



The Official Southeast TX

# HURRICANE & SEVERE WEATHER GUIDE

Hurricane Hanna



Hurricane Laura

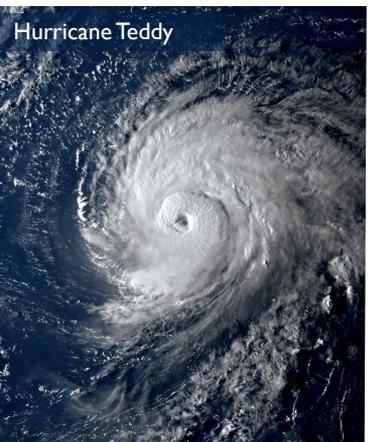


Hurricane Marco



THE DIFFERENT FACES OF THE SAME HURRICANE SEASON

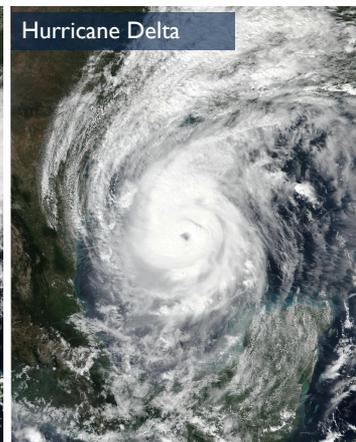
Hurricane Teddy



Tropical Storm Beta



Hurricane Delta



**STAY PREPARED.  
IT'S A LONG SEASON!**



WEATHER.GOV/HOUSTON

# A Letter to Residents

Dear Southeast Texas Residents,

The 2024 Hurricane Season is forecast to be be busy with the forecast number of storms expected to be well above average in the Atlantic. Now is the time to prepare for the hurricane season! This guide is designed to help you do just that with information pertinent to Southeast Texas, including the Houston/Galveston areas. Inside you will find checklists describing what actions to take before, during and after the storm. In addition. there are maps showing evacuation zones and routes to take when leaving at risk areas. You'll find information on what to include in your supply kits, which you will need whether you are evacuating or staying.

Of course this region is prone to severe weather throughout the year, not just during hurricane season. For this reason, we include plenty of preparedness and safety tips for other hazards including flooding, tornadoes, large hail, heat and rip currents. For all of these topics we include links where you can find more information, and also links to sites to stay informed on the latest activity in the tropics. This includes links to the local NWS forecast office and the National Hurricane Center, on the web and through social media.

Our job at the NWS is to keep you informed on what to expect with any upcoming severe weather so you can make informed decisions to keep you and your family safe. We think you will find the information we push out via web and social media useful. This includes webinars we hold for emergency managers, elected officials and other core partners which we record and share with the public. We encourage everyone to review the materials in this guide, get prepared and stay informed.

We wish everyone a safe hurricane season.

*Dan Reilly*

Dan Reilly  
Warning Coordination Meteorologist  
National Weather Service  
Houston/Galveston,, TX



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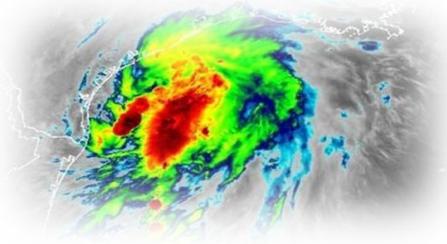
# Hurricane Names

Have you ever wondered how a hurricane gets its name? The National Hurricane Center actually does not name tropical storms and hurricanes. Instead, the names are established by the World Meteorological Organization and then rotated every six years. If a storm is deadly or costly, the name will be retired. If all names in a season are used up, then a supplemental list of new names will be used instead of the Greek alphabet.

2024	2025	2026	2027	2028
Alberto	Andrea	Arthur	Ana	Alex
Beryl	Barry	Bertha	Bill	Bonnie
Chris	Chantal	Cristobal	Claudette	Colin
Debby	Dexter	Dolly	Danny	Danielle
Ernesto	Erin	Edouard	Elsa	Earl
Francine	Fernand	Fay	Fred	Farrah
Gordon	Gabrielle	Gonzalo	Grace	Gaston
Helene	Humberto	Hanna	Henri	Hermine
Isaac	Imelda	Isaias	Imani	Idris
Joyce	Jerry	Josephine	Julian	Julia
Kirk	Karen	Kyle	Kate	Karl
Leslie	Lorenzo	Leah	Larry	Lisa
Milton	Melissa	Marco	Mindy	Martin
Nadine	Nestor	Nana	Nicholas	Nicole
Oscar	Olga	Omar	Odette	Owen
Patty	Pablo	Paulette	Peter	Paula
Rafael	Rebekah	Rene	Rose	Richard
Sara	Sebastien	Sally	Sam	Shary
Tony	Tanya	Teddy	Teresa	Tobias
Valerie	Van	Vicky	Victor	Virgine
William	Wendy	Wilfred	Wanda	Walter

For a printable hurricane tracking map, please click on this [link](#).

# Are You Ready?



Take this assessment to find out if you're ready for this year's hurricane season!

	Yes	No
Do you know where you and your family would go if you have to evacuate?	<input type="checkbox"/>	<input type="checkbox"/>
Do you have emergency plans for your pet(s)? Most shelters do not allow pets and many animal clinics will close if they are also in harm's way.	<input type="checkbox"/>	<input type="checkbox"/>
If you take medicine, do you have a 7-day supply of medications or prescription drugs?	<input type="checkbox"/>	<input type="checkbox"/>
Do you have flashlights? Don't forget batteries!	<input type="checkbox"/>	<input type="checkbox"/>
Do you have at least a 3-day supply of drinking water and basic, non-perishable foods available? Allow one gallon of water per person per day.	<input type="checkbox"/>	<input type="checkbox"/>
Will you have cash available if power outages disrupt normal services?	<input type="checkbox"/>	<input type="checkbox"/>
Do you already have plywood or other materials to protect your windows?	<input type="checkbox"/>	<input type="checkbox"/>
Is your insurance policy updated for new valuables or housing improvements? Consider taking photos or videos of your belongings.	<input type="checkbox"/>	<input type="checkbox"/>
Do you have your family's personal records and documents stored in a waterproof container?	<input type="checkbox"/>	<input type="checkbox"/>
Do you have a generator? Even a tropical storm can disrupt power to your home for several days.	<input type="checkbox"/>	<input type="checkbox"/>

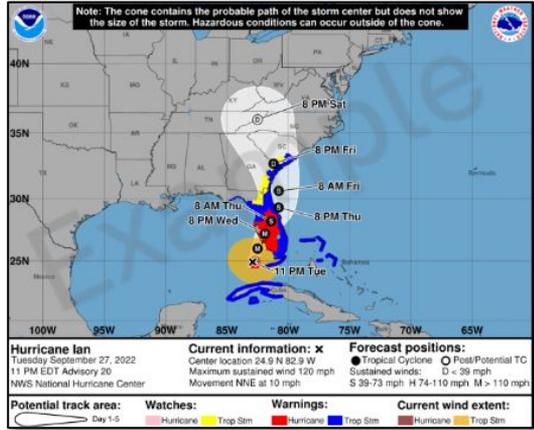
How many YES responses do you have?

- |           |   |
|-----------|---|
| 8 or more | Very good! You're more prepared than most people!                           |
| 5 to 7    | Not bad. Look into how you can improve this.                                |
| 4 or less | Let's get serious about preparing now! Don't wait until the storm develops. |

# New Experimental NHC Cone Graphic Coming Soon!

A new look is coming to the traditional National Hurricane Center's 3 and 5 day cone graphic later on this hurricane season. This new graphic will become available on or around August 15, 2024.

You may be asking yourself, what's changing? This experimental graphic will now include inland U.S. tropical storm and hurricane watches and warnings. The goal is to better relay the wind hazard risk. Keep in mind that there may be times during hurricane season that this graphic will not be immediately available with each advisory update as it will take some time to compile all of the watch and warning information.

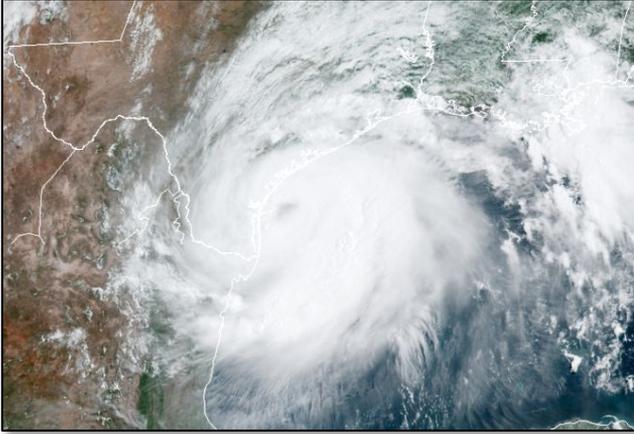


The operational cone graphic will remain unchanged in 2024 other than the annual minor adjustment of the cone size based on recent NHC track forecast errors. The operational cone graphic has always depicted coastal tropical storm and hurricane watches and warnings along with the track cone itself.

