



WALLY WISE GUY

The Deer Park LEPC is a cooperative partnership between community, government, emergency response agencies, businesses, and industry striving to promote and maintain public health and safety by preparing for hazardous materials-related incidents as part of a comprehensive community program. Our goal is to protect citizens and the environment by providing hazard awareness education, training exercises, emergency response plans and an emergency notification system.

DEER PARK LOCAL EMERGENCY PLANNING COMMITTEE AGENDA

A meeting of the Deer Park Local Emergency Planning Committee to be held at the Deer Park City Hall, 710 E. San Augustine, Deer Park, Texas on April 23, 2024 beginning at 11:00 a.m. to discuss the following business:

PLEDGE OF ALLEGIANCE

INTRODUCTIONS

COMPANY OVERVIEW

- Vopak

PRESENTATION

- National Weather Service

PUBLIC COMMENTS

- On LEPC Mission/Function (3-minute time limit)

APPROVALS

- Consideration and approval of minutes from the March 26, 2024 meeting
- Consideration and approval of monthly financial report

COMMITTEE REPORTS

- Executive Committee
 - Approval of by-law changes presented at March's meeting.
- Communications
 - 2024 Company Overview Sign- Up
 - Review any and all Level 2 and Level 3 incidents
- Community Awareness
 - 2024 Volunteer Opportunities
 - 2025 Calendar
- Emergency Response/Transportation
 - Drill

OPEN FOR NEW BUSINESS

NEXT MEETING

- May 28, Jun. 25, Aug. 27, Sept. 24, Oct. 22, and Nov 26, 2024

ADJOURN

Angela Smith

Angela Smith, TRMC, CMC, Treasurer/Board Secretary

DP LEPC Meeting Minutes for April 23, 2024

CALL TO ORDER/PLEDGE OF ALLEGIANCE

Chairman James Stokes called the meeting to order at 11:00 a.m. and led members in the Pledge of Allegiance to the United States flag and Texas flag.

INTRODUCTIONS

Self-introductions were made by Kristen Eason from OxyChem and Nathan Simecek from JAG Emergency Services.

COMPANY OVERVIEW

Fire Chief Jay Foster of Vopak gave a company overview. Vopak Terminal Deer Park is a bulk liquids storage terminal and MTSA USCG-regulated facility. TWIC is required for facility entrance. Royal Vopak roots back to the year 1616, the Dutch-owned company's corporate office is located in Rotterdam, Netherlands. The Deer Park site was originally Robertson Terminals in 1970, Paktank in 1976, and in 2000 became Vopak. Vopak's storage capacity is 8 million plus bbls with 259 tanks, rail capacity of up to 400 cars, four vessels, and six barges at the berth of 185 acres. Chief Foster also covered the Vopak Deer Park Emergency Response Team (ERT), consisting of 55 volunteer members and 3 coordinators, including himself and two assistant chiefs. All hazard response teams include firefighting, hazardous material response, medical first response, and confined space/rope rescue team. Vopak also has an oil response in case of any spills. Chief Foster reviewed the equipment list Vopak has for such emergencies. Vopak works consistently on emergency preparedness including being a level one C.I.M.A. member, fire pre-planning, attending regular and annual ERT training and drills, etc. Vopak is preparing for the hurricane season, focusing on facility response, and crisis management plans.

PRESENTATION

Warning Coordinator Meteorologist Dan Reilly with the National Weather Service Houston/Galveston presented Hurricanes and the 2024 Season Outlook. Hurricane season begins June 1st and ends November 30th. September is the peak of hurricane season and Texas is usually on the back side of hurricane season once we get into October. Atlantic hurricane names are recycled every seventh year. The World Meteorological Organization Committee (WMO) decides which names are retired and what to replace that name with. Most hurricane names are retired due to the impact it has on the area. The Saffir-Simpson Hurricane Wind Scale determines the storm category on a scale of 1-5. Categories 3-5 are considered major hurricanes. Of the nation's strongest hurricanes 150 mph or greater, all except for one were tropical storms just three days before landfall. Most of Texas's hurricanes/tropical storms develop or rapidly intensify over the Gulf of Mexico leaving a small amount of time to prepare for such events. Hurricanes do not care about your timelines. Stay informed by visiting <https://www.weather.gov/hgx/>.

PUBLIC COMMENTS ON LEPC MISSION/FUNCTION (3-MINUTE TIME LIMIT)

No comments at this time.

MINUTES

Buddy Rice made a motion and George Tullgren seconded to accept the minutes for March 26, 2024, as presented. The motion carried unanimously.

FINANCIAL REPORT

Christina Perez made a motion and Jaime Galloway seconded to accept the financial report as presented. The motion carried unanimously.

COMMITTEE REPORTS

Executive Committee:

Approval of by-law changes presented at March's meeting.

LEPC Board Secretary/Treasurer Angela Smith discussed the modified by-laws for LEPC. Last month in March, the changes to the by-laws were discussed with the members. There were no comments or concerns. That meeting served as the 14-day notice of the changes to the by-laws. Ms. Smith went through the few changes that have been made. She asked for any additional comments or questions but none were presented, therefore she asked for a motion to approve the changes to the by-laws.

Christina Perez made a motion to approve the changes in the by-laws presented seconded by Buddy Rice. The motion carried unanimously. The by-laws will be updated on the LEPC website.

