



Tropical Storm Beryl Briefing

Will Focus on Changes from Earlier Briefings

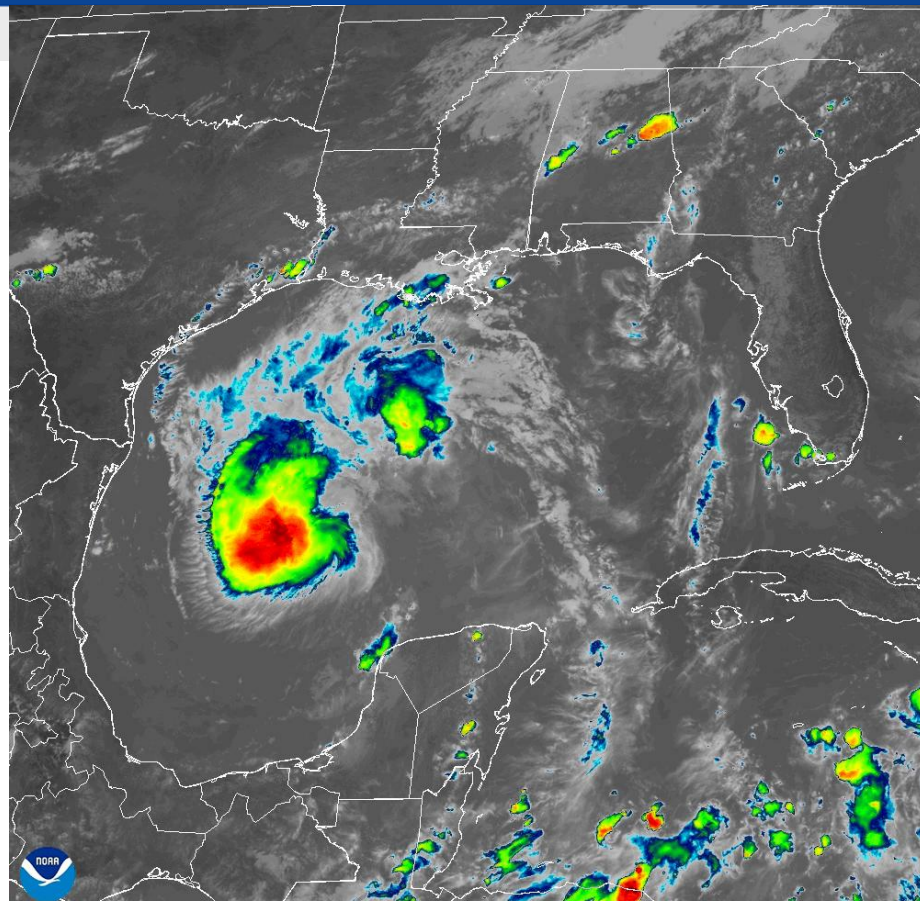
5 pm Saturday, July 6th, 2024

Dan Reilly, NWS Houston/Galveston



Situation Overview

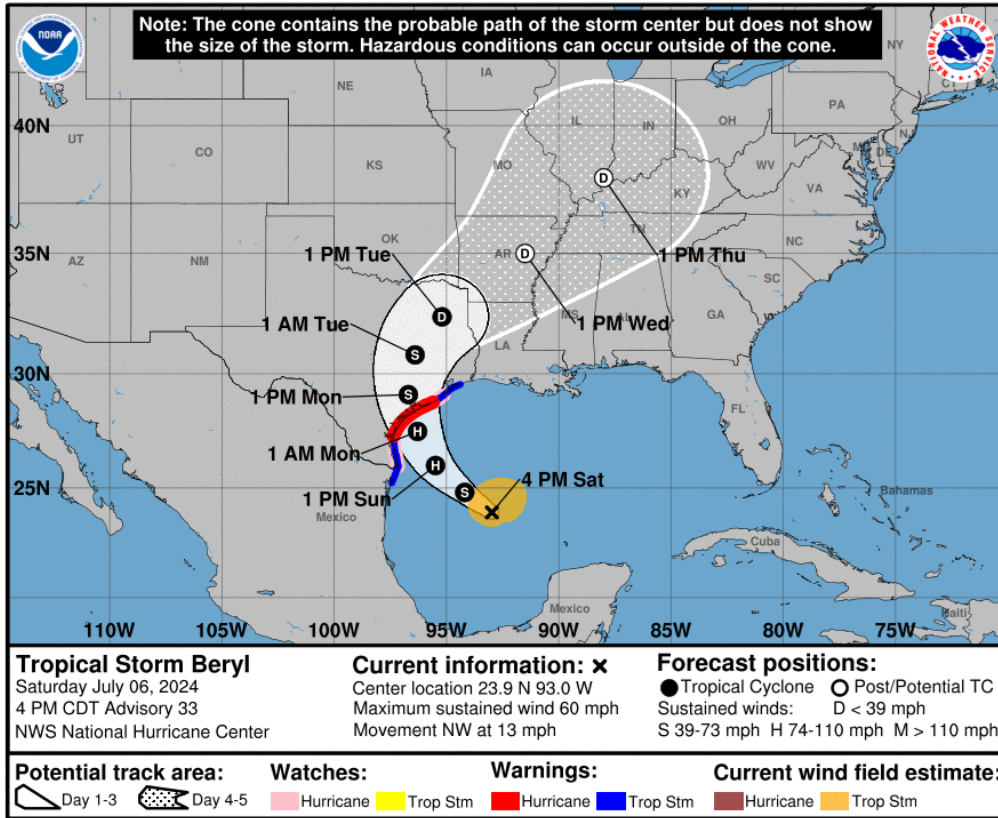
- Tropical Storm Beryl continues to track NW across the Gulf toward the Texas coast. Currently a 60 mph tropical storm, Beryl is forecast to make landfall as a 85 mph hurricane (Cat 1).
- Some watches have been upgraded to warnings to capture areas most at risk.
- Flood Watch has been issued for portions of the area for late Sunday night through Tuesday.
- Rainfall forecast amounts unchanged: 5 to 10 inches are expected with local amounts up to 15 inches where the heaviest rainfall occurs (mainly our western counties).
- Rip currents, elevated tides and seas are likely across all coastal areas even outside watch areas.
- Possibly a few tornadoes in bands starting Sunday afternoon.



