



Tropical Storm Beryl Briefing

Focus on Changes Since this Morning's Briefing

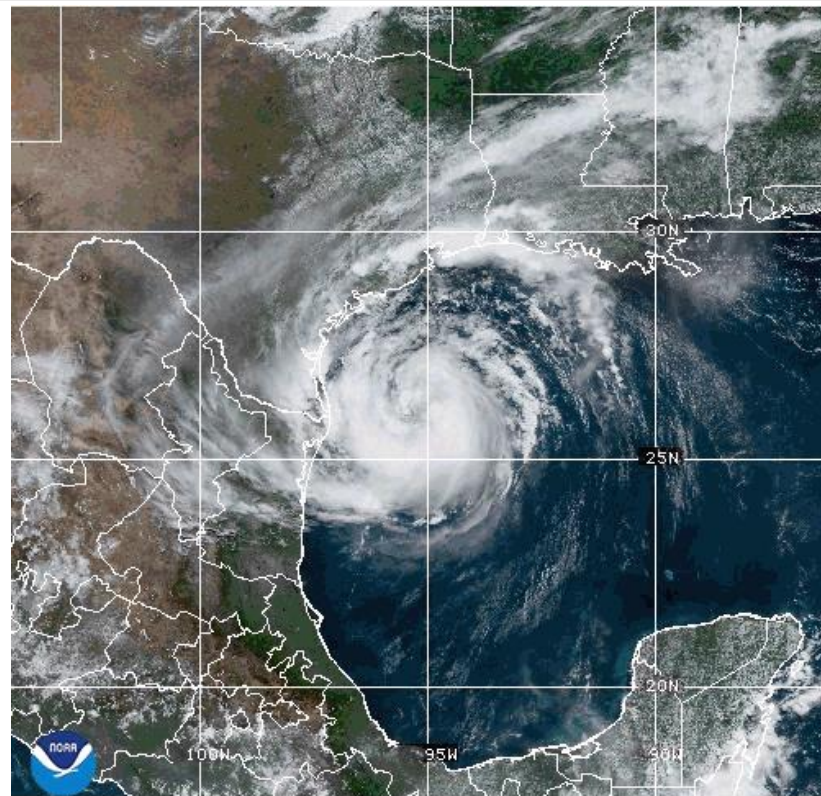
5 PM Sunday, July 7th, 2024

NWS Houston/Galveston



Situation Overview: Emphasis on What Has Changed

- Beryl remains a tropical storm, intensity has not changed much since morning briefing. It continues to track NNW across the Gulf toward the Texas coast.
- Currently a 65 mph tropical storm. Beryl is still forecast to make landfall as a category 1 hurricane.
- There are no changes to wind, surge and flood related watches and warnings or expected rainfall.
- The threat of a few tornadoes in bands will increase this evening and remain through much of Monday.



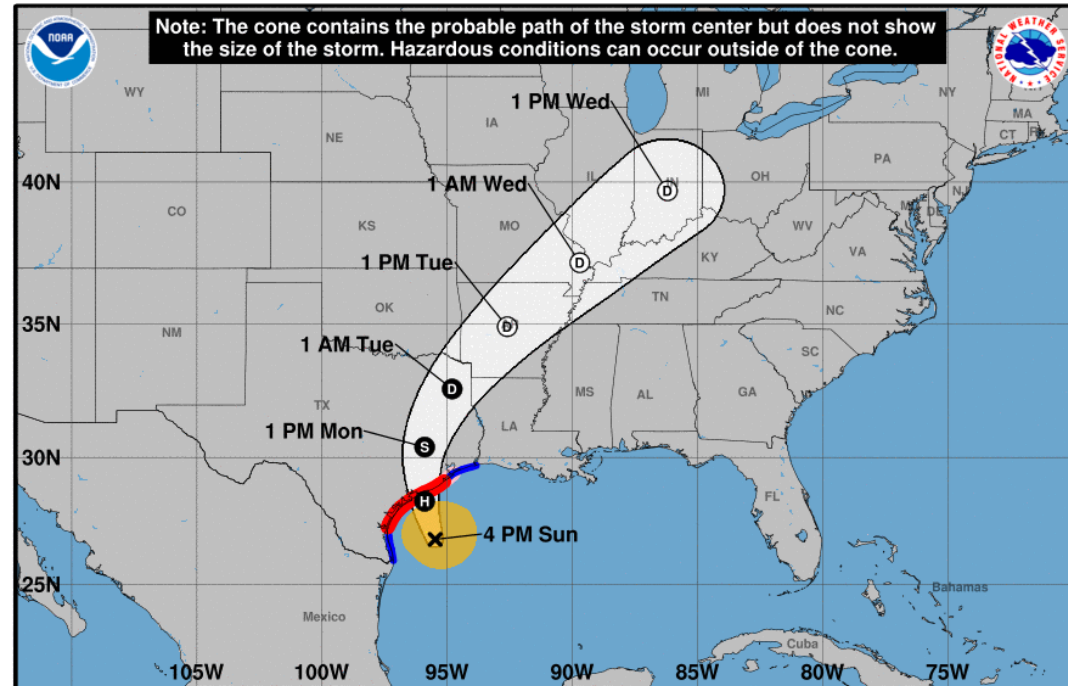
07/07/2024 16:30Z - NOAA/STAR - GOES-East - GEOCOLOR Composite



Tropical Storm Beryl



Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.



- Very little change in track or intensity forecast. List of wind related watches and warnings listed below:
- **Hurricane Warnings** (red) from Baffin Bay to San Luis Pass.
- **Tropical Storm Warnings** (blue) from San Luis Pass to High Island.
- **Hurricane Watch** (shown in pink) and **TS Warning** together from San Luis Pass through Galveston Island.