Communications Committee Chairman, Jamie Galloway:

2024 Company Overview Sign-up: Mr. Galloway announced the company overviews are booked for 2024, and starting to accept for 2025.

Level 2 and Level 3 Incidents: None to report

Community Awareness Chairman, Christina Perez:

2024 Volunteer Opportunities: Ms. Perez announced the next volunteer opportunity is this Saturday for the DPISD Fun Run and she needs at least one more person to assist Wally as his handler but it would be preferred to have two so the other person can assist with the booth. The next volunteer event is in August which will be Salute to Education. All volunteer opportunities are available online at [DPLEPC: DPLEPC Volunteer Opportunities \(signupgenius.com\)](https://www.signupgenius.com) or you can email Ms. Perez.

2025 Calendar: Ms. Perez reminded the members that the LEPC's 2025 calendar theme is about Industries, and about how the industries positively affect the community, whether it's by volunteering or monetary/equipment donations, and what is produced by their plant. We have

commitments from four companies Dow, Oxy, Shell Chemical, and Texas Molecular. If you haven't signed up yet, please email Ms. Perez.

Emergency Response/Transportation Chairman, Robert Campise: Mr. Campise reported the EOC contact list still needs to be updated. If your company has not updated the EOC Contact list please visit the website address <http://deerparklepc.org/1682/Membership> at your convenience. We are continuing to work with DPISD to improve and expand their shelter-in-place.

Drill: Drill planning is ongoing, as the October drill is aligned with the C.I.M.A. all zones drill.

NEW BUSINESS

Ms. Smith announced that for those interested in viewing the presentation, it is available on the LEPC website, www.deerparklepc.org.

NEXT MEETING

The next meeting is May 28, 2024. Meetings for the 2024 year are available on the agenda.

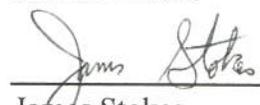
The meeting adjourned at 11:40 am.

ATTEST:

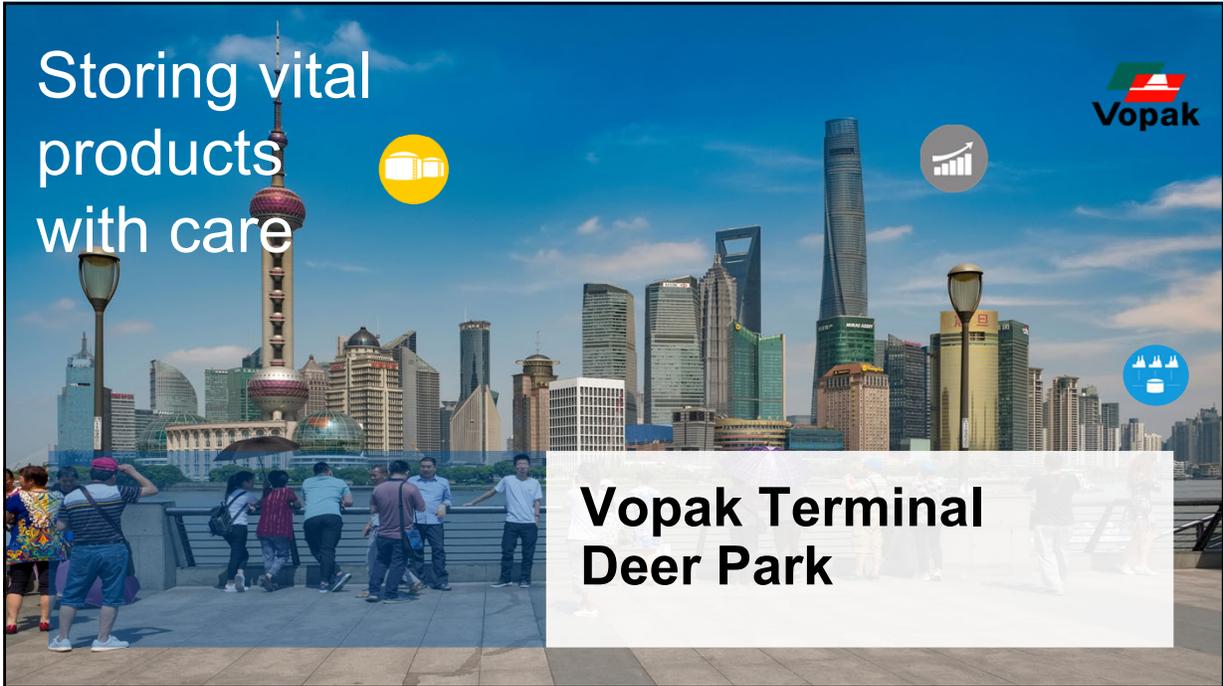


Angela Smith, TRMC, CMC
LEPC Board Secretary/Treasurer

APPROVED:



James Stokes
Chairman



Storing vital products with care

Vopak

Vopak Terminal Deer Park

The image shows a panoramic view of the Shanghai skyline, including the Oriental Pearl Tower and the Shanghai Tower. A semi-transparent white box in the foreground contains the text 'Vopak Terminal Deer Park'. Three circular icons are overlaid on the image: a yellow one with a storage tank, a grey one with a bar chart, and a blue one with a ship and a tank.