06 Jul 2024 17:51Z - NOAA/NESDIS/STAR - GOES-East - Band 11 - GM



Tropical Storm Beryl



- Very little change in track forecast.
- Note the Hurricane Warnings (red) from Baffin Bay to Sargent.
- TS Warnings from Sargent to High Island.
- Hurricane Watch and TS Warning together from Sargent to San Luis Pass (shown in pink).
- Confidence in track continues to increase but changes could still occur. Stay tuned!



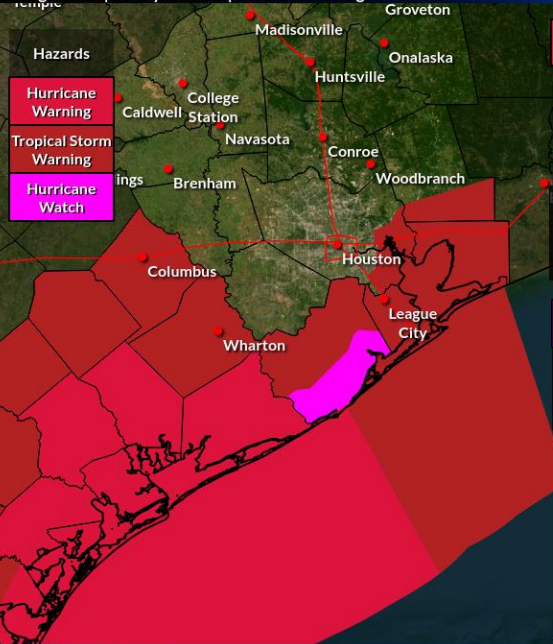
Watches and Warnings

Maps Showing Various Warnings and Watches: Warned Areas Denote the Greatest Threat for Life Threatening Conditions

Tropical Storm Beryl - Hazards

Strong Winds | Heavy Rainfall | Coastal Flooding

Weather Forecast Office
Houston/Galveston TX
Issued Jul 06, 2024 4:43 PM CDT



HURRICANE WARNING

Sustained winds of 75 - 85 mph are expected within 36 hrs or less.

TROPICAL STORM WARNING

Sustained winds of 39 to 73 mph are expected within 36 hrs or less.

HURRICANE WATCH

Sustained winds of 74 - 85 mph are possible.