Tropical Storm Beryl
 Sunday July 07, 2024
 4 PM CDT Advisory 37
 NWS National Hurricane Center

Current information: X
 Center location 26.8 N 95.5 W
 Maximum sustained wind 65 mph
 Movement NNW at 12 mph

Forecast positions:
 ● Tropical Cyclone ○ Post/Potential TC
 Sustained winds: D < 39 mph
 S 39-73 mph H 74-110 mph M > 110 mph

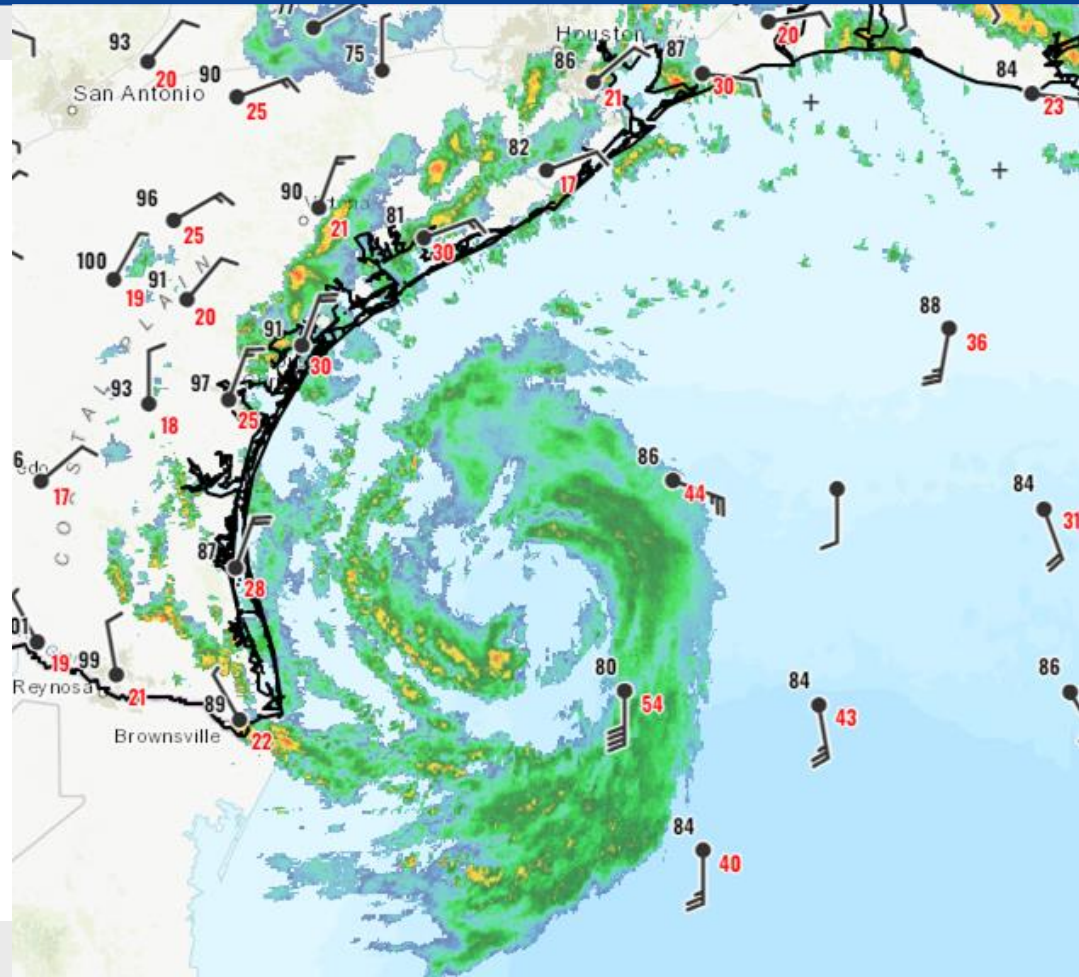
Potential track area: Day 1-3 (solid line), Day 4-5 (dotted line)
Watches: Hurricane (pink), Trop Stm (yellow)
Warnings: Hurricane (red), Trop Stm (blue)
Current wind field estimate: Hurricane (brown), Trop Stm (yellow)



Latest Radar/Observations

Tropical Storm Beryl seen on radar offshore. Spiral bands rotating up into Texas. Core of the storm to push through SE Texas later tonight and Monday.

TS force winds extend well away from center (wind gusts shown in red).



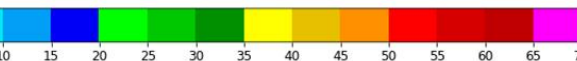
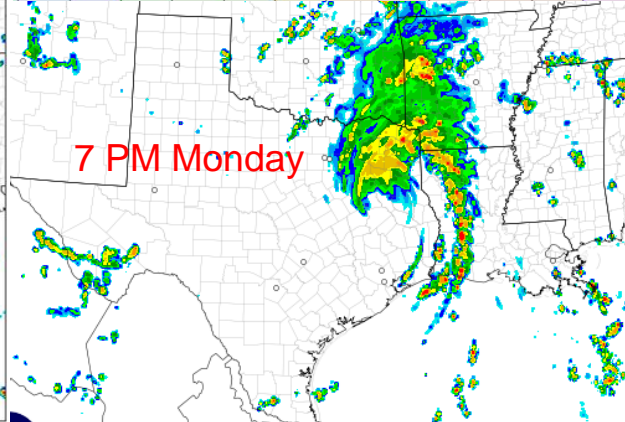
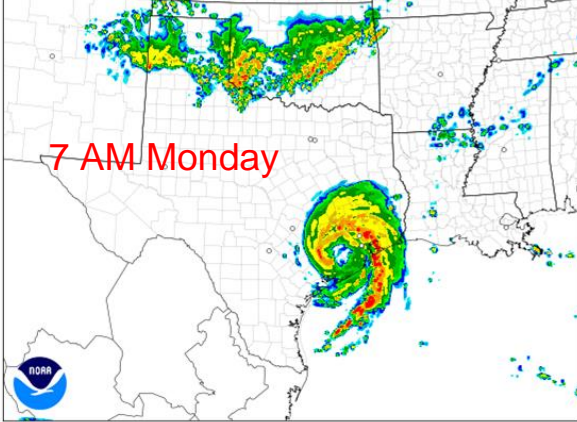
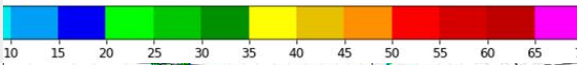
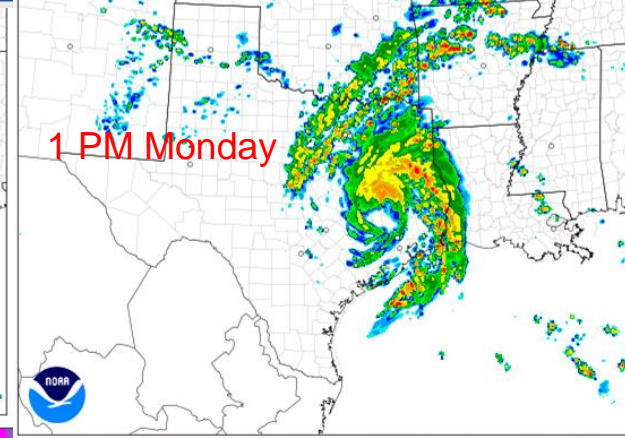
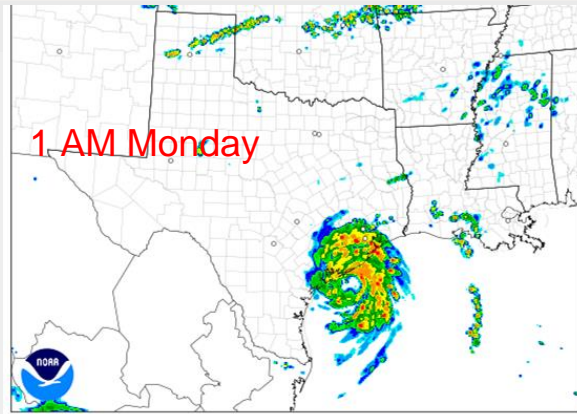


Rainfall Timing (DO NOT FOCUS ON DETAILS)

Model forecasted radar from 18Z run of HRRR model.