Site Overview

Vopak

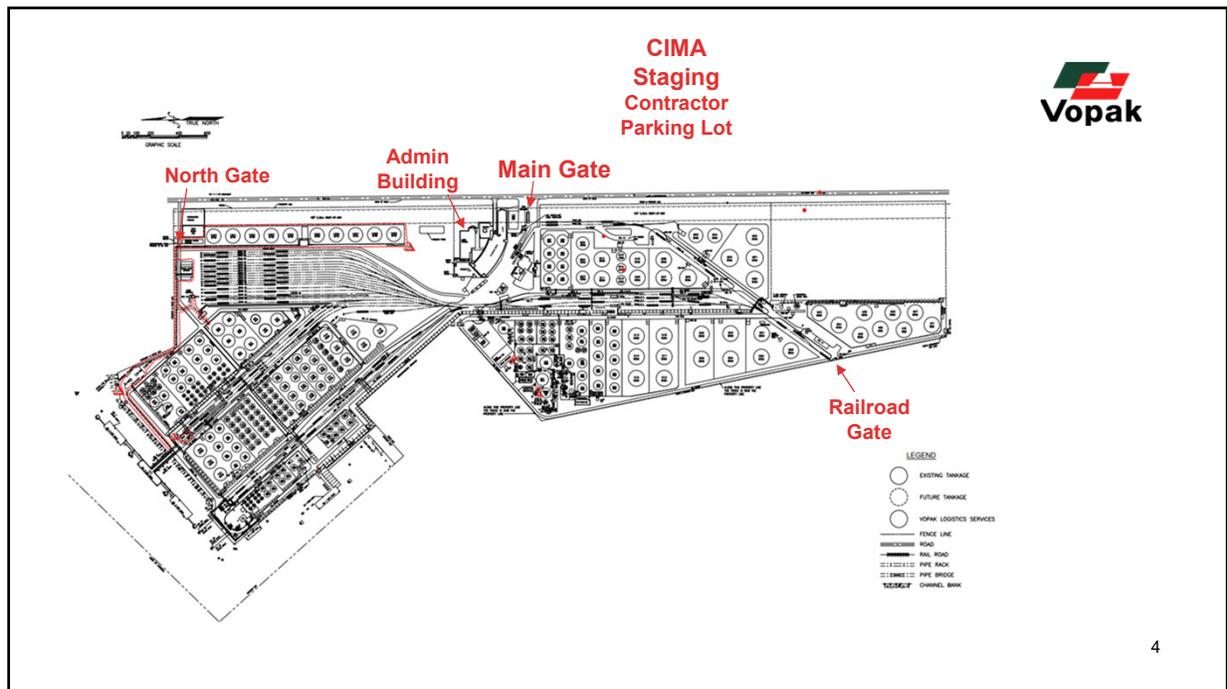
A man wearing a white Vopak hard hat, safety glasses, and an orange high-visibility vest is looking off to the side. In the background, a large blue ship is docked at a port. A semi-transparent white box in the foreground contains the text 'Site Overview' and the Vopak logo.

Vopak Terminal Deer Park



- Bulk Liquids Storage Terminal
- MTSA USCG Regulated Facility (TWIC Required)
- Royal Vopak
 - Dutch owned (Rotterdam, Netherlands Corporate Office)
 - Royal Pakhoed merger with Van Ommeren
 - Van Ommeren and Royal Pakhoed
 - Company roots date back to 1616 in Rotterdam, Netherlands
- Site Originally Robertson Terminals (~1970) > Paktank [Royal Pakhoed] (1976) > Vopak (~2000)

3



4

Vopak Terminal Deer Park



Storage Capacity:

8,000,000+ bbls

Number of Tanks:

259

Berths:

Vessel (4), Barges (6)

Rail Capacity:

up to 400 Cars

Size:

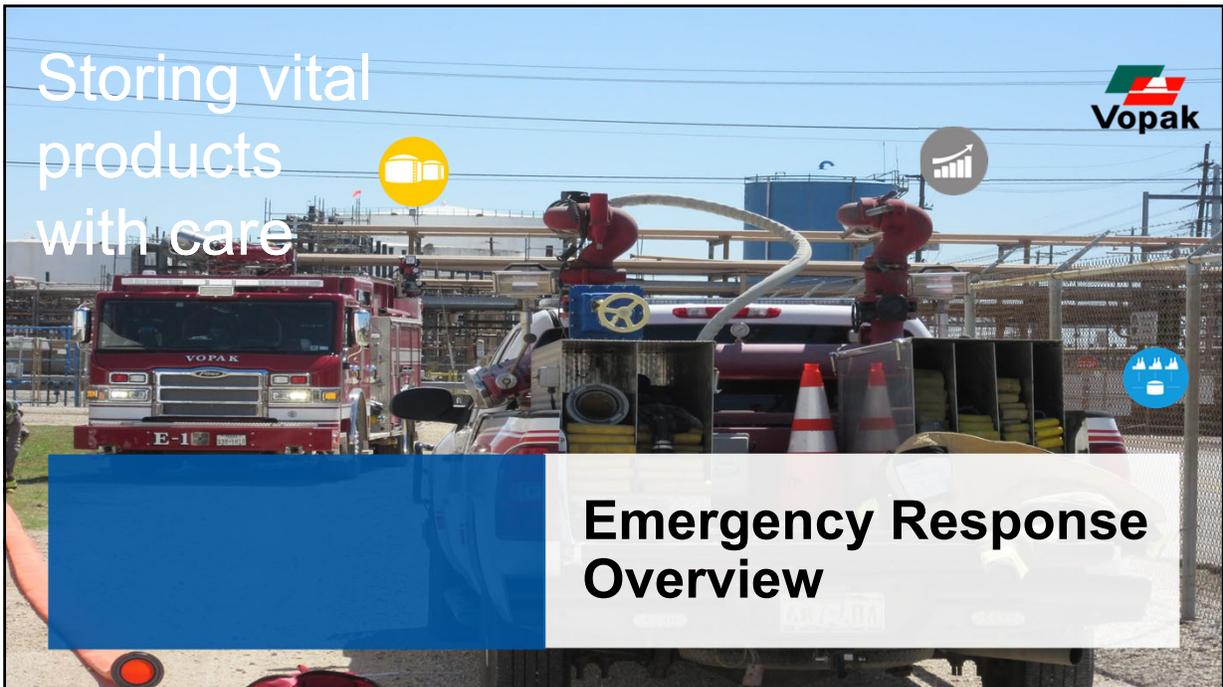
185 Acres



Storing vital products with care



Emergency Response Overview



Vopak Deer Park ERT



- **Consists of ~ 55 volunteer members**
- **3 Coordinators**
 - Ryan Allen (Chief)
 - Kerry Collins (Asst. Chief)
 - Kevin Simmons (Asst. Chief)
- **All Hazards Response Team**
 - Firefighting
 - Hazardous Material Response
 - Medical First Response
 - Confined Space/Rope Rescue Team

7

Vopak Deer Park ERT Apparatus



- **5750 gpm Industrial Foam Engine**



8

Vopak Deer Park ERT Apparatus



- **Quick Attack**
- **Quick Response/Safety Vehicle**
- **Foam Trailer** (x3 - 265 gal Totes 1% -3% AR-AFFF)
- **Hazmat Response Trailer**
- **Hose Trailer (200' of 12" Lay Flat)** *On Order Q2 Delivery Expected*

9

Fire Pump Capacity



- **3500 GPM Electric (SD1)**
- **6000 GPM Diesel (BD7)**
- **5000 GPM Diesel (BD4)**
- **1200 GPM Diesel Booster (BD3)**

Vopak Terminal Deer Park relies on PoH FD Fireboats and/or portable fire pumps for additional makeup supply.

10

Vopak Deer Park Oil Response



- **Hard Boom on Main Fixed Reel** *Located at Docks*
- **Hard Boom on Portable Reel**
- **Spill Response Boats**
- **Spill Kits throughout the terminal and docks**
- **3rd Party OSRO - Phoenix Pollution Control**

11

Emergency Preparedness



- **Firefighting Pre-Plans**
- **Regular ERT training and drills**
- **Annual Live Fire Training**
- **Annual Drills and Exercises (Security, Spill Response, IMT, Evacuation)**
- **Member of CIMA**
- **Hurricane and Severe Weather Procedures**
- **Facility Response Plan and Crisis Management Plan**