Once this graphic is published, users will be asked to provide feedback to the NHC. This

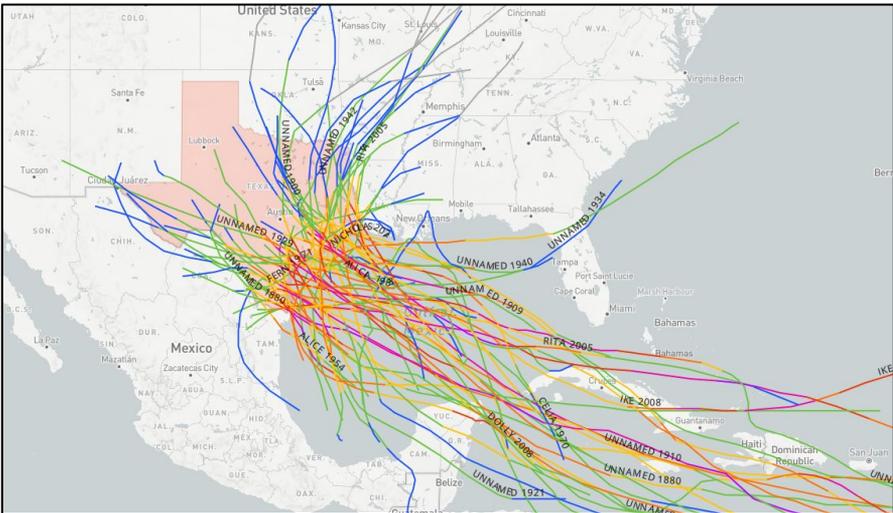
feedback will help the NHC make any changes to the graphic before it is made operational. Hopefully you all find this experimental graphic extremely beneficial as we navigate through the 2024 hurricane season.

# About Hurricanes



Above: High resolution satellite image of Hurricane Hanna approaching the Middle Texas Coast on July 25, 2020. Image--NOAA

Hurricanes form over warm ocean waters, like those found in the Gulf of Mexico. The hurricane season starts June 1 and ends November 30. The peak threat for the Texas coast exists from August through September. However, hurricanes can and have struck the Texas coast during every month of the hurricane season except November. October storms are fairly rare with Hurricane Jerry's landfall on Oct 15, 1989 being the latest on record for Texas.



Above: Historical perspective of hurricane landfalls in the state of Texas since 1851. 62 hurricanes have impacted the Texas Coast during this time, 22 of these were major.

# Hurricane Surf and Rip Currents

## Hurricane Surf



- Rip currents are the leading water hazard for all beach goers and result in over 100 drownings ever year in the United States.
- Hurricane surf is especially dangerous because the strength and size of rip currents are related to the size of the surf and wave periods.
- Along the Middle Texas Coast in 2020, Hurricane Hanna and Tropical Storm Beta contributed to two fatalities because of rip currents.
- Waves, rip currents, can be occur on Texas beaches even from a distant storm.
- Thus, when there is a tropical storm or hurricane in the Gulf, it's advised to stay out of the water!

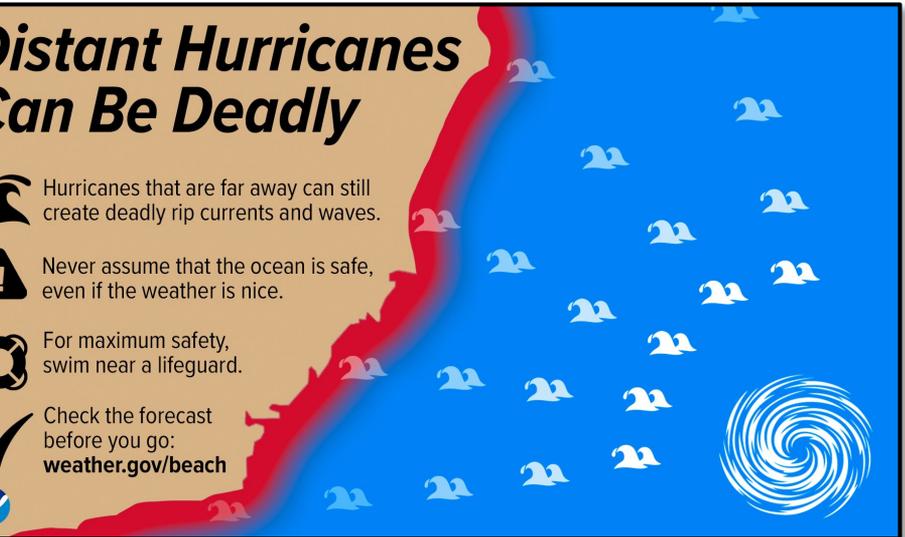
## *Distant Hurricanes Can Be Deadly*

 Hurricanes that are far away can still create deadly rip currents and waves.

 Never assume that the ocean is safe, even if the weather is nice.

 For maximum safety, swim near a lifeguard.

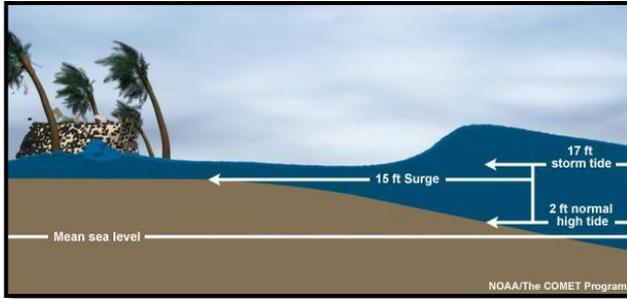
 Check the forecast before you go:  
[weather.gov/beach](https://www.weather.gov/beach)



[Rip Current Safety Page](#)

## What is Storm Surge?

Storm surge is an abnormal rise of water generated by a storm, over and above the predicted astronomical tides. This rise in water level can cause extreme flooding in coastal areas resulting in storm tides reaching 20 feet or more in some cases. Along the Texas coast, these flood waters can penetrate far inland depending on the elevation of the land. If the storm tide is greater than the land elevation (even if well inland) then storm surge flooding will be possible.



## Storm Surge Can Be Deadly! Here are 6 Tips to be Ready

1. Storm surge flooding is often the greatest threat to life and property from a hurricane. It poses a significant threat for drowning. A mere six inches of fast-moving flood water can knock over an adult. It takes only two feet of rushing water to carry away most vehicles.
2. Storm surge can cause water levels to rise quickly and flood large areas in just minutes, and you could be left with no time to take action if you haven't already evacuated as instructed.
3. Storm surge is dependent on more than the Saffir-Simpson Hurricane Wind Scale. The size of the storm and speed and direction of storm motion are also big factors. Any wind category can cause life-threatening storm surge.
4. Many Gulf Coast areas are vulnerable to storm surge including areas many miles inland from the coastline depending on elevation of the coastal plain. Find out today if you live in a storm surge zone (see page 30 in this guide).
5. Storm surge can occur before, during and after the center of the storm passes through an area, and can sometimes cutoff evacuation routes. The water can also rise well in advance of the coming storm, in some cases 36 hours or greater. When an evacuation is ordered, do not wait until the last minute to leave.
6. During the peak of a storm surge event, it is unlikely that emergency responders will be able to reach you if you are in danger.

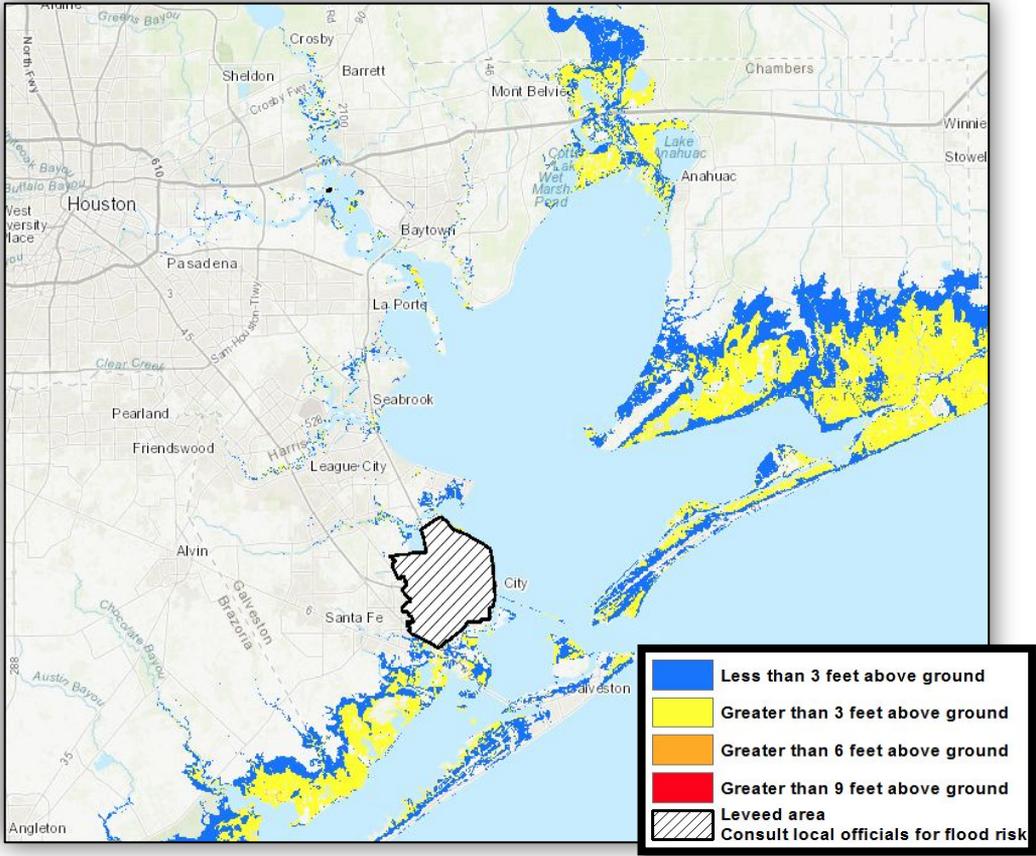


For more information about storm surge,  
please see this NHC Storm Surge Video:  
<https://www.youtube.com/watch?v=bBa9bVYKLP0>