Don't focus on details (including track) but can get a sense of the timing, structure, banding.

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





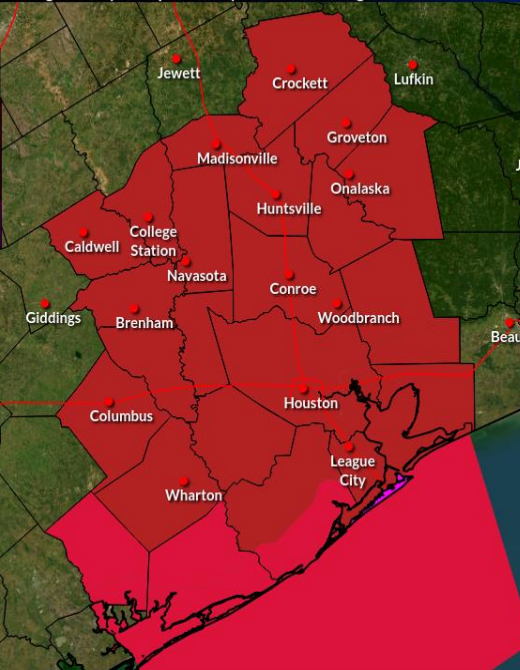
Watches and Warnings

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 10:33 AM CDT



HURRICANE WARNING

Sustained winds of 75 - 85+ mph with higher gusts are expected tonight into Monday.

TROPICAL STORM WARNING

Sustained winds of 39 to 73 mph with higher gusts are expected tonight into Monday.

HURRICANE WATCH

Sustained winds of 74 - 85 mph are possible.

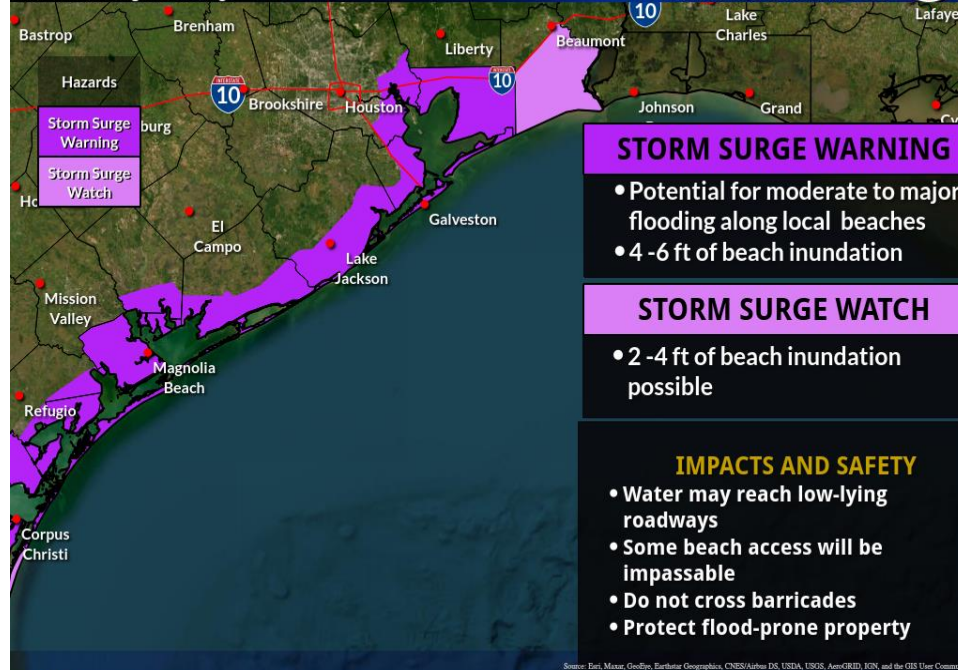
- Warnings and Watches are in effect through Monday.
- Be prepared and follow local official's guidance.

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

Tropical Storm Beryl - Hazards

Life-Threatening Storm Surge

Weather Forecast Office
Houston/Galveston TX
Issued Jul 06, 2024 10:29 PM CDT



STORM SURGE WARNING

- Potential for moderate to major flooding along local beaches
- 4 - 6 ft of beach inundation