12

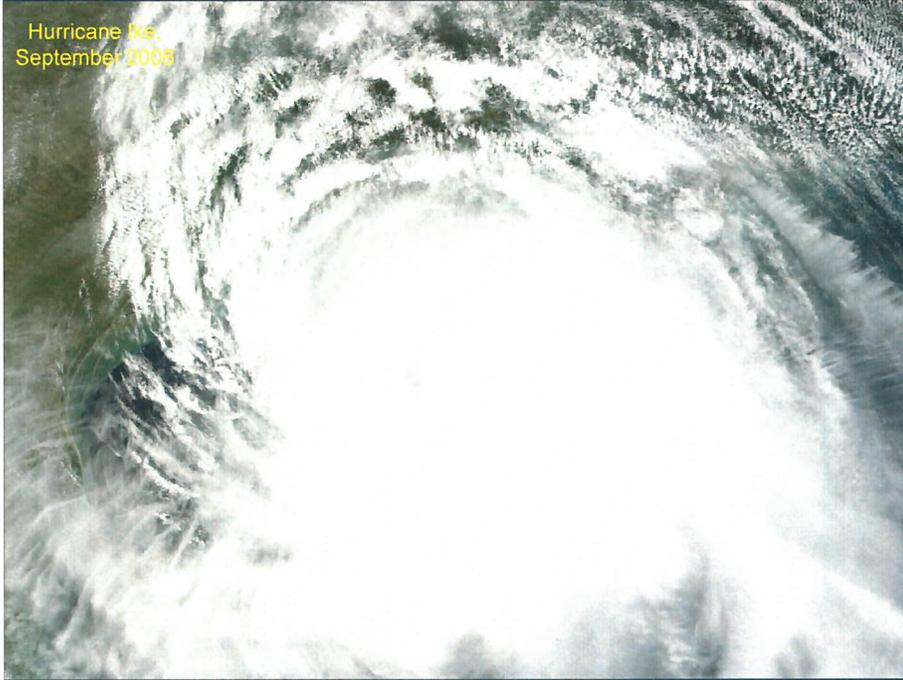




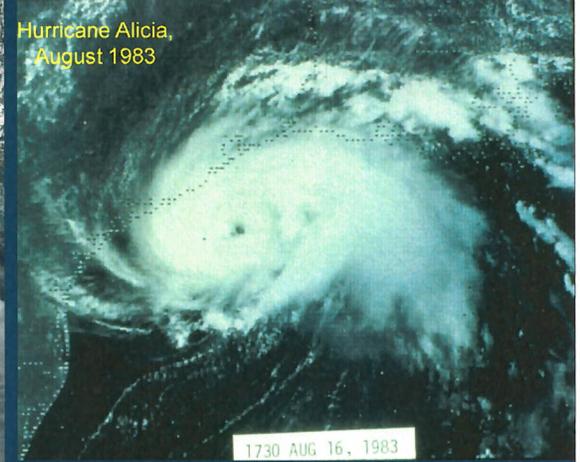
Hurricanes and 2024 Season Outlook



Hurricane Ike,
September 2005



Hurricane Alicia,
August 1983

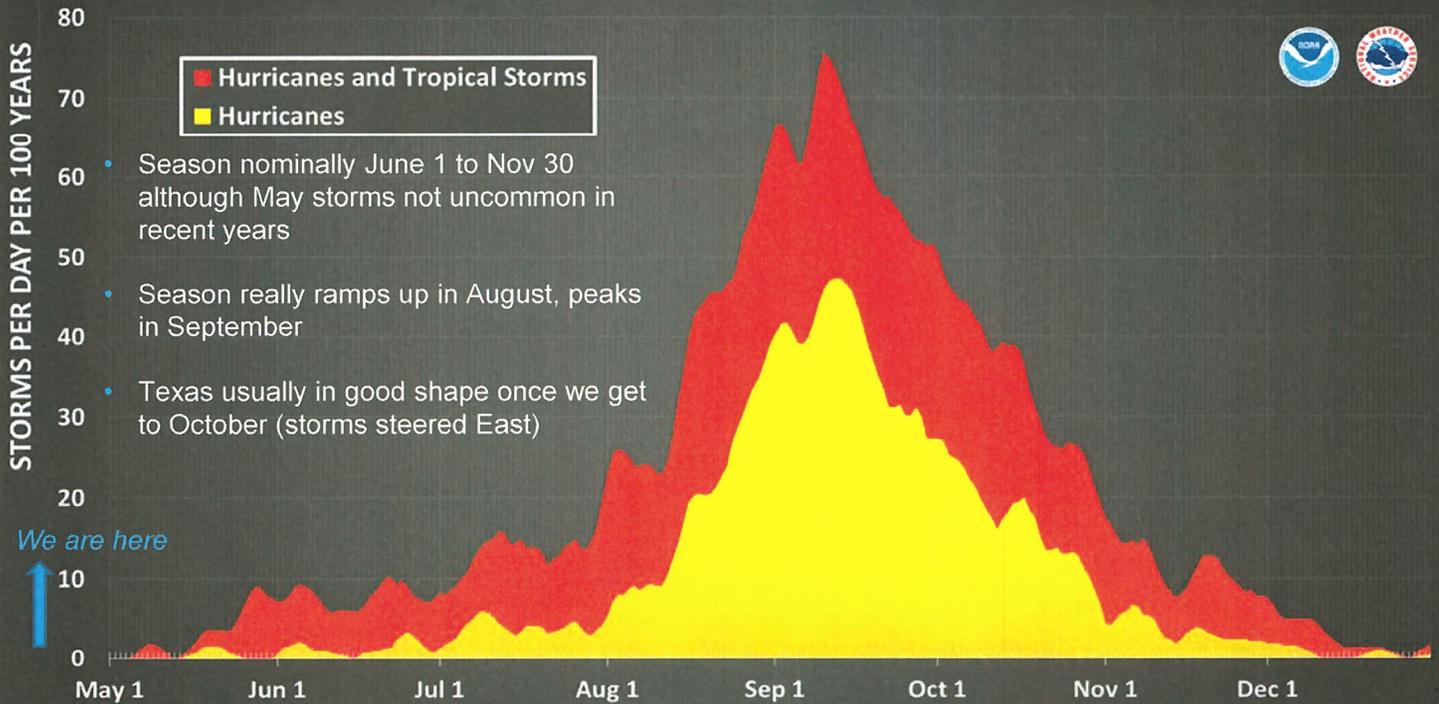


1730 AUG 16, 1983

Dan Reilly
Warning Coordination Meteorologist
National Weather Service Houston/Galveston

Atlantic Hurricane and Tropical Storm Activity

Based on Data from 1944 to 2020



Atlantic Hurricane Names

Storm names are recycled every 7th year. 2030 list will be same as 2024 for storm names that are not retired. WMO committee decides which names are retired and what to replace that name with. What is the most retired letter? <https://www.nhc.noaa.gov/aboutnames.shtml>

