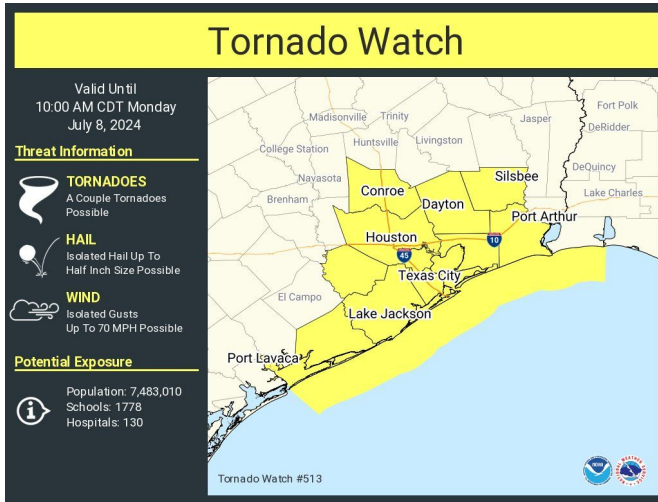
430 AM Monday, July 8th, 2024

Lance Wood and Jimmy Fowler
NWS Houston/Galveston



Situation Overview: What's New?

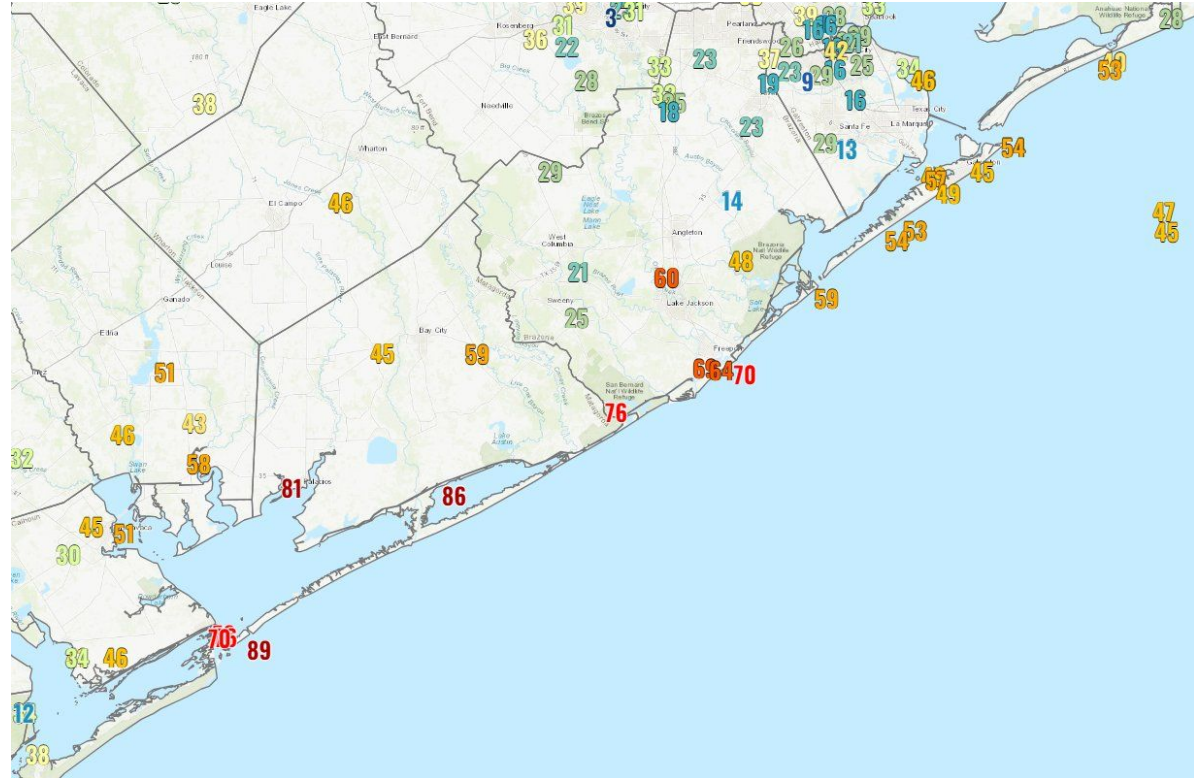
- Beryl became a hurricane at 11 pm last night. Maximum winds are around 80 mph.
- Beryl made landfall as a category 1 hurricane at Matagorda, Texas at 4 AM.
- Southeast portions of southeast Texas are in a tornado watch until 10 am.