STORM SURGE WATCH

- 2 - 4 ft of beach inundation possible

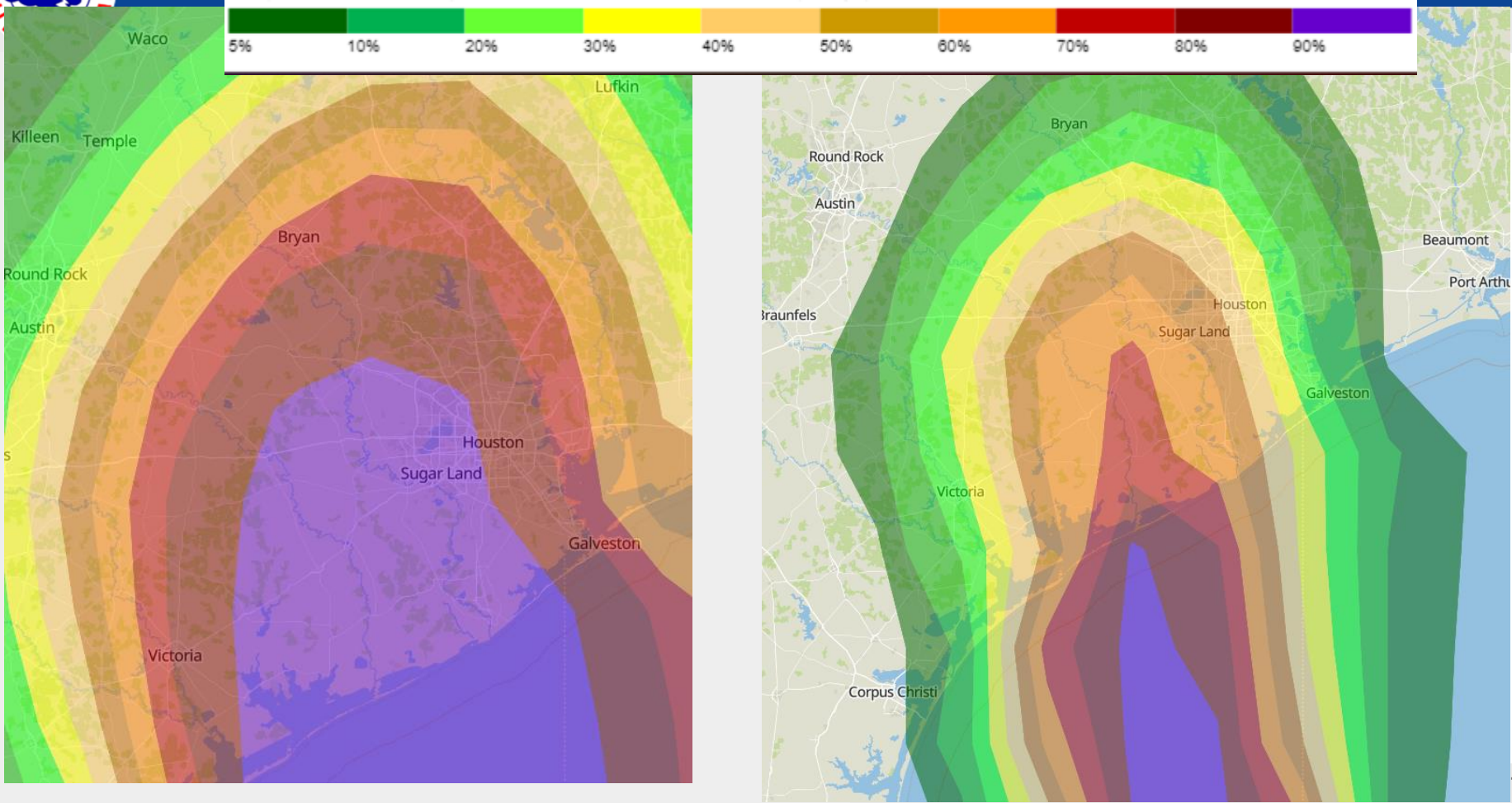
IMPACTS AND SAFETY

- Water may reach low-lying roadways
- Some beach access will be impassable
- Do not cross barricades
- Protect flood-prone property

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



Wind Speed Point Probabilities: Sustained >39 mph left, >58 mph right



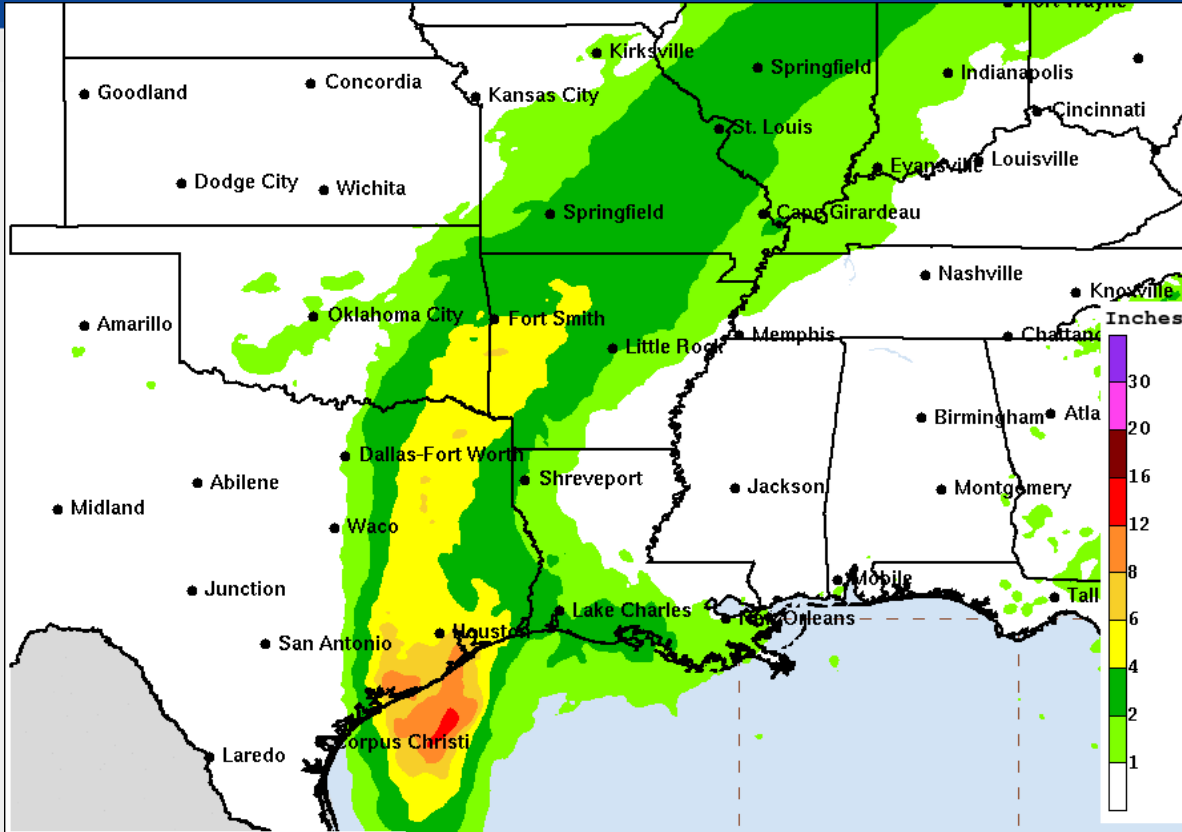


Rainfall Forecast

Storm total rainfall amounts of 5 to 10 inches with localized higher amounts expected. Beginning today (some bands already ongoing).

Period of heaviest rain tonight and Monday.

The heaviest band will be generally near or right of the center track.