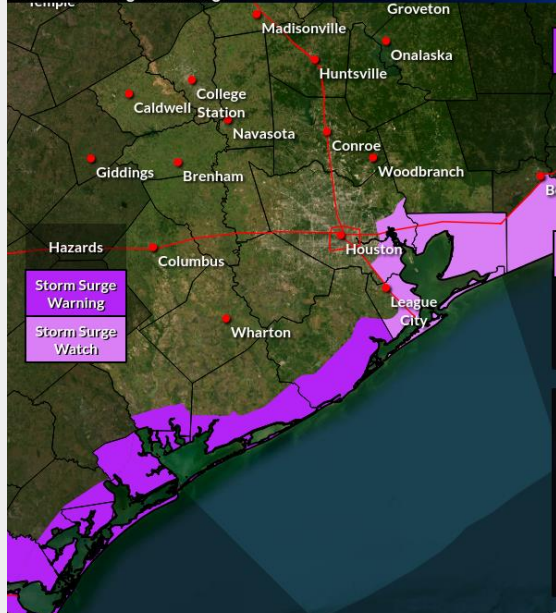
- Warnings and Watches are in effect through early next week.
- Be prepared and follow local official's guidance.

Source: Earth, Meteor, GeoByte, 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 4:48 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

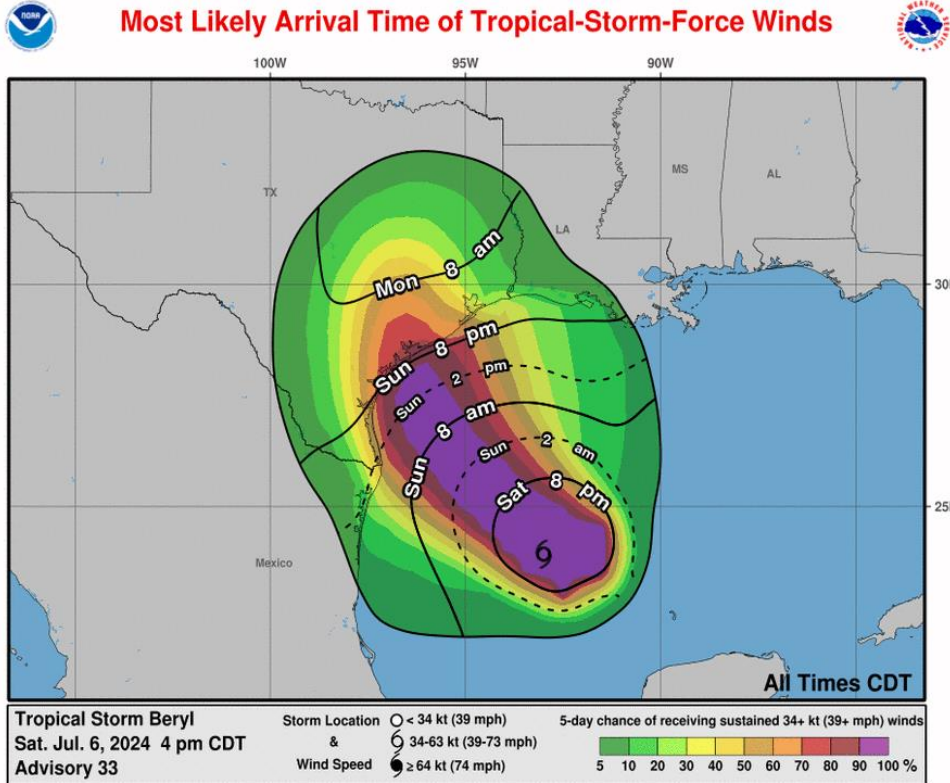
IMPACTS AND SAFETY

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



Most Likely Time of Arrival

Hurricane Beryl



- The most likely time of arrival of Tropical Storm Force Winds early Sunday night.
- Higher point probabilities near and around our SW Counties/Matagorda Bay, lesser probabilities Galveston Bay but higher than indicated earlier as NHC has increased the size of the storm on the NE side.