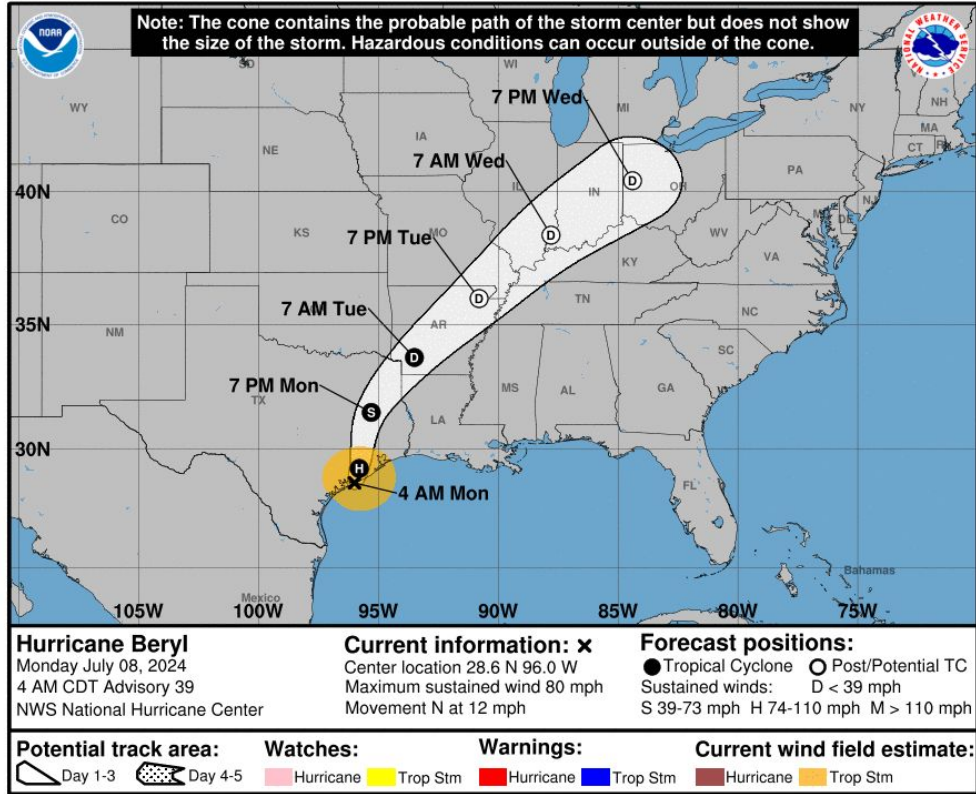
Latest Radar/Observations

Hurricane Beryl highest wind gusts (mph) through 3 AM.





Hurricane Beryl



Beryl will continue to move northward today across southeast Texas and slowly weaken - then accelerate and move northeast