Tropical Storm Beryl
 Day 1-3 Rainfall Forecast (inches)
 Created 3:40 PM CDT Sun Jul 7 2024
 Valid 1:00 PM CDT Sun Jul 7 2024
 through 7:00 PM CDT Wed Jul 10 2024
 DOC/NOAA/NWS/NCEP/WPC

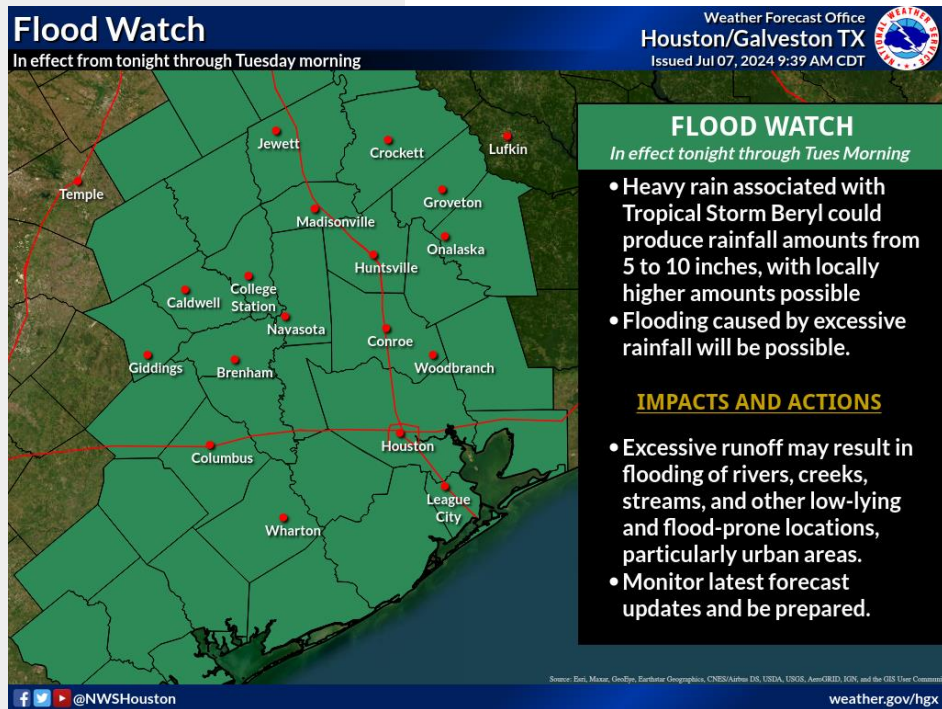
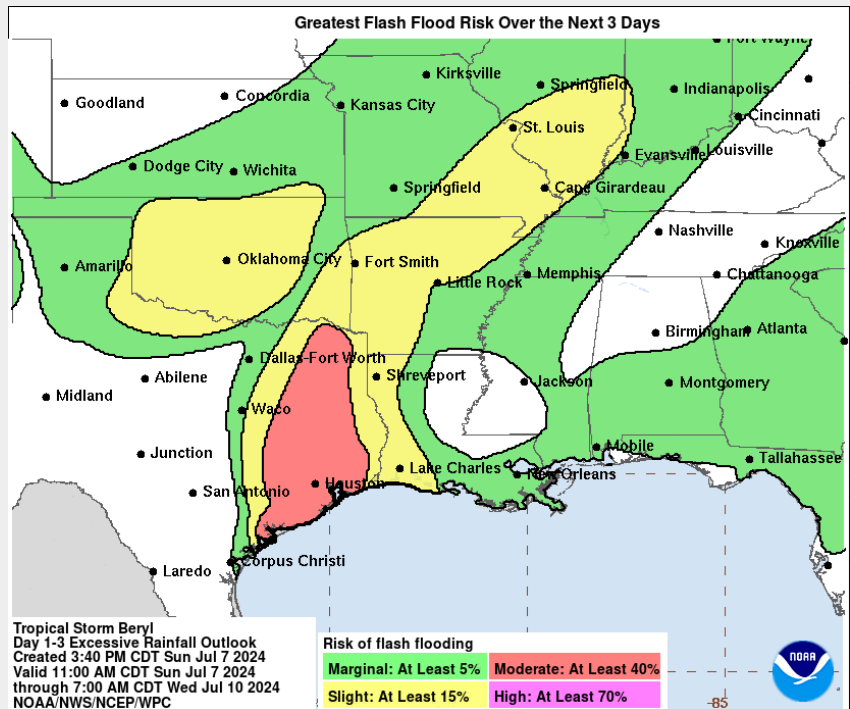
Local point maximum rainfall may be higher than shown.
 See the NHC public advisories for the latest tropical cyclone information.





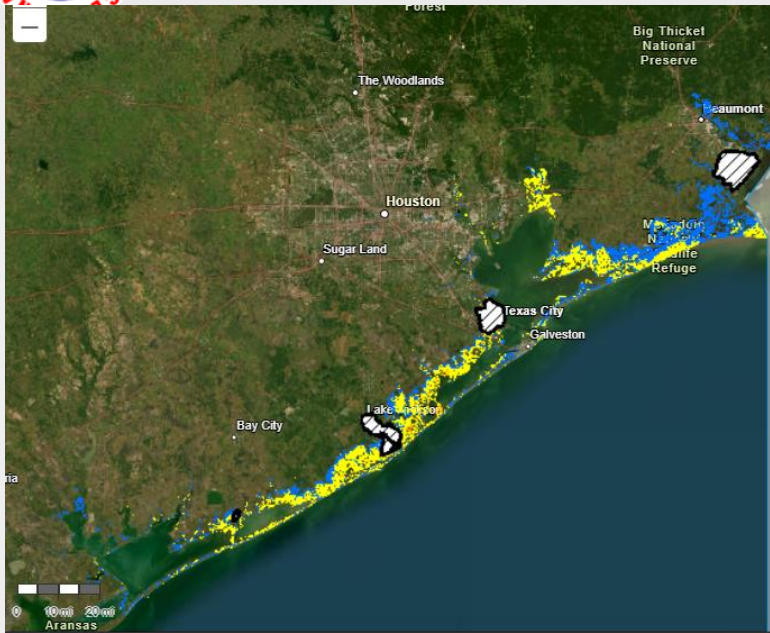
Excessive Rainfall Outlook/Flood Watch

Main heavy rain/flash flood threat will be tonight into Tuesday for the local area. Risk rated as Moderate for western counties which will be closer to the track, highest rainfall.