# Storm Surge

## Galveston Bay Potential Storm Surge Flooding Map

### Category One Storm\*



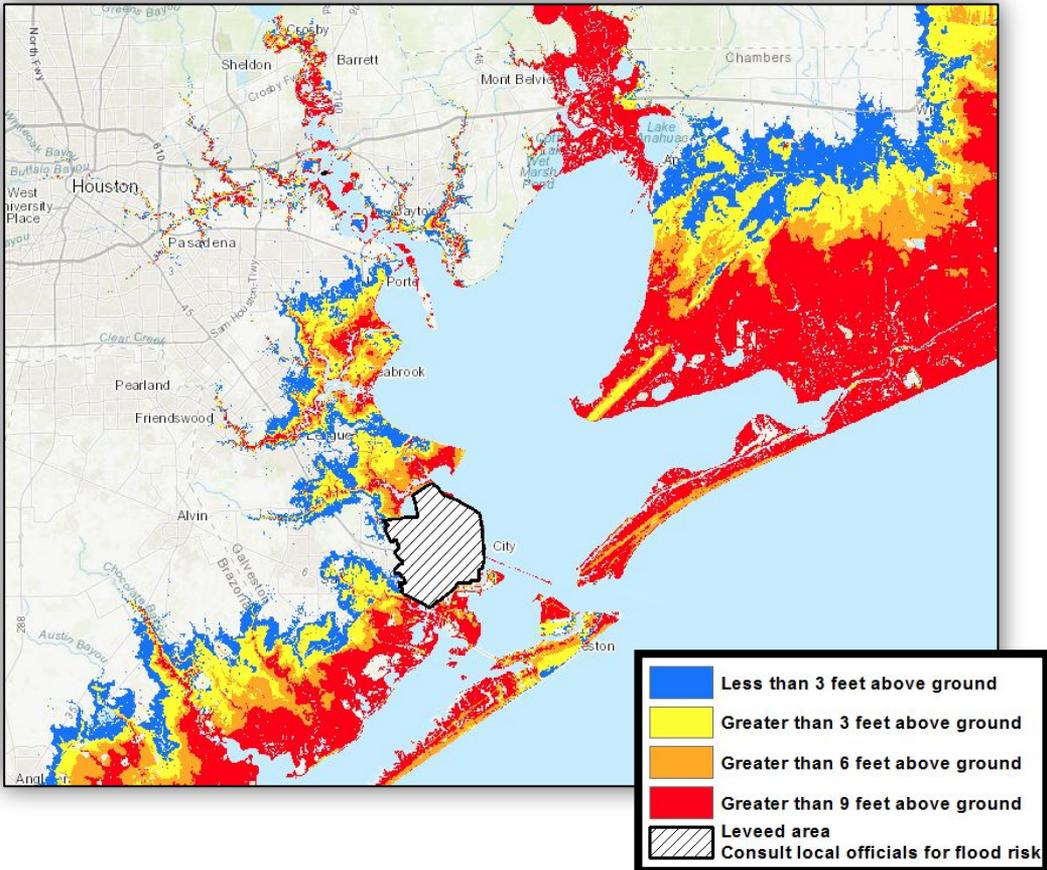
***\*This map shows the height above ground the water could reach and depicts the worst-case scenario from storm surge flooding. Remember storm surge is only loosely related to the category.***

**<https://www.nhc.noaa.gov/nationalsurge/>**

# Storm Surge

## Galveston Bay Potential Storm Surge Flooding Map

### Category Three Storm\*



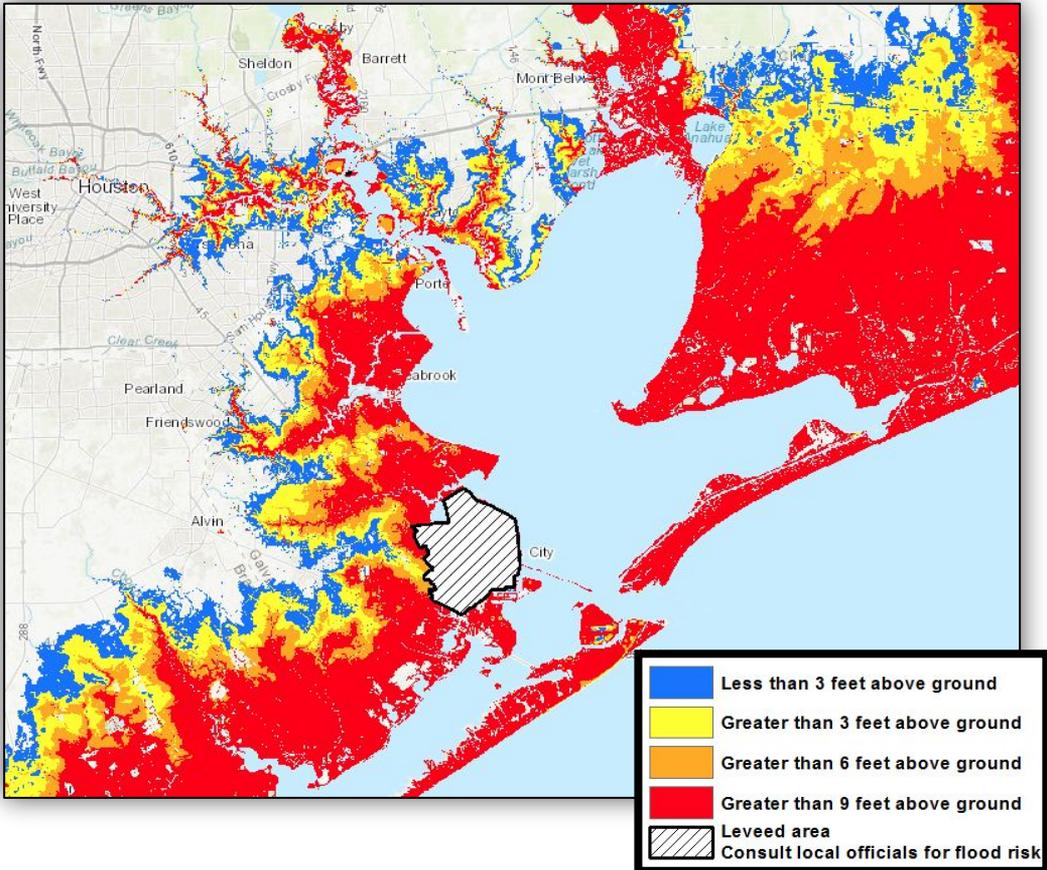
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<https://www.nhc.noaa.gov/nationalsurge/>

# Storm Surge

## Galveston Bay Potential Storm Surge Flooding Map

### Category Five Storm\*



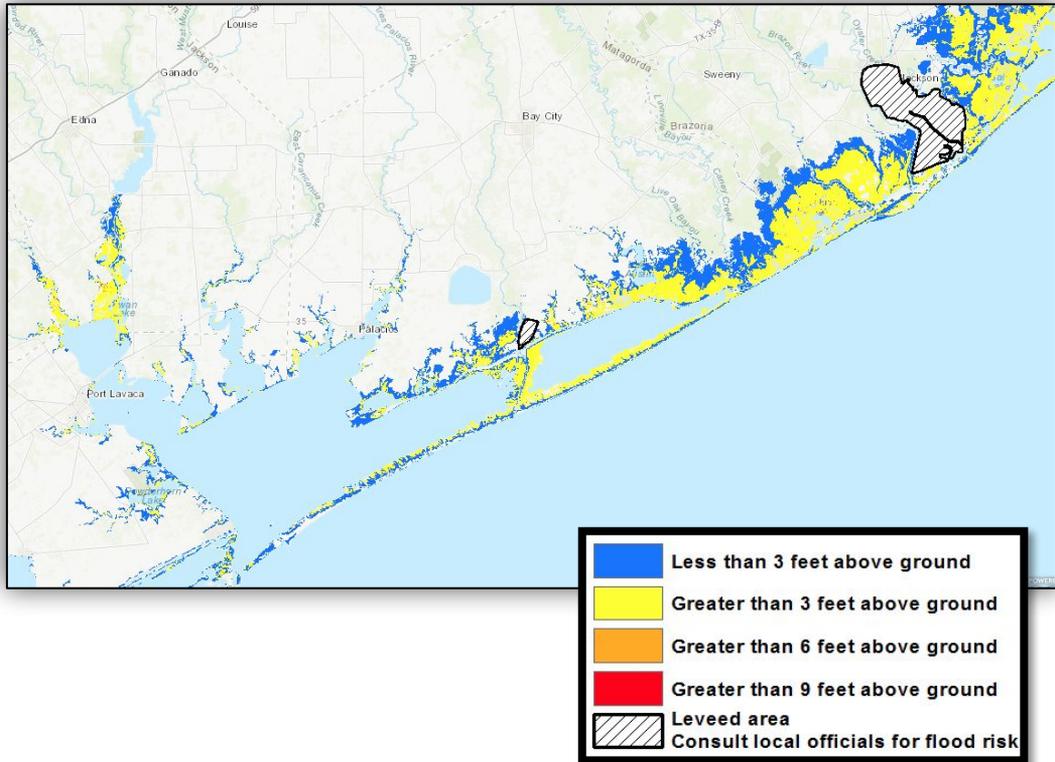
***This map shows the height above ground the water could reach and depicts the worst-case scenario from storm surge flooding. Remember storm surge is only loosely related to the category.***