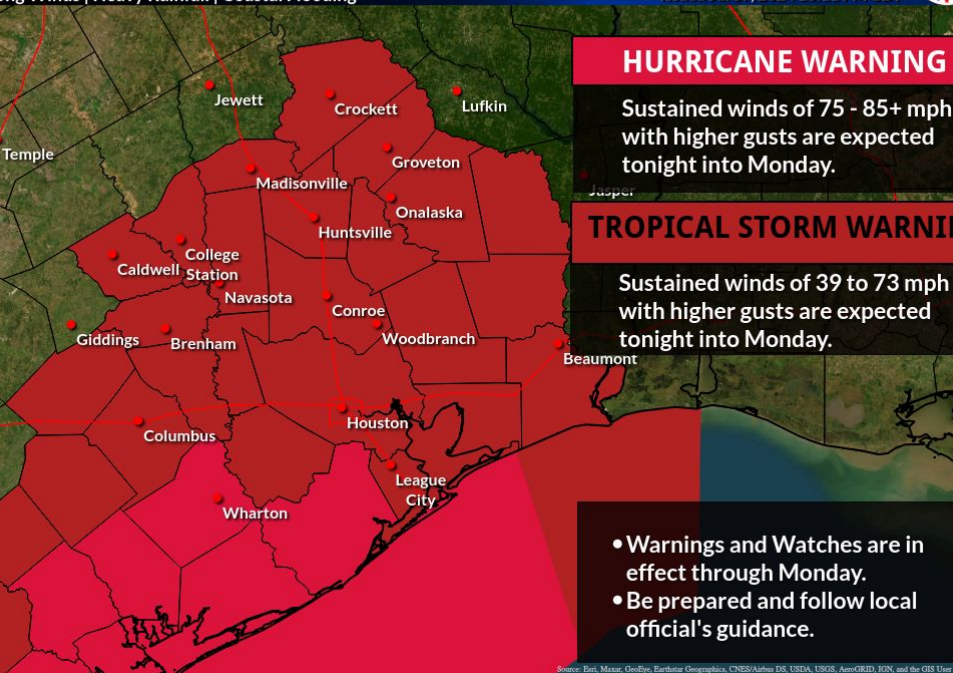
Watches and Warnings

Maps Showing Various Wind and Surge Flooding Related Warnings and Watches

Tropical Storm Beryl - Hazards

Strong Winds | Heavy Rainfall | Coastal Flooding

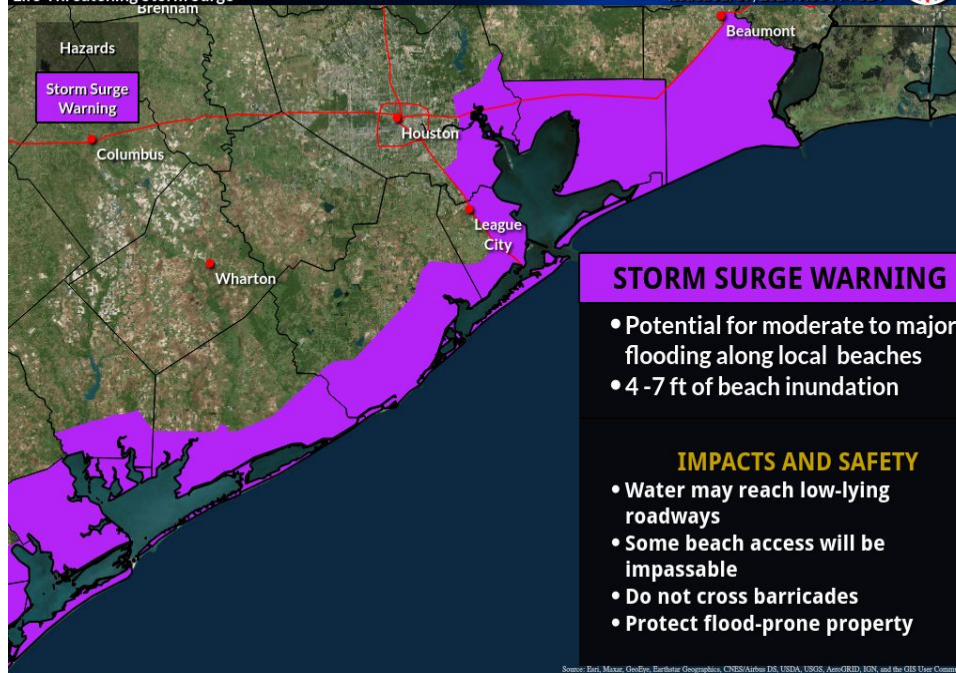
Weather Forecast Office
Houston/Galveston TX
Issued Jul 07, 2024 10:11 PM CDT



Tropical Storm Beryl - Hazards

Life-Threatening Storm Surge

Weather Forecast Office
Houston/Galveston TX
Issued Jul 07, 2024 9:56 PM CDT



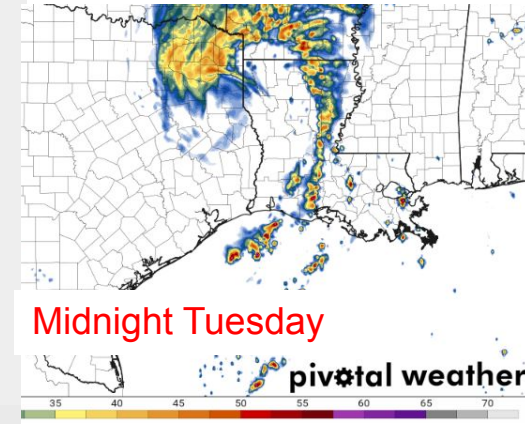
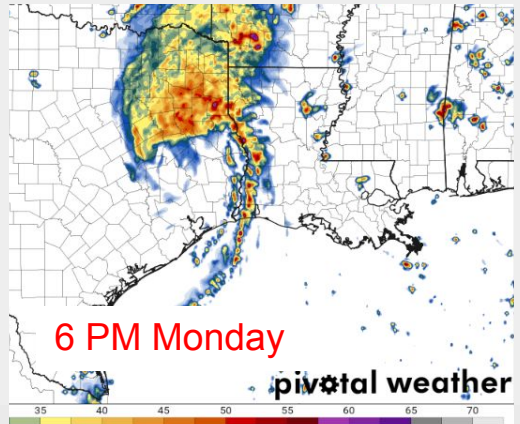
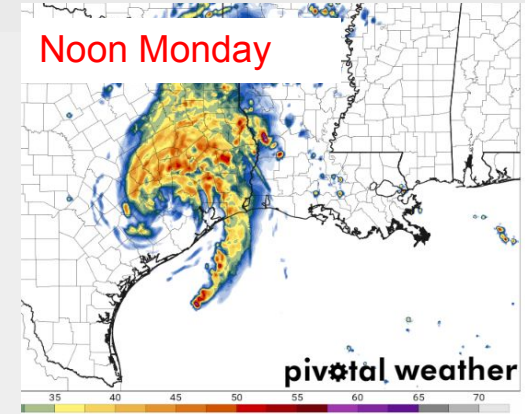
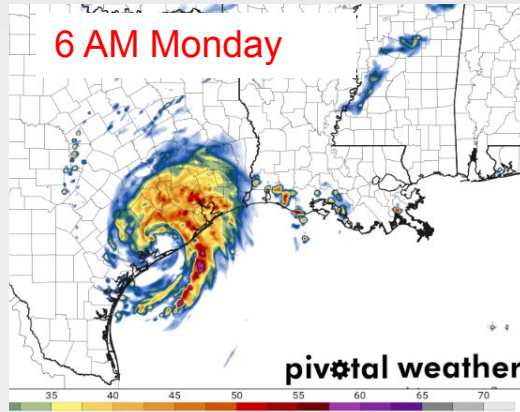