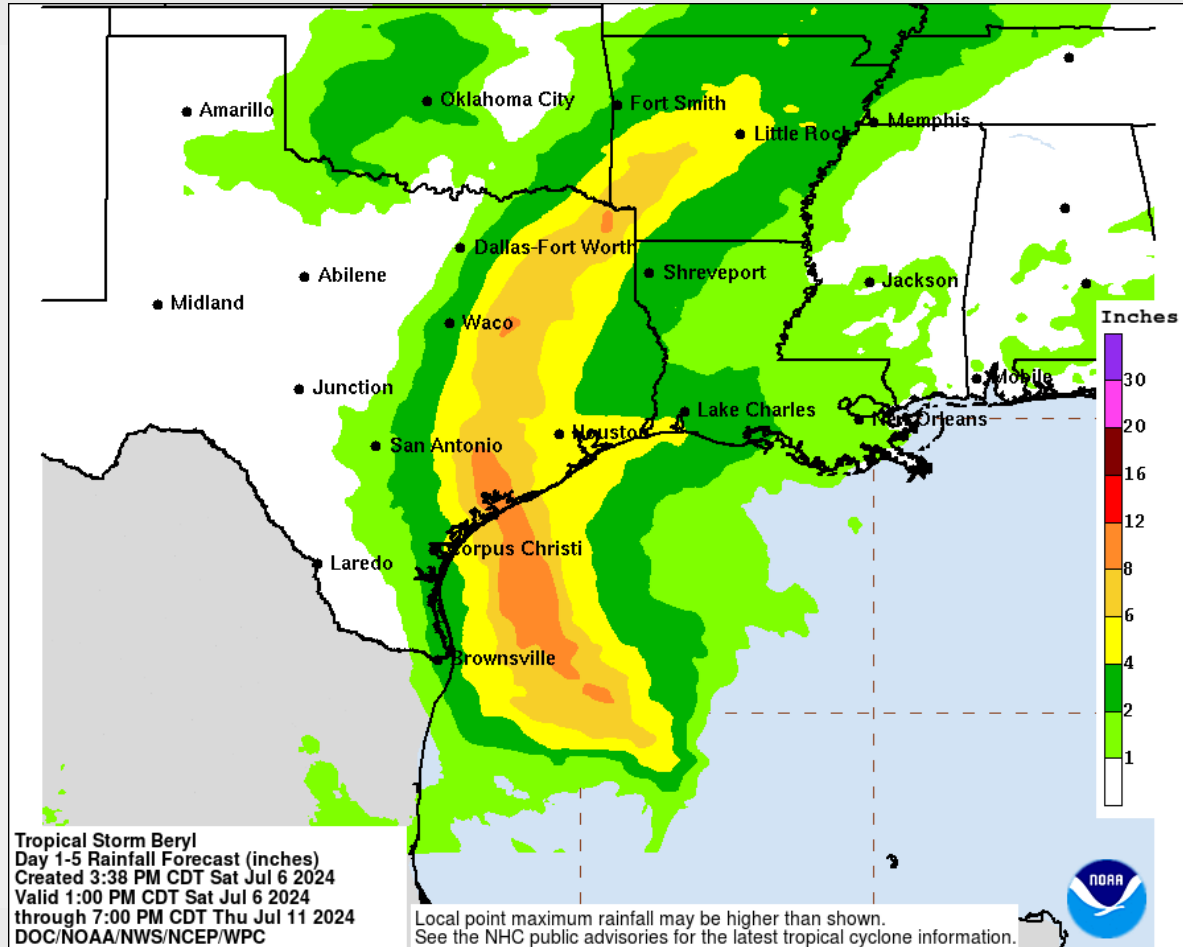


Rainfall Forecast

Storm total rainfall amounts of 5 to 10 inches with localized higher amounts expected. Beginning late Sunday.

Period of heaviest rain Sunday Night into Tuesday.