<https://www.nhc.noaa.gov/nationalsurge/>

# Storm Surge

## Matagorda Bay and Brazoria Coastline Potential Storm Surge Flooding Map

### Category One Storm\*



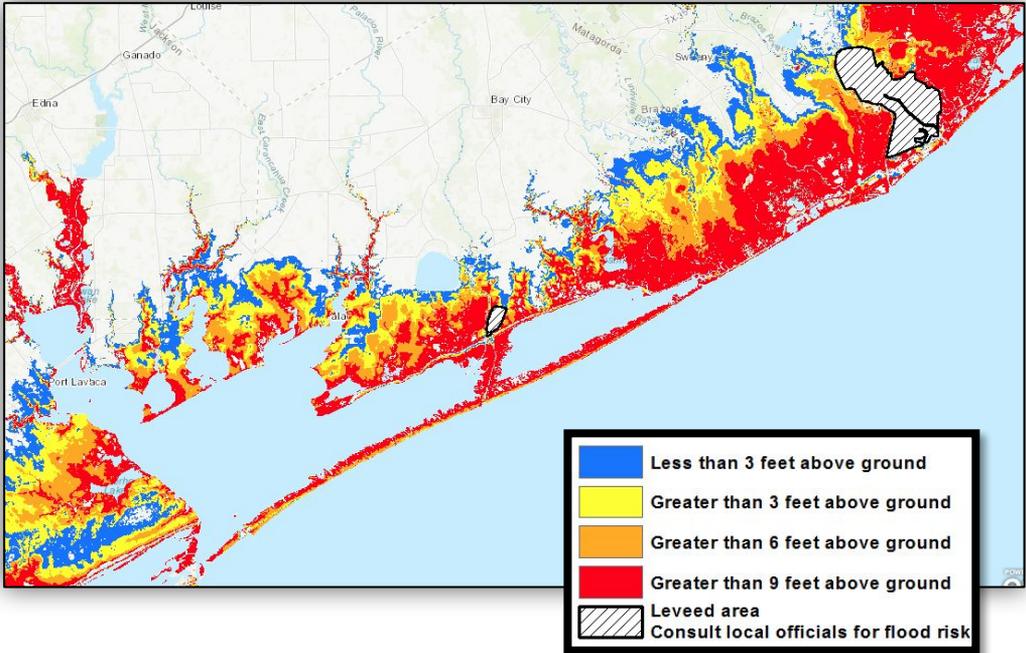
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# Storm Surge

## Matagorda Bay and Brazoria Coastline Potential Storm Surge Flooding Map

### Category Three Storm\*



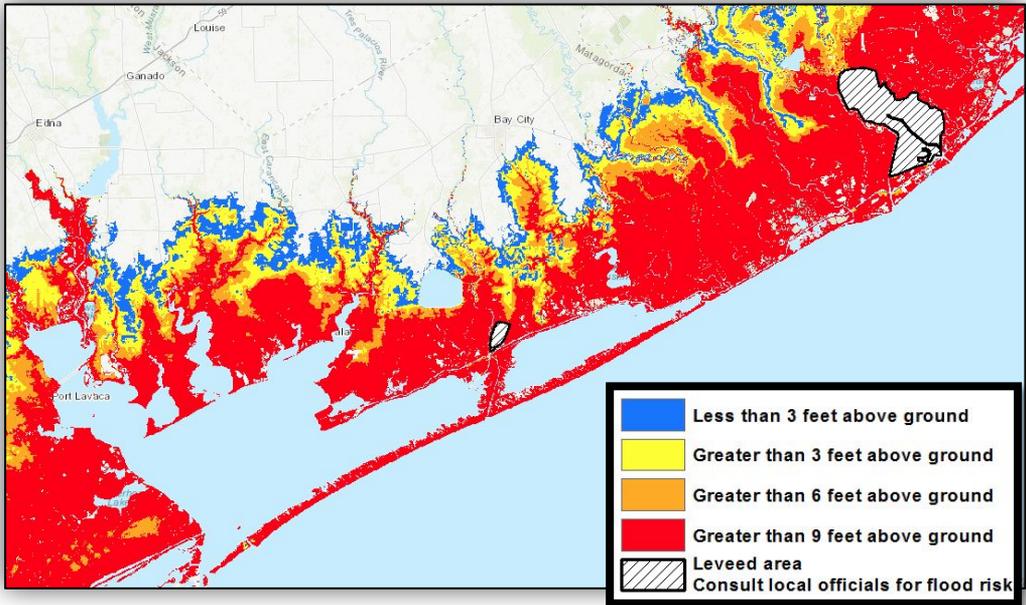
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# Storm Surge

## Matagorda Bay and Brazoria Coastline Potential Storm Surge Flooding Map

### Category Five Storm\*



*This map shows the height above ground the water could reach and depicts the worst-case scenario from storm surge flooding. Remember storm surge is only loosely related to the category.*

<https://www.nhc.noaa.gov/nationalsurge/>

**“The greatest potential for loss of life related to a hurricane is from the storm surge.”**

**-National Hurricane Center**

# Inland Flooding

There are numerous examples of significant flooding caused by landfalling tropical cyclones in Texas. Storms with a slow forward motion are the most dangerous as heavy rains persist for a longer period of time.

## Five Practical Ways to Protect Yourself and Others From the Dangers of Inland Flooding

### Protect Your Personal Documents and Special Items

- Store valuables in plastic tubs with locking tops
- In case of an evacuation, you should be able to secure and move all your valuables within 15 minutes

### Buy Flood Insurance – A Plan for Replaceable Items

- The National Flood Insurance Program (NFIP) is available from an insurance agent or the NFIP. Many don't realize losses from flooding are NOT covered by their standard homeowners policy.
- For more information see [www.floodsmart.gov](http://www.floodsmart.gov)

### Flood Proof Your Home – Take Steps to Minimize Flood Damage

- Shut off the main circuit breaker to prevent appliances from short circuiting and eliminate the threat of electrocution
- Raise outside air conditioning units onto platforms above ground level
- Store rarely used or expensive items in the attic or on high shelves

### Develop a Family Flood Plan

- Develop a plan of action to keep from panicking or withdrawing during an emergency
- Have an evacuation route and alternatives planned in the event you are asked to evacuate to higher ground
- Communicate your plans with friends or family outside of your home area
- Battery powered radios or televisions can be used in the event of a power outage

### Never Drive on Flooded Roads

- Driving into flooded roadways puts your life and the lives of others at risk
- Unless told to evacuate, you are probably safest staying at your current location
- If you encounter flood waters when driving, Turn Around, Don't Drown!



# Tornadoes and Destructive Winds

Tropical cyclones can also produce tornadoes. These tornadoes most often occur in thunderstorms embedded in rain bands well away from the center of the hurricane; however, they can also occur near the eyewall. Tornadoes produced by tropical cyclones are usually relatively weak and short-lived, but still pose a threat.

Hurricane force winds of 74 mph or more can destroy buildings, mobile homes, trees and power poles. Debris such as signs, roofing material, siding, and small items left outside become flying missiles in a hurricane. The strongest winds occur in a region of the hurricane called the eyewall. Wind gusts in the right side of the eyewall are the most destructive. Hurricane force winds can be felt as far as 150 miles from the coast



*Above: Damage to the community of Copano Village in Aransas County, TX in the wake of Hurricane Harvey in 2017.*



*Above: Destroyed mobile home in Refugio County, TX during Hurricane Harvey in 2017.*

## MOBILE HOME RESIDENTS MUST EVACUATE!

- No mobile home or manufactured home - no matter how new it is - can provide safe shelter from hurricane force winds.
- Straps or other tie-downs will not protect a mobile home from the high winds associated with a hurricane.
- Mobile home residents must evacuate when told to do so by local authorities.

## Saffir Simpson Hurricane Wind Scale

- Category 1 - Winds 74 to 95 mph
- Category 2 - Winds 96 to 110 mph
- Category 3 - Winds 111 to 129 mph
- Category 4 - Winds 130 to 156 mph
- Category 5 - Winds 157 mph or higher

# Hurricane Preparation

## Home Preparation

### Elevation Matters

- Know the elevation of your home! Are you in a flood and/or evacuation zone?

### Mobile Homes

- Check tie-downs for rust or breakage.
- Residents of mobile homes must evacuate when told to do so!!

### Landscaping

- Trim trees, shrubbery and dead limbs, especially ones close to your home.
- Repair or replace broken or damaged fences.

### Roofing

- Inspect the roof for loose tiles, shingles or debris. Consider replacing old or damaged shingles with new ones rated for hurricane force winds.
- Clear loose and clogged rain gutters and downspouts.

### Doors

- Reinforce garage doors and tracks or replace with a hurricane tested door.
- Reinforce double entry doors with heavy duty foot and head bolts.
- Use a security deadbolt with a one inch minimum bolt length.

### Windows

- If possible, install tested/manufactured hurricane shutters.
- Inspect existing shutters to ensure they are in good working order.
- Alternative: Use 5/8" or greater exterior grade plywood secured by 2 1/2" screws and/ or special clips. Obtain wood and fasteners, cut wood to size, pre-drill holes and place anchors on homes.