Potential Storm Surge Flooding, Peak Surge Above Ground

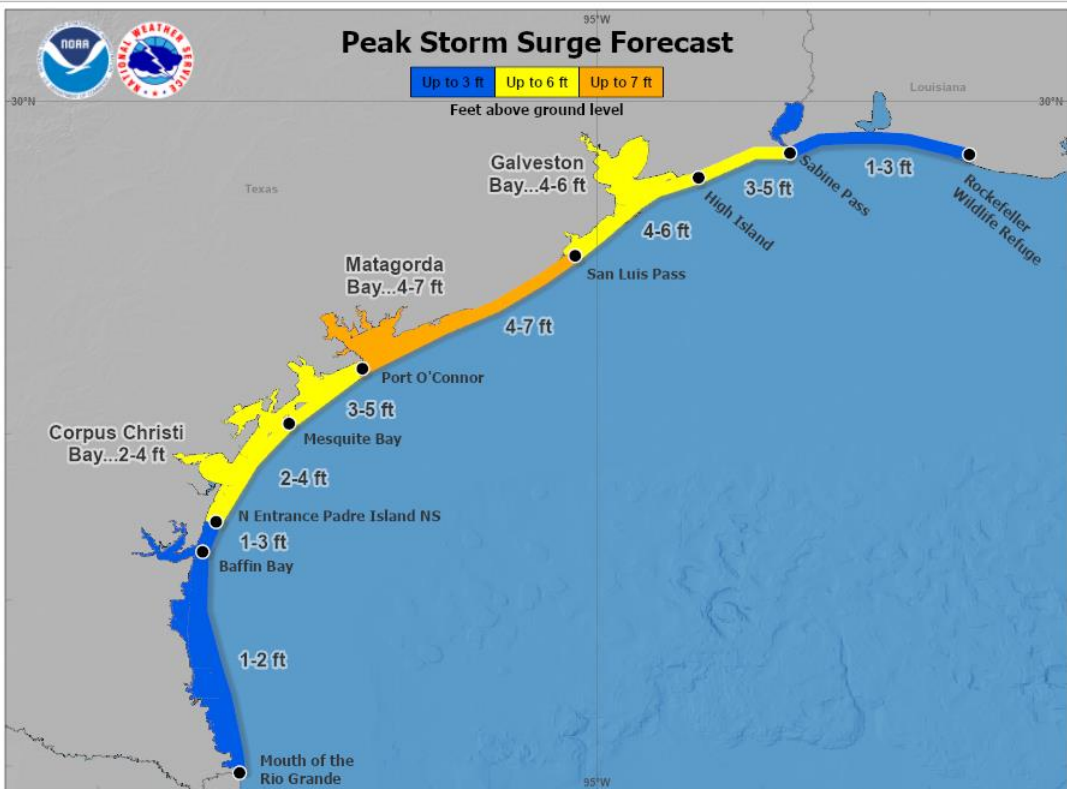


Potential Storm Surge Flooding*

- 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

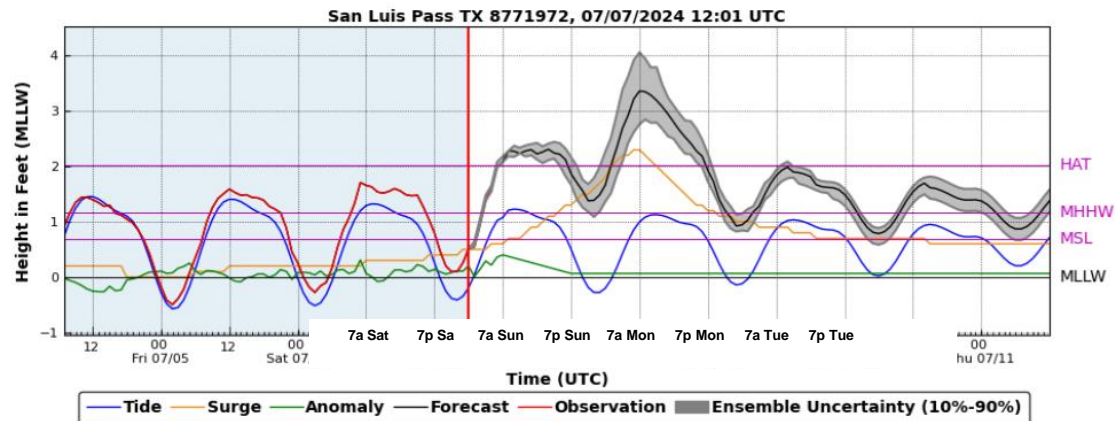
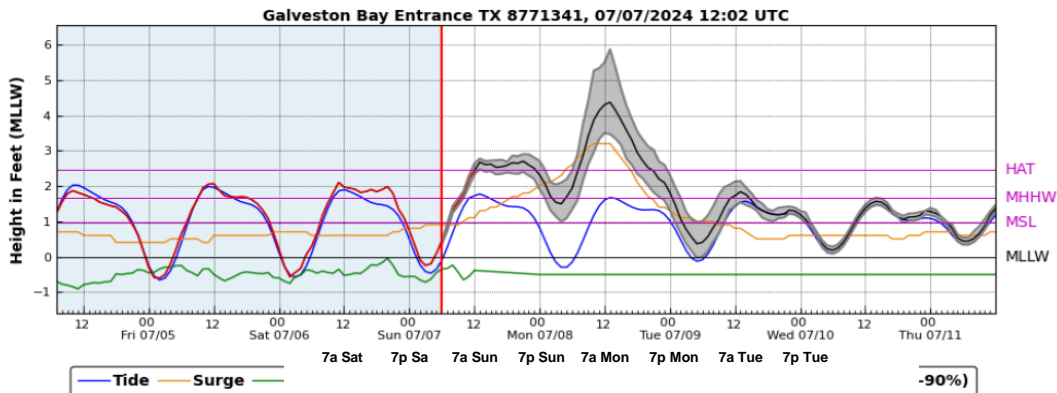


Tropical Storm Beryl
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NWS National Hurricane Center

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.