Simulated RADAR

Model forecasted radar from
1 AM run of HRRR model.

Don't focus on details - but can
get a sense of the timing,
structure, banding.

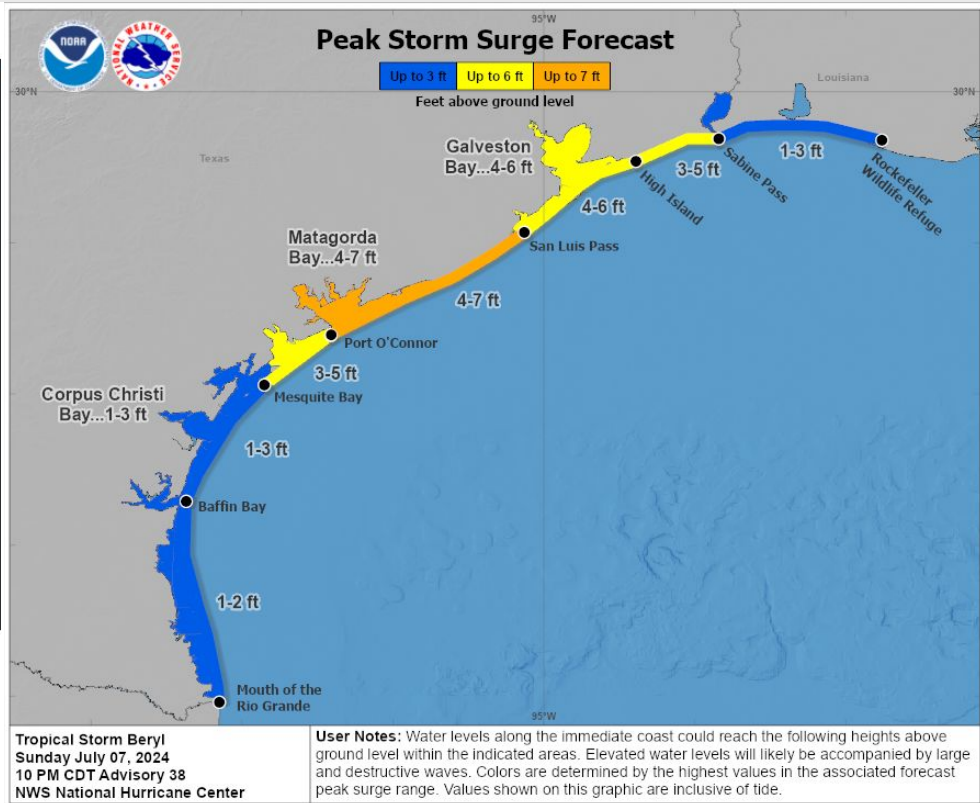
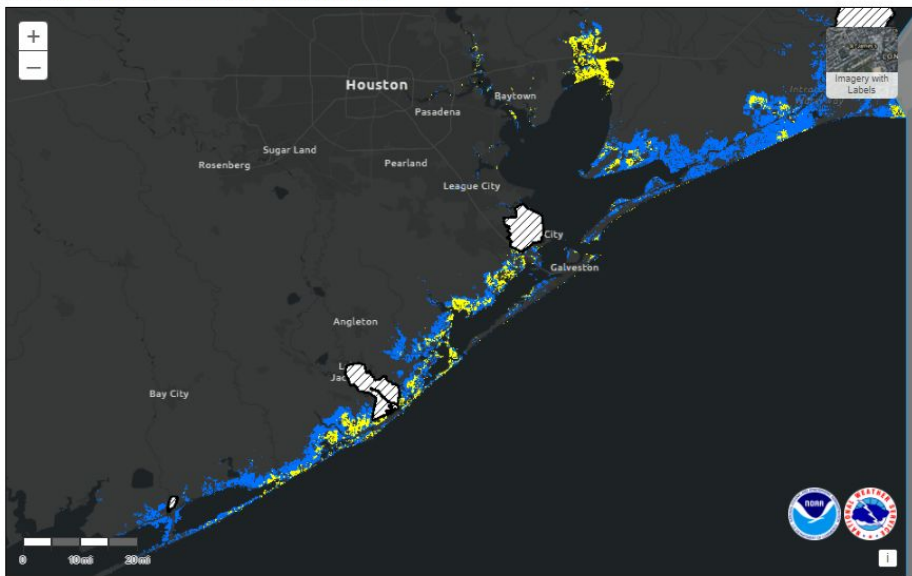
Morning commute will be
difficult with heavy rain, high
winds and surge coastal areas.