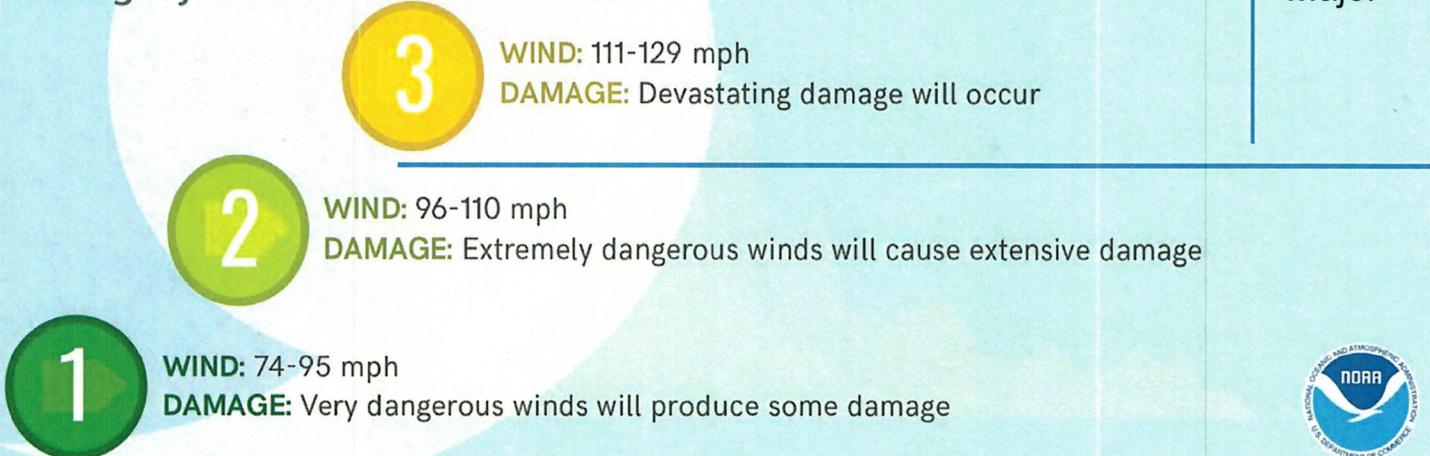
Atlantic Names

[Atlantic Pronunciation Guide \(PDF\)](#)

2024	2025	2026	2027	2028	2029
Alberto	Andrea	Arthur	Ana	Alex	Arlene
Beryl	Barry	Bertha	Bill	Bonnie	Bret
Chris	Chantal	Cristobal	Claudette	Colin	Cindy
Debby	Dexter	Dolly	Danny	Danielle	Don
Ernesto	Erin	Edouard	Elsa	Earl	Emily
Francine	Fernand	Fay	Fred	Farrah	Franklin
Gordon	Gabrielle	Gonzalo	Grace	Gaston	Gert
Helene	Humberto	Hanna	Henri	Hermine	Harold
Isaac	Imelda	Isaias	Imani	Idris	Idalia ??
Joyce	Jerry	Josephine	Julian	Julia	Jose
Kirk	Karen	Kyle	Kate	Karl	Katia
Leslie	Lorenzo	Leah	Larry	Lisa	Lee
Milton	Melissa	Marco	Mindy	Martin	Margot
Nadine	Nestor	Nana	Nicholas	Nicole	Nigel
Oscar	Olga	Omar	Odette	Owen	Ophelia
Patty	Pablo	Paulette	Peter	Paula	Philippe
Rafael	Rebekah	Rene	Rose	Richard	Rina
Sara	Sebastien	Sally	Sam	Shary	Sean
Tony	Tanya	Teddy	Teresa	Tobias	Tammy
Valerie	Van	Vicky	Victor	Virginie	Vince
William	Wendy	Wilfred	Wanda	Walter	Whitney

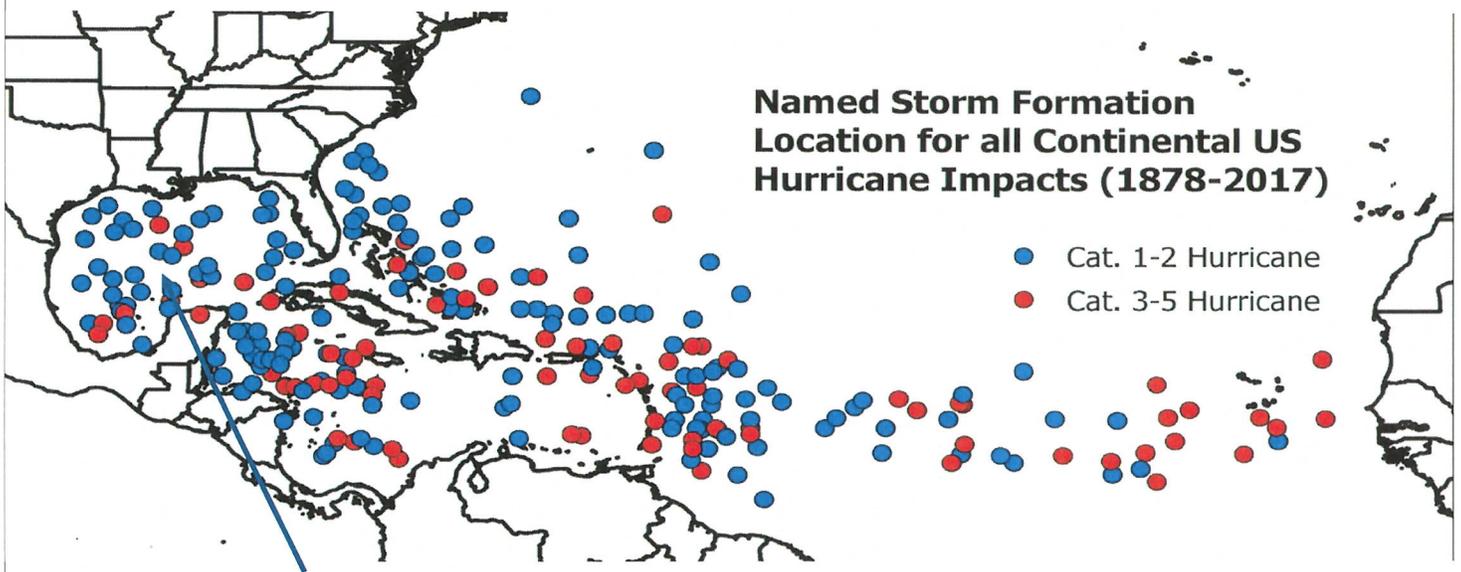
Since 1953, Atlantic tropical storms had been named from lists originated by the National Hurricane Center. They are now maintained and updated through a strict procedure by an international committee of the World Meteorological Organization.