Tide Forecast – Probabilistic Model (PETSS)

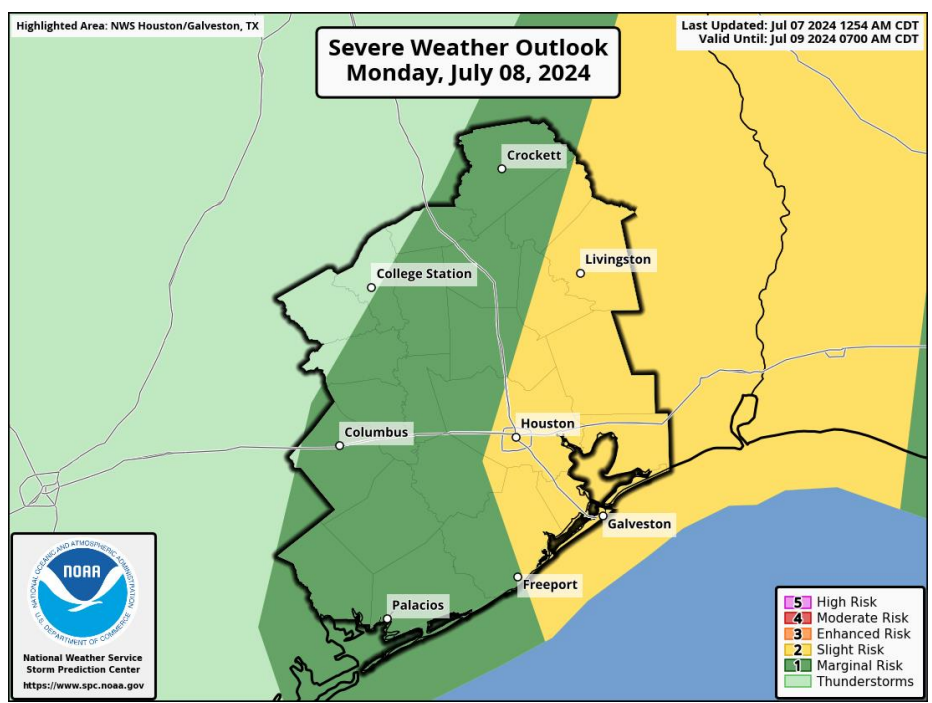
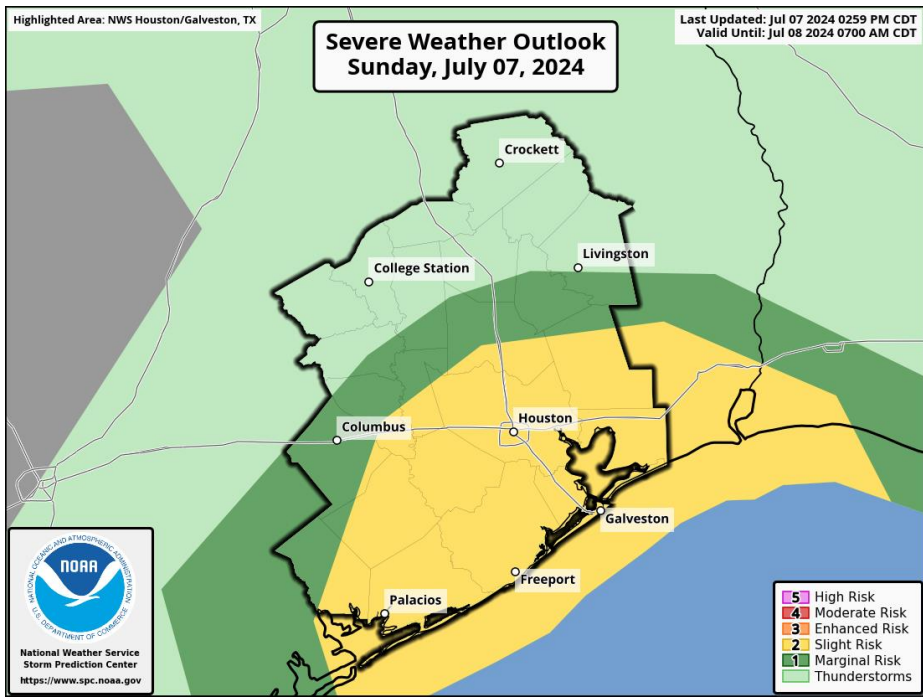


- Water levels shown are relative to MLLW. Note the values up to 6 feet above MLLW around Galveston Bay.
- Elevated tides are expected today, but the highest water levels are expected on Monday.
- Graphics are meant to show timing. For peak values refer to National Hurricane Center guidance which is superior for this type of storm.



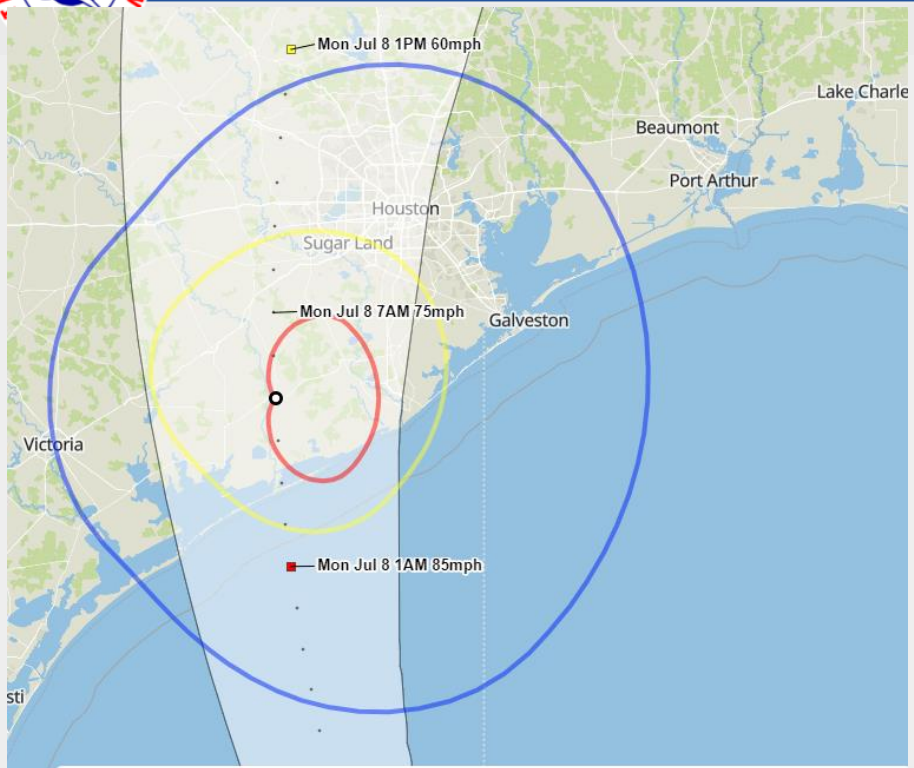
Tornado Risk

Brief tornadoes possible in spiral bands this afternoon through Monday.