*Above: This well built home in the community of Copano Village in Aransas County, TX survived Hurricane Harvey in 2017.*

**For more information on home preparedness, please visit the Federal Alliance for Safe Homes (FLASH) at:**

**<http://www.flash.org/>**

# Additional Preparation

## Business and Employee Preparation

- Identify and protect vital records. Backup and store key files off site.
  - Protect electronic equipment from possible water damage.
  - Have extra cash and blank checks on hand.
  - Develop a 24-hour emergency contact list with phone numbers of key employees.
  - Set up a telephone number for employees to check in and receive company information.
  - Establish a temporary location for business operations in case your facility is damaged.
  - Give employees enough time to secure their homes and protect their families.
  - Consider paying employees before they leave to prepare their homes.
- 

## Marine Preparations

- Check with the manufacturer for proper ways to secure your boat during a storm.
  - Purchase necessary hurricane materials such as additional mooring lines, crew anchors, fenders, fender boards, chafing gear, and anchors.
  - Safe storm moorings should consist of good condition ropes of sufficient diameter and length, with at least three or four substantial anchor points.
  - Do not moor parallel to bank. Receding tides often capsize boats in this type of anchorage.
- 

## Preparing for Your Pet's Safety

- Your pet should be part of your overall hurricane preparation plans. Below are a few important things to help you prepare:
- Make sure your pet's vaccinations are current and have proof they are current. DO NOT assume that a public shelter or hotel will accept your pet.
- Be sure to have a current photo of your pet.
- Each animal should have a properly sized pet carrier. The carrier should be large enough for the animal to stand up and turn around.
- Pack enough food and bottled water for the duration of your evacuation. DO NOT let your pet eat food or drink water from outside that may have become contaminated.
- Be sure to pack all medications your pet may need along with a muzzle, collar, leash, paper towels, and trash bags.
- Make sure your pet has a proper ID collar.

## Before the Storm

- New and existing policies will not be written or modified when a storm nears the Gulf of Mexico.
  - Make sure you fully understand what perils are covered and excluded in your policy.
  - Make sure your coverage is adequate to replace your home and contents in today's dollar.
  - Determine whether your policy covers additional living expenses for a temporary residence if you are unable to live in your home because of damage from a disaster.
  - Before hurricane season, prepare detailed written and/or photographic inventory of your home's contents and store it in a safe place with your policy.
  - If your insurance company does not cover flood or windstorm perils, ask about coverage through the Texas Windstorm Insurance Association or the National Flood Insurance Program.
- 

## After the Storm

- Give prompt written notice to your insurance company.
- Photograph or videotape damaged structures and all damaged property. Make a list of damaged or lost items.
- DO NOT throw out damaged property before your adjuster has inspected the debris unless it is a health hazard or impedes local cleanup.
- Protect your property from further damage.
- Keep an accurate record of temporary repair and living expenses if a loss of use is suffered.

## Important Online Insurance Information

- National Flood Insurance Program [www.floodsmart.gov](http://www.floodsmart.gov)
- Texas Windstorm Insurance Association [www.twia.org](http://www.twia.org)  
Consumer help line 800-788-8247
- Texas Department of Insurance [www.tdi.texas.gov](http://www.tdi.texas.gov)  
Consumer Help Line 800-252-3439



# Hurricane Supply Kit

Your chapter of the American Red Cross recommends that you have the following items in your Hurricane Supply Kit.

- At least a 7-day supply of non-perishable food and water. One gallon of water per person per day is recommended
- Battery powered portable television or radio with extra batteries
- Flashlight with extra batteries
- First Aid kit and manual
- Sanitation and hygiene items such as instant hand sanitizing gel, moist towelettes, toilet paper, and feminine hygiene products
- Whistle
- Kitchen accessories, cooking utensils, and manual can opener
- Cash
- Extra clothing, blankets, and sleeping bags
- Matches in a waterproof container
- Photocopies of identification, insurance, prescriptions, household inventory, credit cards, and your latest utility bill
- CD or photocopies of important documents such as birth/marriage certificates and titles
- Prescription medications, eyeglasses, contact lens solution, and hearing aid batteries
- Formula, baby food, diapers, and pacifiers
- Pet carriers, leashes, shot records, and food for each animal evacuating with you
- A good map showing county roads and highways
- Tire repair kit, booster cables, pump, and flares
- White distress flag
- Toys and games for children
- List of family phone numbers and addresses outside the area

# Final Checklists

## Actions to Take When a Storm is in the Gulf

- Listen frequently to radio, TV, or NOAA weather radio for bulletins and forecasts of the storm's progress.
- Double check items in your emergency supply kit.
- Fuel and service your vehicles.
- Inspect and secure mobile home tie-downs.
- Board up windows (if shutters do not exist) in case storm moves quickly and you have to leave! **TAPE PROVIDES NO PROTECTION!**
- Store lawn furniture and other loose, lightweight objects, such as garbage cans and garden tools.
- Garage or store vehicles that are not being used.
- Follow instructions issued by local officials.

### EVACUATE IMMEDIATELY IF ORDERED TO DO SO!

## Final Actions to Take if Leaving

- Turn off propane tanks.
- Unplug small appliances.
- Empty refrigerator and freezer.
- Turn off utilities if ordered to do so.
- Lock home securely.
- Take pets with you.



## Final Actions to Take if Staying

- Close storm shutters.
- Notify family members of your evacuation plans.
- Lower water level in swimming pool by one foot.
- Turn refrigerator or freezer to coldest setting and open only if necessary (25 pounds of dry ice will keep a 10-cubic foot freezer below freezing for 3-4 days.)
- Follow instructions from emergency managers and be prepared to turn off utilities if ordered to do so.
- Board up remaining doors, brace garage door, and remain inside. Stay away from boarded up windows.
- Take refuge in a predetermined safe room, such as an interior closet, bathroom, or hallway.

**DO NOT EXPECT EMERGENCY RESPONDERS TO BE OF ANY ASSISTANCE DURING A LANDFALLING HURRICANE!**

# Forecast Information



## Latest Weather Information

National Weather Service

[www.weather.gov/houston](http://www.weather.gov/houston)

24 Hour Phone Recording:

281-337-5074



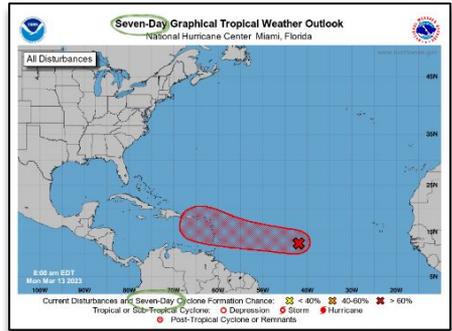
National Hurricane Center

[www.hurricanes.gov](http://www.hurricanes.gov)



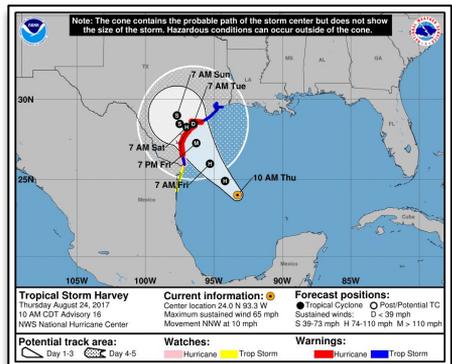
## Graphical Tropical Weather Outlook (May 15 – Nov 30)

- This NHC product provides an overview of all tropical cyclone activity and indicates areas of interest that have potential for tropical cyclone development.



## NHC Forecast Advisory

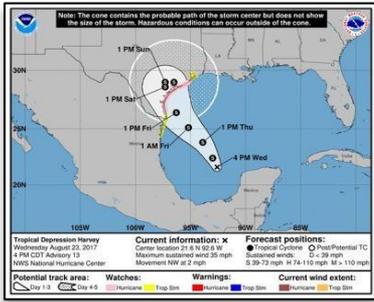
- Most recent position for a storm along with all coastline watches and warnings. Includes a 3 or 5 day track with error cone.
- Error cone represents a 5 year average error. The center of the storm only stays within the error cone 67% of the time.
- DO NOT focus too closely on the exact track forecast – the little back line.
- Impacts may occur well outside the cone.



# Forecast Information

## Hurricane Watch/Warning Tropical Storm Watch/Warning

- A Hurricane Watch means hurricane conditions are possible in your area within 48 hours.
- A Hurricane Warning means hurricane conditions are likely within your area within 36 hours.
- A Tropical Storm Watch means tropical storm conditions are possible in your area within 48 hours.
- A Tropical Storm Warning means tropical storm conditions are likely within your area within 36 hours.
- If you are under a hurricane watch or warning, prepare for possible evacuations and evacuate if instructed to do so.



## Do you have Wireless Emergency Alerts (WEA) turned on for your phone?

WEAs are sent by authorized government agencies through your wireless provider and alert to extreme weather.