Saffir-Simpson Hurricane Wind Scale





Where do hurricanes form?



Named Storm Formation Location for all Continental US Hurricane Impacts (1878-2017)

- Cat. 1-2 Hurricane
- Cat. 3-5 Hurricane

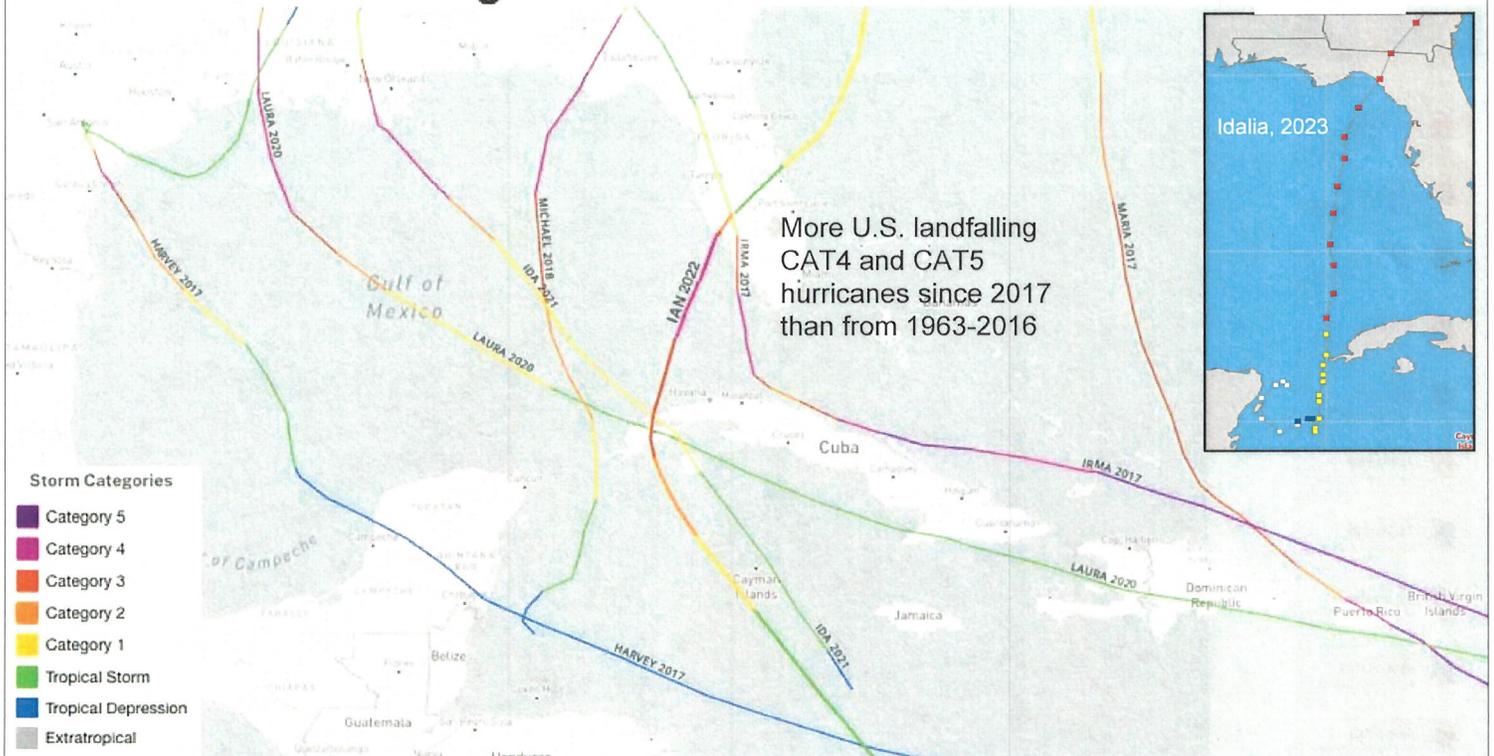
Look at all those Gulf developers!!