Wind Radii, Timing, Cone

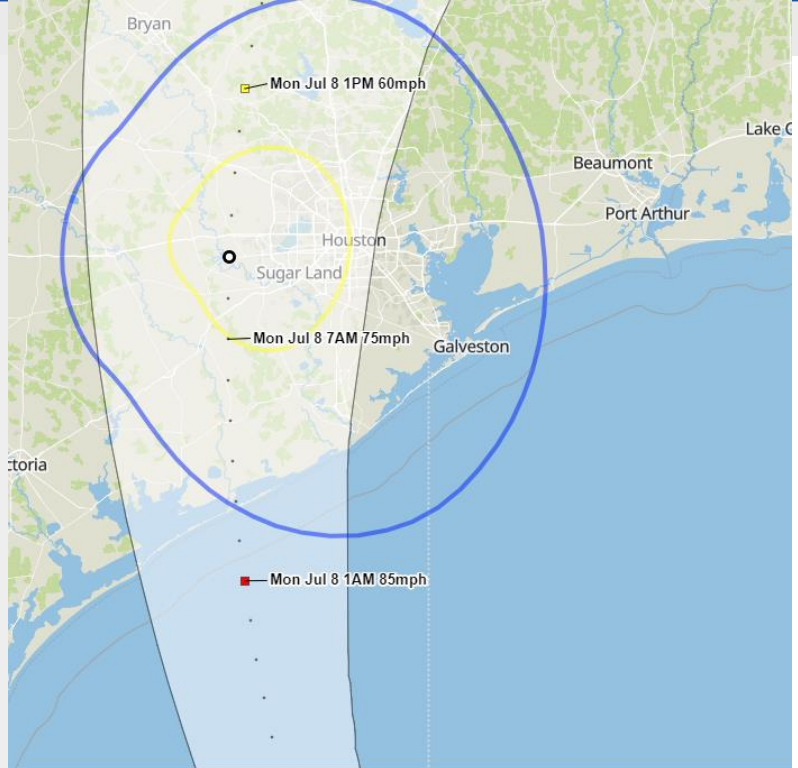


TROPICAL STORM BERYL - Monday, July 8, 2024 5AM CDT (Fcst Hr 13) Advisory #37

Center Location: 29.0 N 96.0 W Maximum Sustained Winds: 80 mph (Cat 1) Movement: 12 mph N

Wind Field: at current location Potential Track Area: 1-3 day 4-5 day

Sustained Wind Speed: tropical storm \geq 34kt/39mph strong tropical storm \geq 50kt/58mph hurricane \geq 64kt/74mph



TROPICAL STORM BERYL - Monday, July 8, 2024 9AM CDT (Fcst Hr 17) Advisory #37

Center Location: 29.7 N 96.0 W Maximum Sustained Winds: 70 mph Movement: 12 mph N

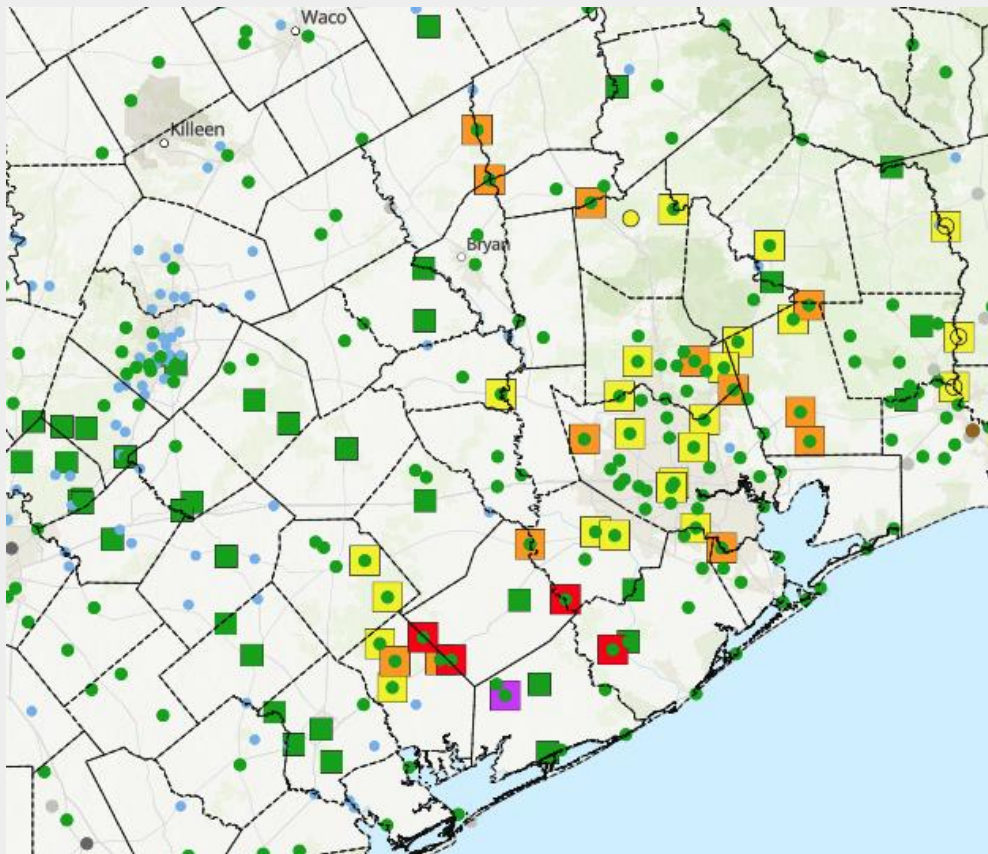
Wind Field: at current location Potential Track Area: 1-3 day 4-5 day

Sustained Wind Speed: tropical storm \geq 34kt/39mph strong tropical storm \geq 50kt/58mph hurricane \geq 64kt/74mph



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.

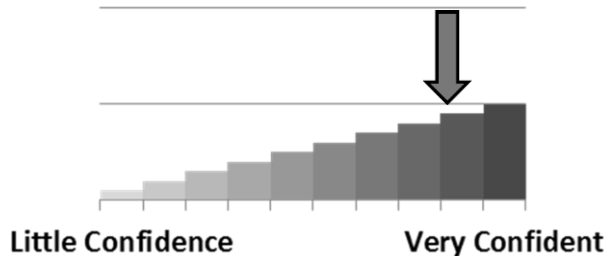
Need to monitor tributaries of Brazos and Trinity Rivers, as well as San Jacinto River/Houston Bayous for any training.



Key Take-Aways

- Very few changes today. Beryl remains a tropical storm, still could strengthen to a hurricane before 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.
- Looks to be a very stormy night and Monday morning with potential for damaging winds, flooding rains and storm surge flooding near the coast. Improving conditions by Monday 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 Briefing:
July 7th 10:30 PM CDT
Method: Webinar and Email



Web: weather.gov/houston



Phone: 281-337-5074



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



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