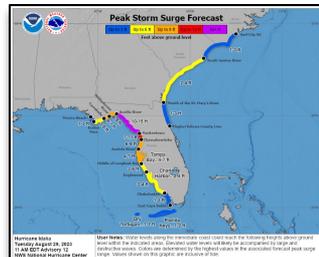
Check your wireless phone's menu settings to ensure WEAs are enabled:

- Android: Settings > Connections > More Connection Settings > Wireless Emergency Alerts **or** Notifications > Advanced Settings > Wireless Emergency Alerts
- Apple: Settings > Notifications > Government Alerts



## Graphical depiction of peak storm surge inundation values along the U.S. Gulf & Atlantic coasts, Puerto Rico, and the U.S. Virgin Islands

- Values represent the peak height water could reach above normally dry ground somewhere in the specified area



## Hurricane Watch vs. Warning Know the Difference

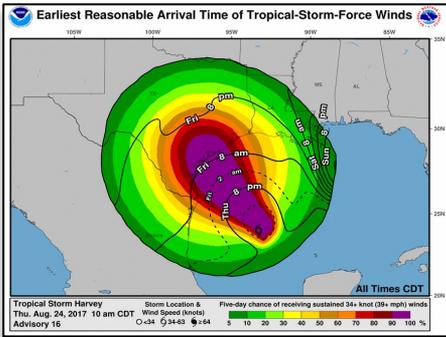
<h3 style="margin: 0;">HURRICANE WATCH</h3> <p>A Hurricane Watch is issued when <b>hurricane force winds are possible</b>.</p> <p>Prepare your home by boarding up windows and moving loose items indoors. Have an emergency supply kit ready.</p> <p style="background-color: #333; color: white; padding: 5px; text-align: center;"><b>Hurricane Possible.</b></p>	<h3 style="margin: 0;">HURRICANE WARNING</h3> <p>A Hurricane Warning is issued when <b>hurricane force winds are expected</b>.</p> <p>Seek shelter in a sturdy structure or evacuate if ordered.</p> <p style="background-color: #333; color: white; padding: 5px; text-align: center;"><b>Hurricane Expected!</b></p>
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# Forecast Information

## Time of Arrival and Wind Speed Probability Graphics

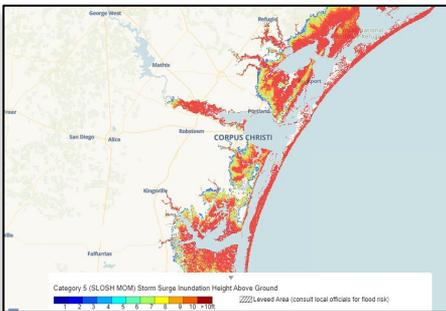
Time of arrival graphics show the earliest reasonable and most likely arrival time of tropical storm force winds.

- Wind speed probability graphics show the point probability of wind speeds reaching TS and Hurricane levels



## Potential Storm Surge Flooding Map

- If a hurricane is threatening your community, go to [hurricanes.gov](http://hurricanes.gov) and view the potential storm surge flooding map, which will show the reasonable-worst case scenario for storm surge inundation (depth of water above ground) for your area.



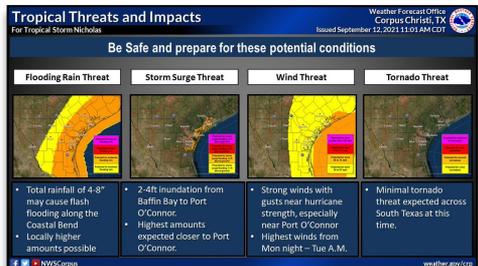
## Storm Surge Watch/Warning

- A storm surge watch is the possibility of life-threatening storm surge within 48 hours.
- A storm surge warning is the danger of life-threatening storm surge within 36 hours.
- If you are located in a storm surge watch or warning, you might be in danger. Promptly follow evacuation and other instructions from emergency management officials if ordered.



## Hurricane Threats and Impacts

- This product issued by local NWS offices will summarize potential impacts expected from a tropical cyclone.
- Click on the colored area and text that describes potential impacts will display.
- [www.weather.gov/srh/tropical?office=hgx](http://www.weather.gov/srh/tropical?office=hgx)



# Local Tropical Webpage

## NWS Houston/Galveston Tropical Webpage

NWS Houston/Galveston homepage [Provide Feedback on this Webpage](#)

[Outlook](#) [Threats and Impacts](#) [Satellite](#) [Radar](#) [Social Media](#) [Preparedness](#) [Links](#)

There are currently no active storms in the North Atlantic, Caribbean Sea, or Gulf of Mexico.

### Two-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida

Current Disturbances and Two-Day Cyclone Formation Chance: ☹️ < 40% ☹️ 40-60% ☹️ > 60%  
Tropical or Sub-Tropical Cyclone: ○ Depression ○ Storm ○ Hurricane  
● Post-Tropical Cyclone or Remnants

[Product Description](#)

### Seven-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida

Current Disturbances and Seven-Day Cyclone Formation Chance: ☹️ < 40% ☹️ 40-60% ☹️ > 60%  
Tropical or Sub-Tropical Cyclone: ○ Depression ○ Storm ○ Hurricane  
● Post-Tropical Cyclone or Remnants

[Product Description](#)

Click each image above to view the full-size image.

Special Tropical Weather Outlook  
NWS National Hurricane Center Miami FL  
4:10 PM EDT Wed Apr 24 2024

For the North Atlantic...Caribbean Sea and the Gulf of Mexico:

East-Central Subtropical Atlantic:  
An area of low pressure located about 900 miles northwest of the Cabo Verde Islands has been producing a small but persistent area of showers and thunderstorms to the east of its center since this morning. However, the low is forecast to move southwestward at 10 to 15 mph into an area of stronger upper-level winds tonight and tomorrow, and additional development is not expected.

No additional Special Tropical Weather Outlooks are scheduled for this system unless conditions warrant. Regularly scheduled Tropical Weather Outlooks will resume on May 15, 2024, and Special

- **One-Stop Shop** for all tropical related forecast information, tailored to each forecast area along U.S. coastline.
- **Active Storms** tab appears when NHC initiates Tropical Cyclone advisories.
- **Local Products** tab also becomes active when WFO Issues Watches/Warnings for local area.
- **Satellite and Radar** data is always available.
- **Preparedness** tab is always available and provides quick access to local evacuation maps, preparedness guides, and videos.
- Scrolling down the page provides access to NHC products related to each active storm and WPC rainfall products.

# Tourist Safety Guide

## How to Prepare for Hurricane Season

### Actions To Take When Threatened By A Hurricane:

- Listen frequently to radio, TV, or NOAA Weather Radio
- Fuel your vehicle
- Stock up on batteries, food that will keep, first aid supplies, drinking water, and medications
- Have cash on hand in case power goes out and ATMs don't work
- **Follow instructions from local officials and leave if ordered**

### Terms To Know:

**Tropical Storm/Hurricane Watch: Conditions are possible within 48 hours**

**Tropical Storm/Hurricane Warning: Conditions are expected within 36 hours**

**Continue to check [hurricanes.gov](https://www.weather.gov/houston) for the latest forecast information!**

### How will you get alerts while on vacation?

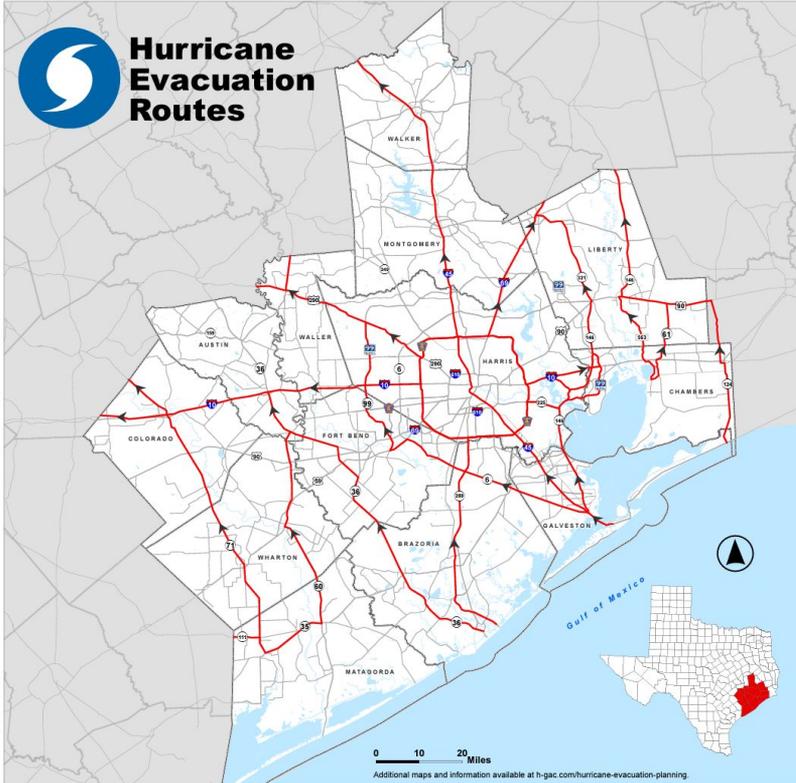
- Local media (TV, radio, newspaper, etc)
- Our website [weather.gov/houston](https://www.weather.gov/houston)
- Wireless Emergency Alerts or WEA
  - WEAs are free notifications on your smartphone that can indicate hazardous weather.
  - WEA alerts include: Tornadoes, Severe Thunderstorms, Flash Floods, **Extreme Winds, Hurricanes**, Tsunamis, **Storm Surge** and Winter Weather

### What should you do if you receive a WEA?

- Follow any action advised by the emergency message. Seek more details from your favorite TV or radio station, NOAA Weather Radio, news website, desktop application, mobile application, or other trusted source of information.