Potential Storm Surge Flooding, Peak Surge Above Ground

NHC Potential Storm Surge Flooding Map
Tropical Storm BERYL (2024) Advisory 38
From 10 PM CDT Sunday July 07 to 01 AM CDT Friday July 12



Tropical Storm Beryl
Sunday July 07, 2024
10 PM CDT Advisory 38
NWS National Hurricane Center

User Notes: Water levels along the immediate coast could reach the following heights above ground level within the indicated areas. Elevated water levels will likely be accompanied by large and destructive waves. Colors are determined by the highest values in the associated forecast peak surge range. Values shown on this graphic are inclusive of tide.

Potential Storm Surge Flooding*

- Intertidal Zone/Estuarine Wetland
- Greater than 1 foot above ground
- Greater than 3 feet above ground
- Greater than 6 feet above ground
- Greater than 9 feet above ground
- Leveed area
- Consult local officials for flood risk

Map Layer Options:

Inundation Layer Only Inundation with Intertidal Layer Map Opacity Slider

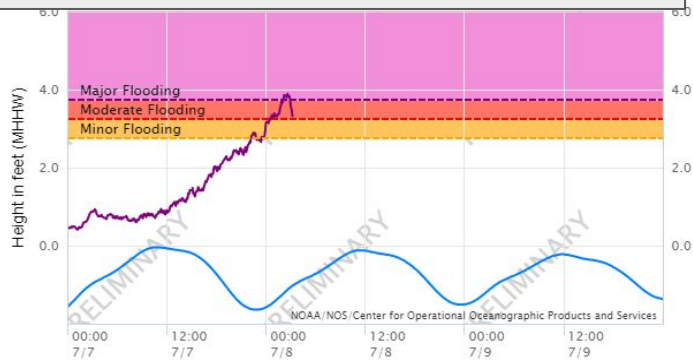
[Download GIS data \(Instructions\)](#) Inundation Layer Only Inundation with Intertidal Layer

*Displayed flooding values indicate the water height that has about a 1-in-10 (10%) chance of being exceeded.