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

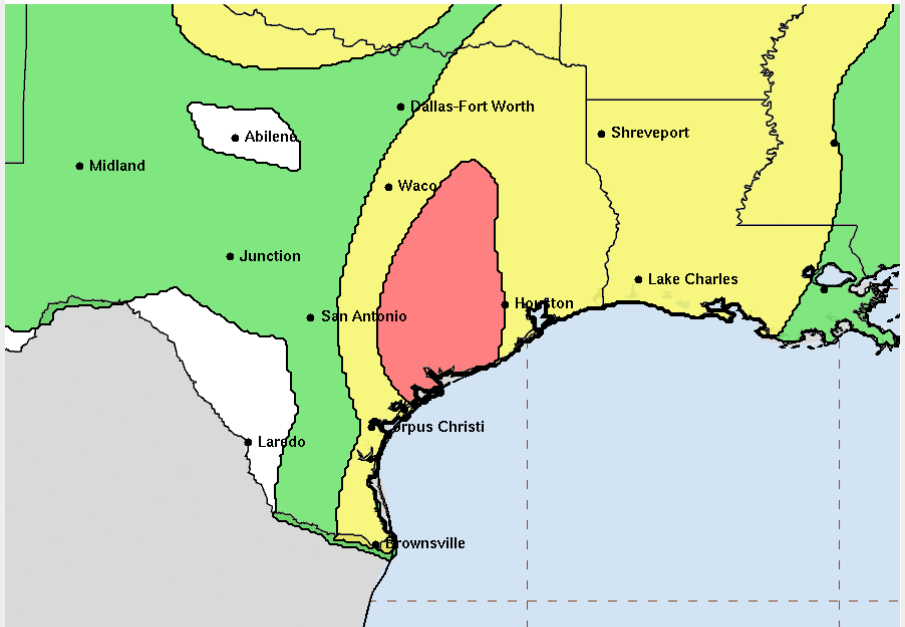




Excessive Rainfall Outlook/Flood Watch

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

Greatest Flash Flood Risk Over the Next 5 Days

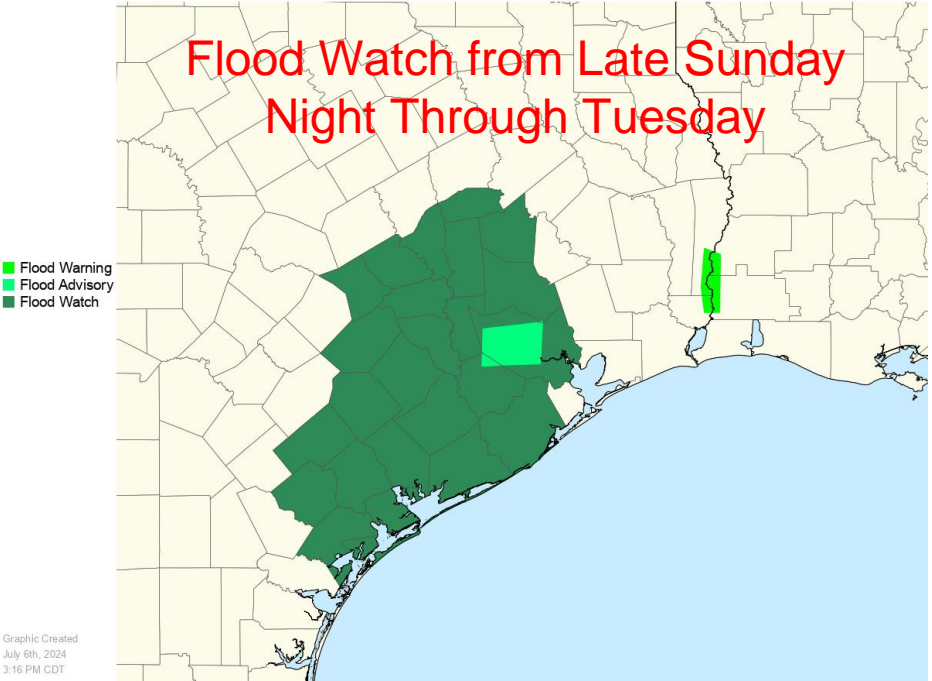


Tropical Storm Beryl
Day 1-5 Excessive Rainfall Outlook
Created 3:49 PM CDT Sat Jul 6 2024
Valid 11:00 AM CDT Sat Jul 6 2024
through 7:00 AM CDT Thu Jul 11 2024
NOAA/NWS/NCEP/WPC

Risk of flash flooding	
Marginal: At Least 5%	Moderate: At Least 40%
Slight: At Least 15%	High: At Least 70%