For more information about Wireless Emergency Alerts, visit: [weather.gov/wrn/wea](https://www.weather.gov/wrn/wea)

# Evacuation Routes



## H-GAC Region

Austin, Brazoria, Chambers, Colorado, Fort Bend, Galveston, Harris, Liberty, Matagorda, Montgomery, Walker, Waller, Wharton



### Route Designation

- Evacuation Corridors
- Other Roads
- County Boundary



Revision Date: May 1, 2024  
Expiration Date: December 31, 2024  
Map Created by:  
Houston-Galveston Area Council

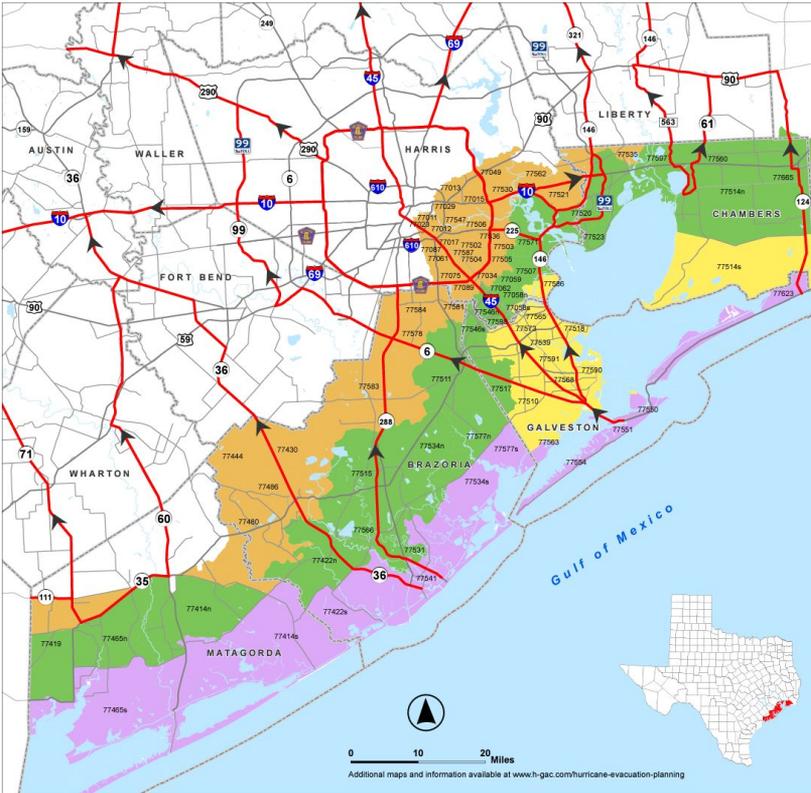
[Click Here for a Complete Hurricane Evacuation Maps](#)

## Actions Before Evacuating:

- State of Texas will supply fuel and other resources along designated evacuation routes. However you will be allowed to take other roads if preferred.
- Follow orders from local officials
- Once the evacuation order is given, LEAVE IMMEDIATELY
- Take your Hurricane Supply Kit with you
- Leave as early as possible to avoid heavy traffic and hazardous weather
- Do NOT stay in a mobile home near the coast
- Remember that large boats and travel trailers may not be allowed to cross local bridges and causeways once high winds commence
- Prepare to stay at your destination for a week or more as re-entry may be restricted; check with jurisdiction before returning to make sure it is safe to do so.

# Evacuation Zip Zones

## Brazoria, Chambers, Galveston, Harris and Matagorda Hurricane Evacuation Zip-Zones Coastal, A, B, C



ZIP ZONE COASTAL				
77414s	77422s	77465s	77534s	77541
77550	77551	77554	77563	7757a
77623				
ZIP ZONE A				
77058	77510	77514s	77516	77538
77563	77565	77568	77573	77586
77590	77591			
ZIP ZONE B				
77058n	77056	77062	77414n	77419
77422n	77465n	77507	77511	77514n
77515	77517	77520	77523	77531
77534n	77540n	77546n	77583	77585
77571	77577n	77587	77588	77665
ZIP ZONE C				
77011	77012	77013	77015	77017
77023	77029	77034	77049	77061
77075	77087	77089	77430	77444
77480	77486	77502	77503	77504
77505	77506	77521	77530	77535
77536	77547	77562	77578	77581
77583	77584	77587		

Some zip codes are split into north (n) and south (s) for evacuation purposes.

### Route Designation

- ← Evacuation Corridors
- Other Roads
- County Boundary



Revision Date: May 1, 2024  
 Expiration Date: December 31, 2024  
 Map Created by:  
 Houston-Galveston Area Council

Evacuation zones loosely correspond to the following hurricane categories. However, surge depends on other factors like storm size and speed. Its best to heed recommendations and any evacuation orders made by local officials. What zone are you in? If you area is NOT shaded in on the map, most of the time an evacuation would not be ordered. Zones are closely related to storm surge flooding risk.

**Purple - Cat 1; Yellow - Cat 1 or 2;**  
**Green - Cat 3; Orange - Cat 4,5.**

[Click Here for an Evacuation Map by Zip-Zones](#)

<https://www.h-gac.com/hurricane-evacuation-planning>

**Evacuees NEED to consider the projected path of the hurricane when choosing an evacuation route and destination. When local authorities order an evacuation, leave immediately!**



## State of Texas Emergency Assistance Registry (STEAR)

The State of Texas offers the option to register with the STEAR program, a free registry that provides local emergency management planners and responders with information related to your needs during an emergency.

### Who Should Register?

- People with disabilities
- People who are medically fragile
- People with functional needs such as:
  - Limited mobility
  - Communication barriers
  - Require additional medical assistance during an emergency event
  - Require personal care assistance
- People who require transportation assistance



Scan to Register



Register online at  
[Stear.tdem.texas.gov](http://Stear.tdem.texas.gov)



Call 2-1-1 or use your video  
 phone relay option of choice

Registering in STEAR **DOES NOT** guarantee you will receive a specific service during emergencies.

# Returning Home

**IF YOU EVACUATED THE AREA, WAIT FOR AN ALL CLEAR FROM THE CITY OR COUNTY BEFORE ATTEMPTING TO RETURN TO YOUR HOME. BE PREPARED TO SHOW PROOF OF RESIDENCE BY HAVING A COPY OF YOUR LATEST UTILITY BILL.**

## Debris Cleanup

- Cities and counties will publish a schedule for debris pick-up and removal. Debris cannot be removed from private property.
- Construction materials, vegetative debris, household hazardous waste and household appliances will need to be placed into separate piles and moved to the curbside for pick-up.



## General Cleanup

- Be cautious of structural damage and downed power lines.
- DO NOT attempt to move structural supports or large pieces of debris.
- DO NOT run power generators indoors. Inhalation of carbon monoxide from the exhaust can cause death. Ensure exhaust is well ventilated.
- DO NOT use open flames indoors.
- Restrict your driving to emergency use only. Road conditions may not be safe until road debris is cleared.

## Water

- Listen for instructions regarding public water supply. Use only bottled, boiled or treated water until you know that your water supply is safe.
- You can use household chlorine bleach to treat water for drinking or cleaning. Add 1/8 teaspoon of bleach per gallon of clear water or 1/4 teaspoon of bleach per gallon if water is cloudy. Allow water to stand for 30 minutes before using.

## Interior Cleanup

- Disinfect and dry interior buildings and items inside. This will prevent growth of some bacteria, viruses, mold, and mildew that can cause illness.
- Clean walls, floors, and countertops with soap and water. Disinfect them with a solution of 1 cup of bleach to 5 gallons of water.
- Wash all clothes and linens in hot water. Air dry and spray all unwashable items with disinfectant. Steam clean carpets. Throw away all items touched by water that cannot be disinfected.

# Returning Home

## Utility Cleanup

- Check for gas leaks. If you smell or hear gas leaking, leave immediately. **DO NOT** use the phone or turn on lights in your home. Call the gas company from a neighbor's phone.
- Report any visible damage of power lines to the electric company. Turn off power at main breaker if any electrical equipment or circuits have been exposed to water.
- **DO NOT** connect generators to your home's electrical circuits. If a generator is on line when electrical service is restored, it can become a major fire hazard. Also, line workers working to restore power will be endangered if a generator is hooked up to the home's circuits.
- It is likely that an electric company other than your own will reconnect the lines to your home; however, they cannot turn the service back on. Only your electric company can actually turn the power back on to your house.



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## Sewage Cleanup

- If you suspect water or sewage lines are damaged, do not use your plumbing (toilets, sinks, etc.). Contact the water company or a plumber for repairs.
- A chemical portable commode can be created by the following:
  - Use 5 gallon buckets with tight lids, lined with heavy duty plastic garbage bags.
  - Add kitty litter to the bucket as a disinfectant and deodorizer. Keep lids on firmly.
  - Keep buckets in a cool, dark place. Clean and disinfect buckets immediately.
- Your toilet can also be used by flushing until the bowl has no water. Then, line with heavy duty trash bags and disinfect with chlorine bleach after each use. Remove waste to an outside location.
- If significant sewer outages have occurred, instructions for disposal of human wastes will be announced.
- **DO NOT** dispose of human waste through your regular trash!