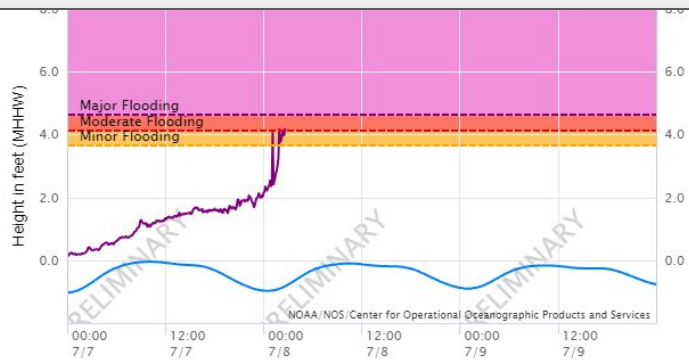


Storm Surge Observations

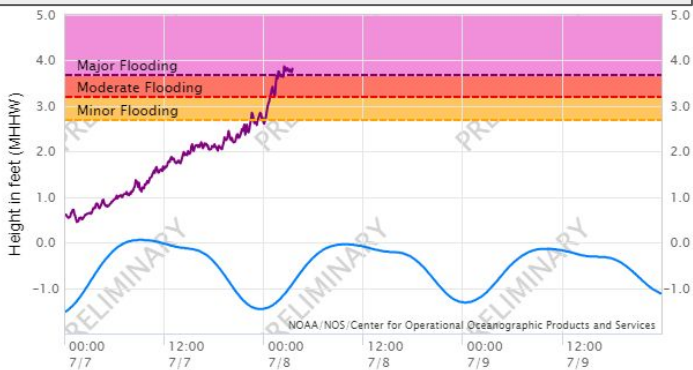
Matagorda Bay Entrance



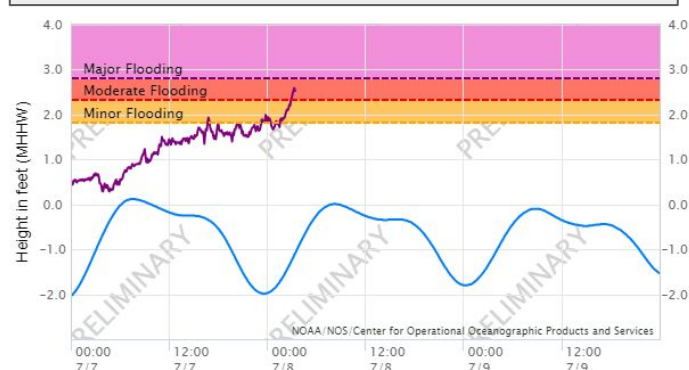
Sargent



Sargent



Galveston Bay Entrance



— Predictions — Observed — Forecast Guidance — (Observed - Predicted)

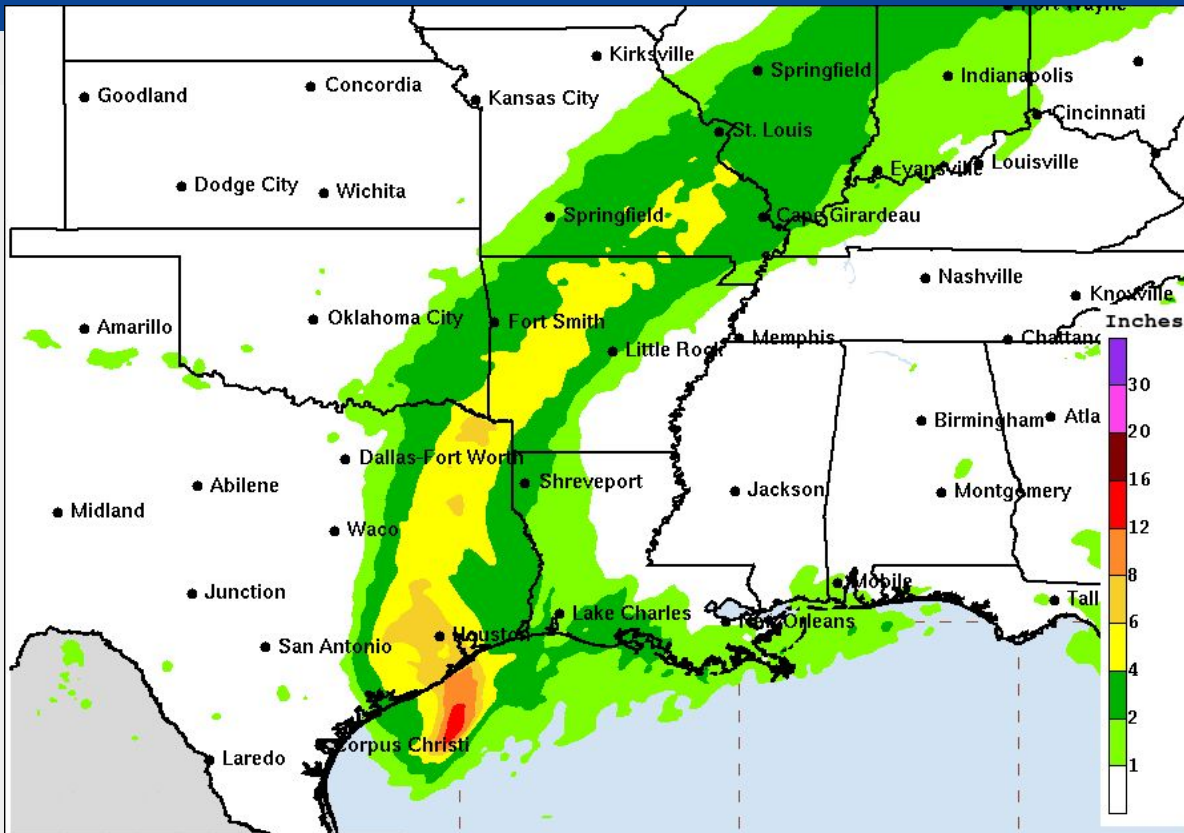
— Predictions — Observed — Forecast Guidance — (Observed - Predicted)



Rainfall Forecast

Additional rainfall amounts of 4 to 8 inches with localized higher amounts are expected.

Period of heaviest rain tonight and Monday.