Flood Watches Warnings and Advisories



Graphic Created
July 6th, 2024
3:16 PM CDT



Storm Surge Watch / Warning

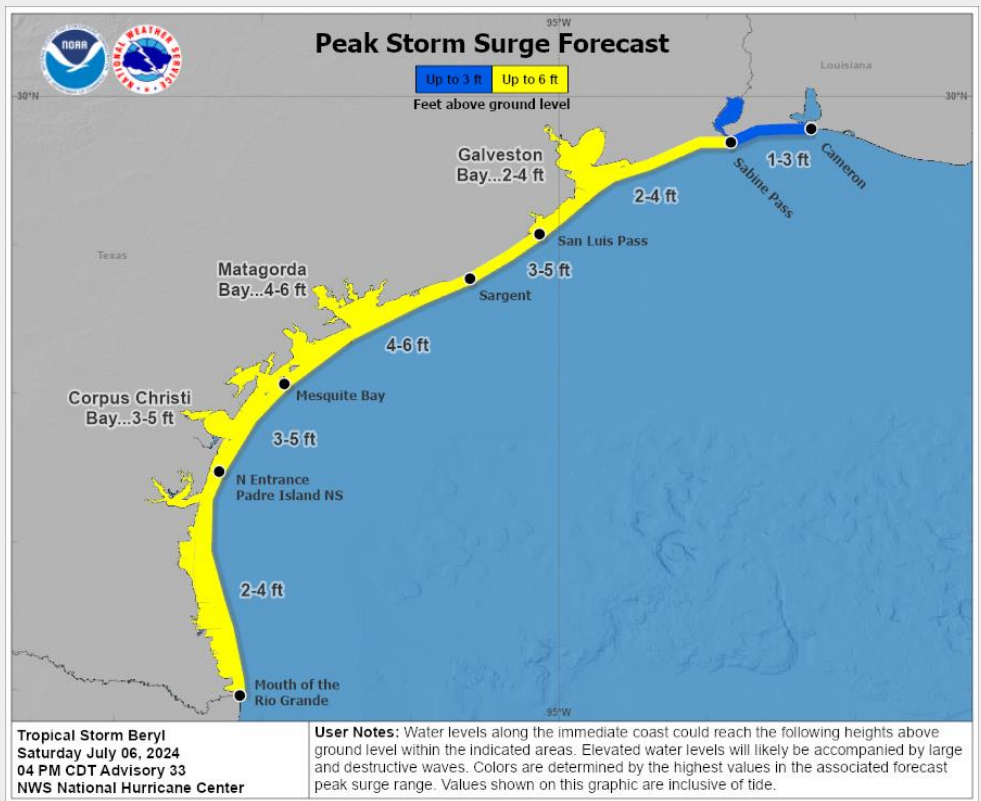


- Storm Surge Warning along Texas Coast up to San Luis Pass including Matagorda Bay.
- Storm Surge Watch in effect from San Luis Pass to Sabine Pass including Galveston Bay.



Peak Surge (Height Above Normally Dry Ground)

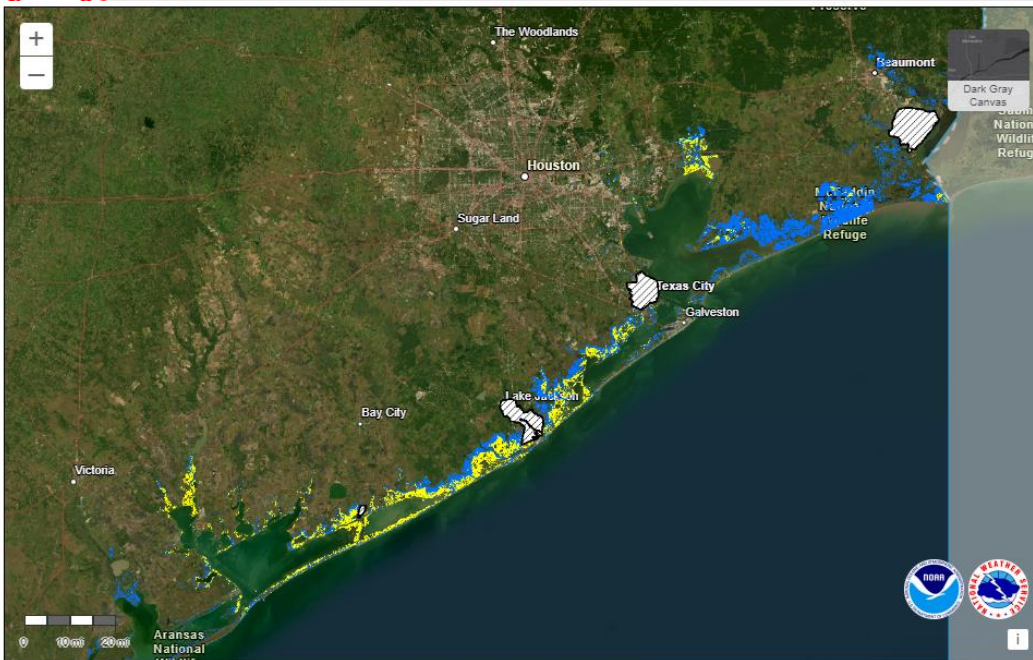
Beryl



Peak surge 4 to 6 feet above ground
 Mesquite Bay to Sargent, 3 to 5 feet
 Sargent to San Luis Pass, 2 to 4 feet
 San Luis Pass to Sabine Pass
 including Galveston Bay.



Potential Storm Surge Flooding



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:

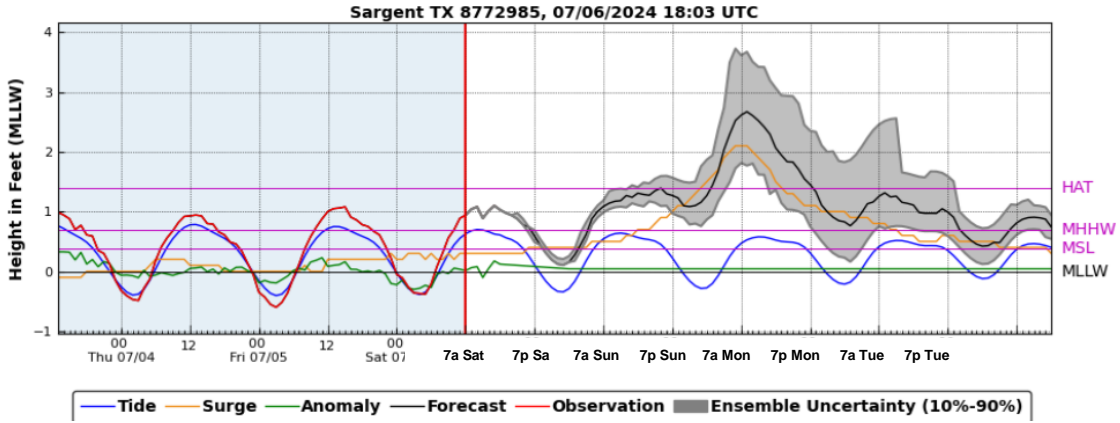
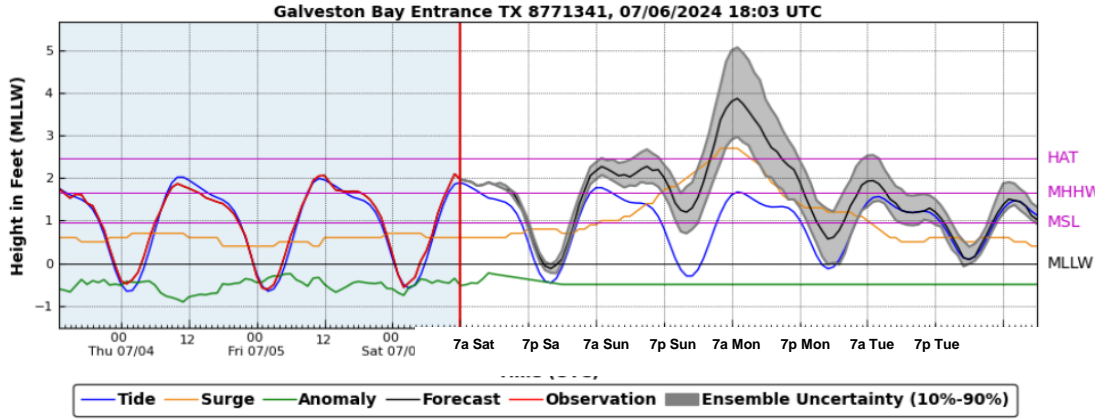
Inundation Layer Only Inundation with Intertidal Layer

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

- Map shows areas, depth of water that may occur (surge potential, reasonable worst case).
- Can be viewed at hurricanes.gov and, for EMCs, using Hurrevac.
- Blue shaded 1 to 3 feet above ground level, yellow >3 feet above ground level
- Highest water level values on Monday



Tide Forecast – Probabilistic Model (PETSS)