# Emergency Management Contacts

## AUSTIN COUNTY

- **County Emergency Management**  
979-865-6463  
[www.austincounty.com](http://www.austincounty.com)

## BRAZORIA COUNTY

- **County Emergency Management**  
979-864-1201  
[brazoriacountytx.gov/departments/emergency-management/](http://brazoriacountytx.gov/departments/emergency-management/)
- **Alvin**  
281-388-4363  
[www.alvin-tx.gov](http://www.alvin-tx.gov)
- **Angleton**  
979-849-2383
- **Bailey's Prairie**  
979-849-0134
- **Bonney**  
281-595-2269
- **Brazoria**  
979-798-2489
- **Brookside Village**  
281-485-3048
- **Clute**  
979-265-9653
- **Danbury**  
979-583-5733
- **Freeport**  
979-233-2111
- **Hillcrest**  
281-756-0577  
<http://www.hillcrestvillagetx.gov/>
- **Holiday Lakes**  
979-849-1136
- **Iowa Colony**  
281-369-3444  
<http://iowacolonytx.gov/>
- **Jones Creek**  
979-292 -6393

## Lake Jackson

979-415-2500  
[www.lakejackson-tx.gov](http://www.lakejackson-tx.gov)

- **Liverpool**  
281-581-2342
- **Manvel**  
281-489-0630
- **Oyster Creek**  
979-233-8481
- **Pearland**  
281-997-4640  
[pearlandtx.gov/prepare](http://pearlandtx.gov/prepare)
- **Quintana**  
979-233-0848
- **Richwood**  
979-265-2082
- **Surfside**  
979-239-1151
- **Sweeny**  
979-482-4617  
[sweenytx.gov](http://sweenytx.gov)
- **West Columbia**  
979-345-5121

## BRAZOS COUNTY

- **County Emergency Management**  
979-821-1010  
[www.bcdem.org](http://www.bcdem.org)
- **Bryan**  
979-821-1000
- **College Station**  
979-821-1000

## BURLESON COUNTY

- **County Emergency Management**  
979-567-2001  
<https://www.co.burleson.tx.us/>

**Only Call 911 in an Emergency!**

# Emergency Management Contacts

## CHAMBERS COUNTY

- **County Emergency Management**  
409-267-2445  
[www.chamberscountytexas.gov](http://www.chamberscountytexas.gov)
- **Mont Belvieu**  
281-576-2021

## COLORADO COUNTY

- **County Emergency Management**  
979-733-0184  
[www.co.colorado.tx.us/](http://www.co.colorado.tx.us/)

## FORT BEND COUNTY

- **County Emergency Management**  
281-342-6185  
[www.fbcoem.org](http://www.fbcoem.org)
- **Arcola**  
281-431-0606
- **Beasley**  
979-387-2775
- **Fairchilds**  
281-705-1856
- **Fulshear**  
281-346-8822
- **Kendleton**  
979-532-8240
- **Meadows Place**  
281-983-2900
- **Missouri City**  
281-403-4370
- **Needville**  
979-793-4255
- **Orchard**  
979-478-6893
- **Pleak**  
281-239-8504

- **Richmond**  
281-342-0559  
[www.richmondtx.gov](http://www.richmondtx.gov)
- **Rosenberg**  
832-595-3700  
[www.rosenbergtx.gov](http://www.rosenbergtx.gov)
- **Simonton**  
281-533-9809
- **Stafford**  
281-208-6983
- **Sugar Land**  
281-275-2700

[sugarlandtx.gov/105/Emergency-Management](http://sugarlandtx.gov/105/Emergency-Management)

- **Weston Lakes**  
281-533-0907

## GALVESTON COUNTY

- **County Emergency Management**  
281-309-5002  
888-384-2000  
[www.gcoem.org](http://www.gcoem.org)
- **Bayou Vista**  
409-935-0449
- **Clear Lake Shores**  
281-334-2799
- **Dickinson**  
281-337-4599  
[www.dickinsontexas.gov](http://www.dickinsontexas.gov)
- **Friendswood**  
281-996-3300  
[friendswood.com/](http://friendswood.com/)
- **City of Galveston**  
409-765-3702  
[galvestontx.gov](http://galvestontx.gov)

**Only Call 911 in an Emergency!**

# Emergency Management Contacts

## **GALVESTON COUNTY**

- **Hitchcock**  
409-986-5559  
[www.hitchcockpd.com](http://www.hitchcockpd.com)
- **Jamaica Beach**  
920-737-1800  
[www.ci.jamaicabeach.tx.us](http://www.ci.jamaicabeach.tx.us)
- **Kemah**  
281-334-5414
- **La Marque**  
409-938-9269  
[www.cityoflamarque.org](http://www.cityoflamarque.org)
- **League City**  
281-554-1000  
[www.leaguecity.com](http://www.leaguecity.com)
- **Santa Fe**  
409-925-2000
- **Texas City**  
409-643-5720
- **Tiki Island**  
409-935-1427  
[www.villageoftikiisland.gov](http://www.villageoftikiisland.gov)

## **GRIMES COUNTY**

- **County Emergency Management**  
979-204-4592  
[www.grimescountytexas.gov](http://www.grimescountytexas.gov)
- **Navasota**  
936-825-6410  
<http://www.navasotatx.gov/>

## **HARRIS COUNTY**

- **County Emergency Management**  
713-881-3100  
[www.readyharris.org](http://www.readyharris.org)
- **City of Houston**  
713-884-4500  
[www.houstonoem.org](http://www.houstonoem.org)
- **Baytown**  
281-422-2311  
[baytown.org/preparedness](http://baytown.org/preparedness)

- **Bellaire**  
713-662-8202  
[www.bellairetx.gov](http://www.bellairetx.gov)
- **Deer Park**  
281-478-7298  
[www.deerparktx.gov](http://www.deerparktx.gov)
- **El Lago**  
281-326-2658
- **Galena Park**  
713-672-2556
- **Humble**  
281-446-4928  
[www.cityofhumble.com](http://www.cityofhumble.com)
- **Jacinto City**  
713-674-8424
- **Jersey Village**  
713-466-2130
- **Katy**  
281-391-3500  
[www.cityofkaty.com](http://www.cityofkaty.com)
- **La Porte**  
281-470-0010  
[www.lpoem.org](http://www.lpoem.org)
- **Morgans Point**  
281-471-2171
- **Nassau Bay**  
281-333-4211  
[www.nassaubay.com](http://www.nassaubay.com)
- **Pasadena**  
713-475-5588  
[www.pasadenatx.gov](http://www.pasadenatx.gov)
- **Seabrook**  
281-291-5787  
[seabrooktx.gov/](http://seabrooktx.gov/)
- **Shoreacres**  
281-471-2244
- **South Houston**  
713-947-7700

**Only Call 911 in an Emergency!**

# Emergency Management Contacts

## HARRIS COUNTY

- **Taylor Lake Village**  
281-326-2843
- **Tomball**  
281-351-5484
- **Webster**  
281-332-1826  
[www.cityofwebster.com](http://www.cityofwebster.com)
- **West University Place**  
713-662-5835  
<http://www.westutx.gov/>

## HOUSTON COUNTY

- **County Emergency Management**  
936-544-7175  
<http://www.co.houston.tx.us/>

## JACKSON COUNTY

- **County Emergency Management**  
361-782-3398  
[www.co.jackson.tx.us](http://www.co.jackson.tx.us)
- **Edna**  
361-782-3122
- **Ganado**  
361-771-2800

## LIBERTY COUNTY

- **County Emergency Management**  
936-334-3219  
[www.co.liberty.tx.us](http://www.co.liberty.tx.us)
- **City of Liberty**  
936-336-8118
- **City of Cleveland**  
281-592-2667  
[www.clevelandtexas.com](http://www.clevelandtexas.com)

## MADISON COUNTY

- **County Emergency Management**  
936-348-3810  
[www.co.madison.tx.us](http://www.co.madison.tx.us)

## MATAGORDA COUNTY

- **County Emergency Management**  
979-323-0707  
[disaster@co.matagorda.tx.us](mailto:disaster@co.matagorda.tx.us)

## MONTGOMERY COUNTY

- **County Emergency Management**  
936-523-3900  
[www.mctxoem.org](http://www.mctxoem.org)
- **Conroe**  
936-522-3080  
<http://www.cityofconroe.org/>
- **Shenandoah**  
361-771-2800

## POLK COUNTY

- **County Emergency Management**  
936-327-6826  
[www.polkcountyoem.com](http://www.polkcountyoem.com)
- **Alabama-Coushatta**  
936-563-1200

## SAN JACINTO COUNTY

- **County Emergency Management**  
936-653-3395  
<https://www.co.san-jacinto.tx.us/>

## WALKER COUNTY

- **County Emergency Management**  
936-435-8035  
<https://www.co.walker.tx.us/>
- **City of Huntsville**  
936-291-5917

**Only Call 911 in an Emergency!**

# Emergency Management Contacts

## WALLER COUNTY

- **County Emergency Management**  
979-826-8282

## WASHINGTON COUNTY

- **County Emergency Management**  
979-353-7683

<http://www.co.washington.tx.us/>

## WHARTON COUNTY

- **County Emergency Management**  
979-532-4612

<https://www.co.wharton.tx.us/>

- **El Campo**  
979-543-5311
- **Wharton**  
979-532-4811, ext 502

## Additional Information

- **US Department of Homeland Security**  
[www.ready.gov](http://www.ready.gov)
- **American Red Cross**  
[www.redcross.org](http://www.redcross.org)  
*(enter zip code for local office)*  
24 hour number to call for assistance  
1-800-RED CROSS  
(1-800-733-2767)

**Only Call 911 in an Emergency!**



**Become an  
Ambassador  
Today!**



**National Weather Service  
WFO Houston/Galveston, TX**

1353 FM 646 Suite 202  
Dickinson, TX 77539

Phone: 281-337-5074  
[www.weather.gov/houston](http://www.weather.gov/houston)

**@NWSHouston**