Hurricane Beryl
 Day 1-3 Rainfall Forecast (inches)
 Created 2:45 AM CDT Mon Jul 8 2024
 Valid 1:00 AM CDT Mon Jul 8 2024
 through 7:00 AM CDT Thu Jul 11 2024
 DOC/NOAA/NWS/NCEP/WPC

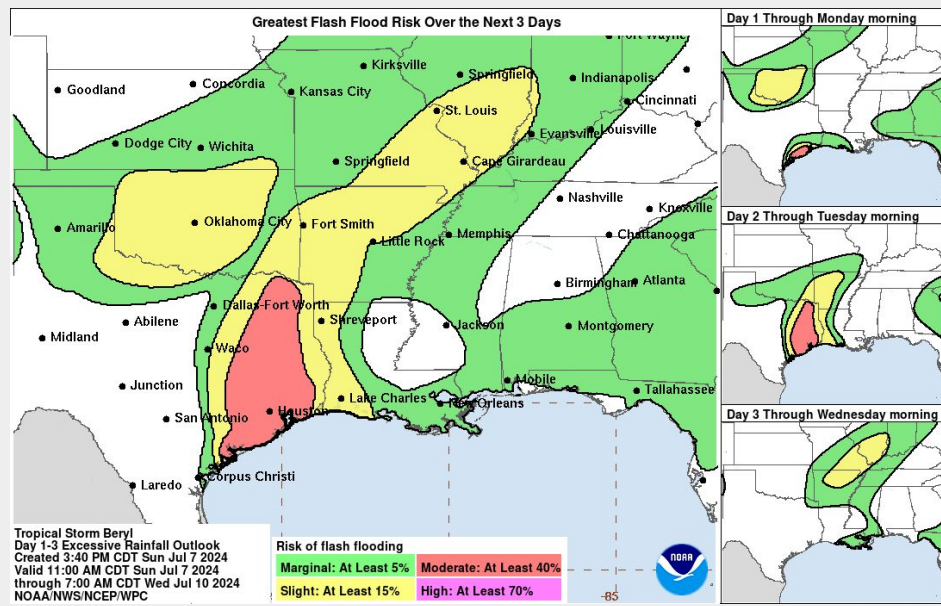
Local point maximum rainfall may be higher than shown.
 See the NHC public advisories for the latest tropical cyclone information.





Excessive Rainfall Outlook/Flood Watch

Main heavy rain/flash flood threat will be today for the local area. Risk rated as Moderate.



Flood Watch

In effect from tonight through Tuesday morning

Weather Forecast Office
Houston/Galveston TX
Issued Jul 07, 2024 9:39 AM CDT

FLOOD WATCH
In effect tonight through Tues Morning

- Heavy rain associated with Tropical Storm Beryl could produce rainfall amounts from 5 to 10 inches, with locally higher amounts possible
- Flooding caused by excessive rainfall will be possible.

IMPACTS AND ACTIONS

- Excessive runoff may result in flooding of rivers, creeks, streams, and other low-lying and flood-prone locations, particularly urban areas.
- Monitor latest forecast updates and be prepared.

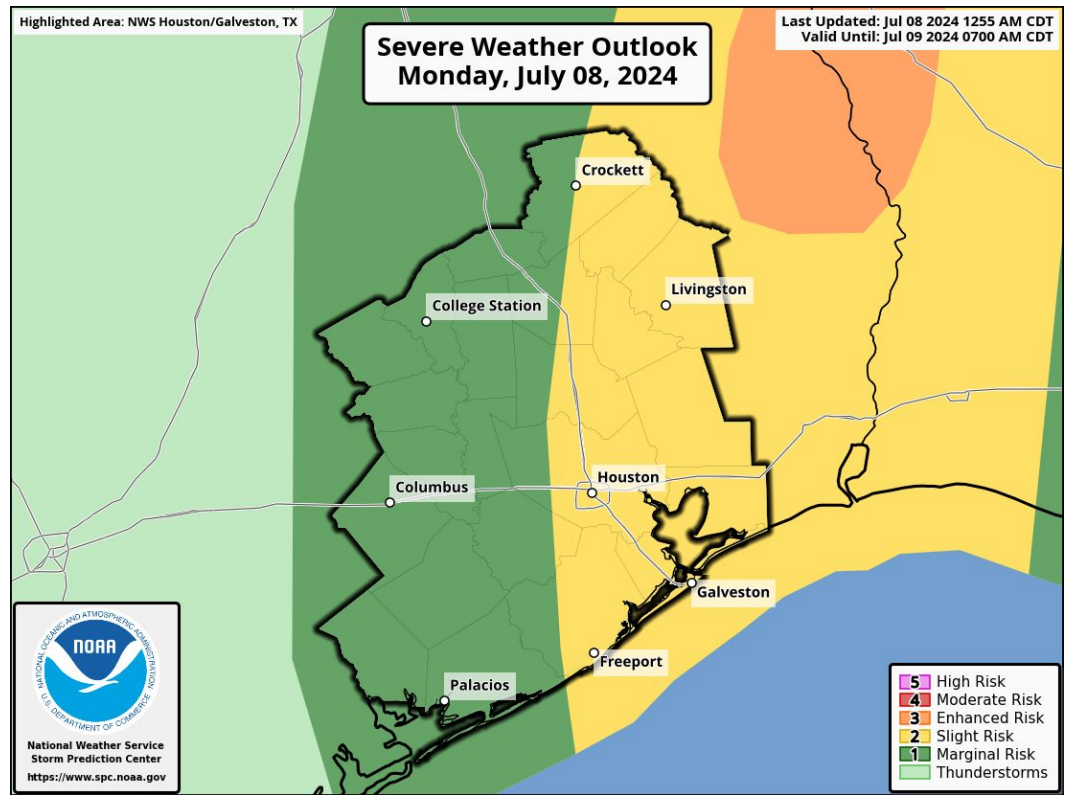
Source: Sat, Mxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