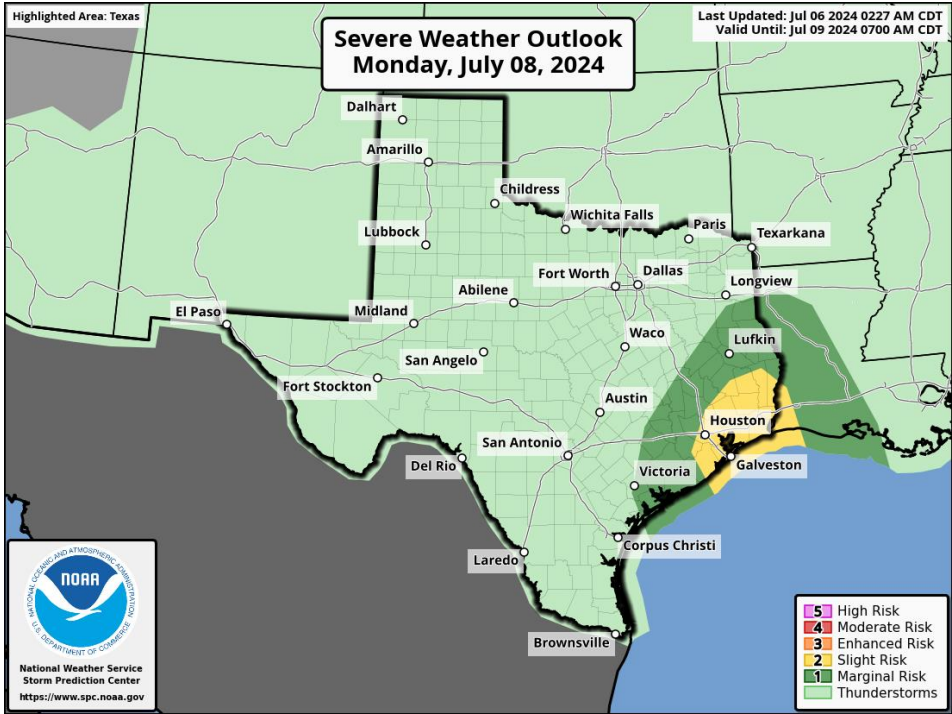
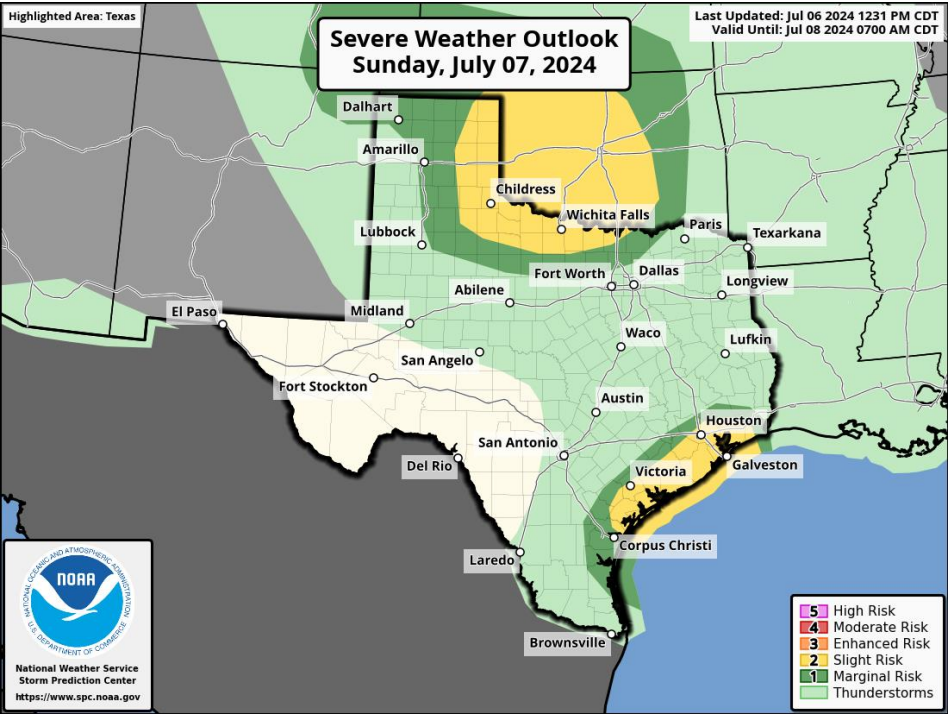
- Water levels shown are relative to MLLW
- Highest water levels Sunday night, **Monday** and Monday night.
- Graphics are meant to show timing. For peak values refer to National Hurricane Center guidance which is superior for this type of storm.

Will be highly dependent on the track, intensity and size of the wind field.



Tornado Chances

Brief tornadoes possible in spiral bands Sunday and Monday. Maps show risk areas both days.



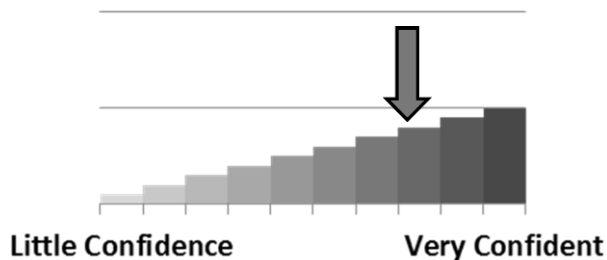


Key Take-Aways

Hurricane Beryl

- Track forecast for Beryl has been more consistent the past 18 hours, focusing on a landfall near or just south of Matagorda Bay. Confidence in track increasing.
- Beryl is a tropical storm now, but forecast to strengthen to a category one hurricane before landfall. Best practice is to plan for one category higher (cat 2)
- A Flood Watch has been added for portions of the area for Sunday Night through Tuesday. Some watches have been upgraded to warnings as described on previous slides to highlight areas of greatest risk, concern.
- Hardest hit areas look to be Jackson and Matagorda Counties with hurricane force winds and damaging surge likely there. Could be impacts farther east and inland as described by the various watches and warnings.
- Isolated tornadoes will be possible starting Sunday afternoon.

Forecast Confidence



Confidence increasing in track and intensity forecasts but changes may still occur. Small shifts could mean significant changes to forecast. Stay tuned for updates!



Local Resources

Hurricane Beryl

Next Briefing:
July 6th, 11:00 PM CDT
Method: Email



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