@NWSHouston weather.gov/hgx



Tornado Risk

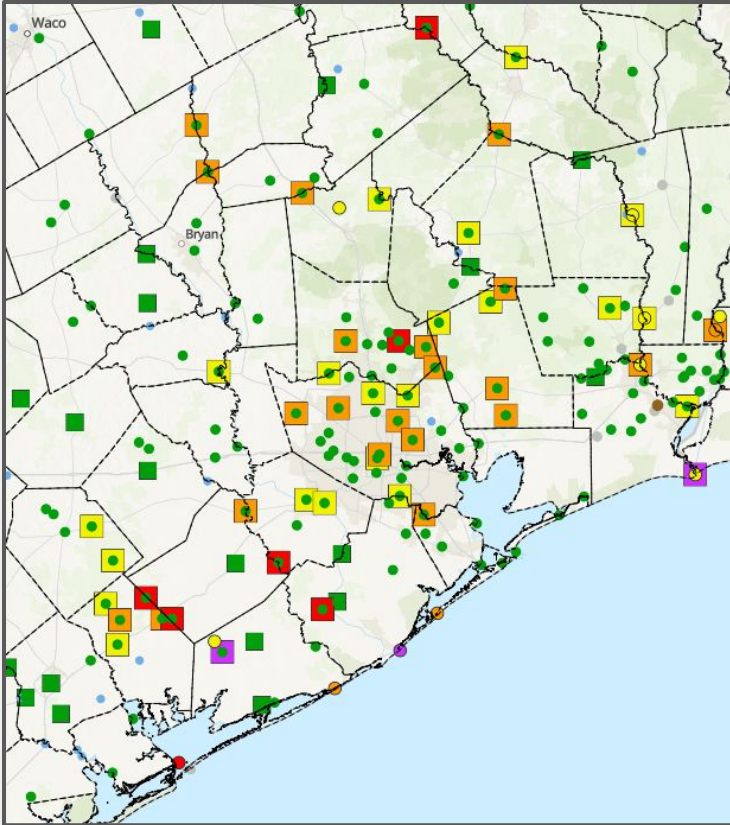
Isolated tornadoes are possible in spiral bands through this morning and into the afternoon.





River Forecasts

48-Hour QPF



Not much change. River flooding expected to begin early tomorrow morning and extend into late week.

Focus is on Lavaca/Navidad, Tres Palacios, and San Bernard Rivers.

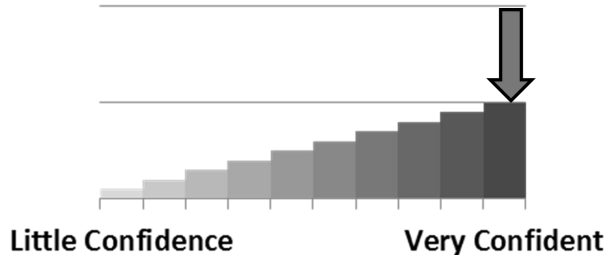
Need to monitor tributaries of Brazos and Trinity Rivers, as well as San Jacinto River/Houston Bayous for any training.



Key Take-Aways

- Beryl is a category 1 hurricane and has made landfall.
- Beryl will bring a variety of hazards including high winds, heavy rains and storm surge flooding to low lying coastal area.
- Isolated tornadoes will be possible the rest of tonight and today.
- Potential for damaging winds, flooding rains and storm surge flooding near the coast through this morning. Improving conditions this afternoon and evening.

Forecast Confidence




Confidence overall is high on significant impacts from Beryl, all hazards. Still some question whether or how much Beryl will intensify before landfall.




Local Resources

Next Webinar Briefing: None Planned Method: Email Briefings

 **Web:** weather.gov/houston

 **Phone:** 281-337-5074

 **E-mail:** sr-hgx.nws@noaa.gov

 **Facebook:** facebook.com/NWSHouston/

 **Twitter:** twitter.com/NWSHouston

 **YouTube:** youtube.com/nwshouston