NATIONAL WEATHER SERVICE
Protecting Lives and Property for 150 Years

NWS HOUSTON-GALVESTON
www.weather.gov/Houston @NWSHouston

The 8 Landfalling U.S. Cat 4 & 5 Hurricanes of 2017-2023



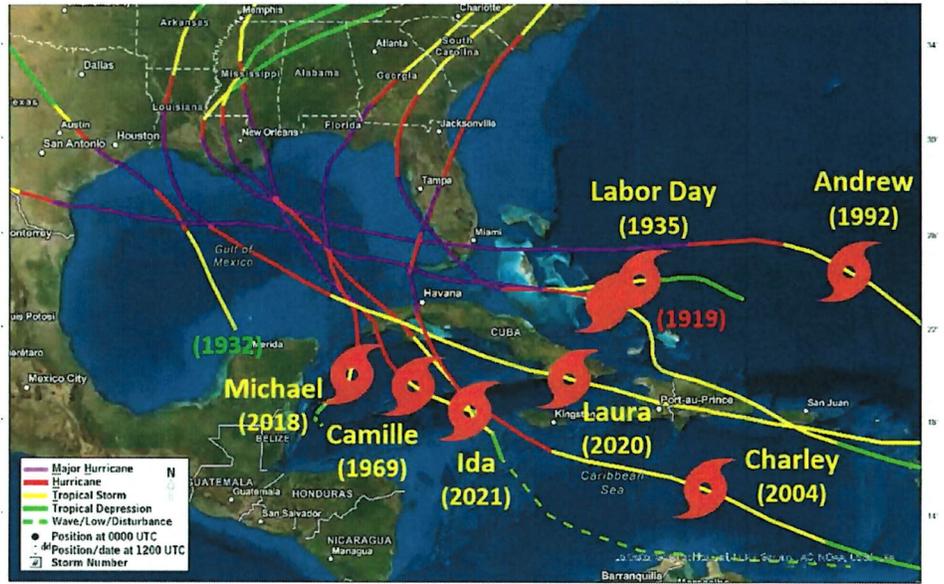
More U.S. landfalling CAT4 and CAT5 hurricanes since 2017 than from 1963-2016

- Storm Categories**
- Category 5
 - Category 4
 - Category 3
 - Category 2
 - Category 1
 - Tropical Storm
 - Tropical Depression
 - Extratropical

Hurricanes don't care about your timelines

The Nation's Strongest – 150 MPH or Greater: All But 1 Were Tropical Storms 3 Days Before Landfall

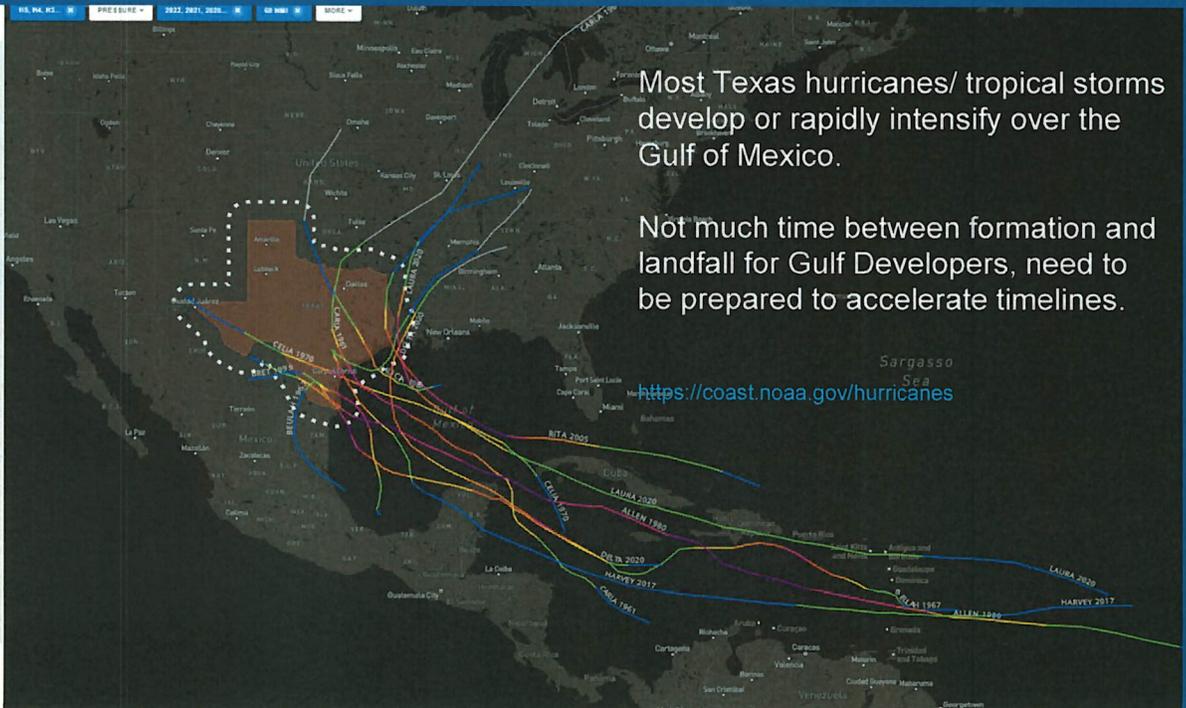
- U.S. 150 mph
- 1919 – Storm 2
- 1932 – Storm 2
- 1935 – Labor Day
- 1969 – Camille
- 1992 – Andrew
- 2004 – Charley
- 2018 – Michael
- 2020 – Laura
- 2021 – Ida



Ten Major Hurricane Landfalls for Texas Since 1960



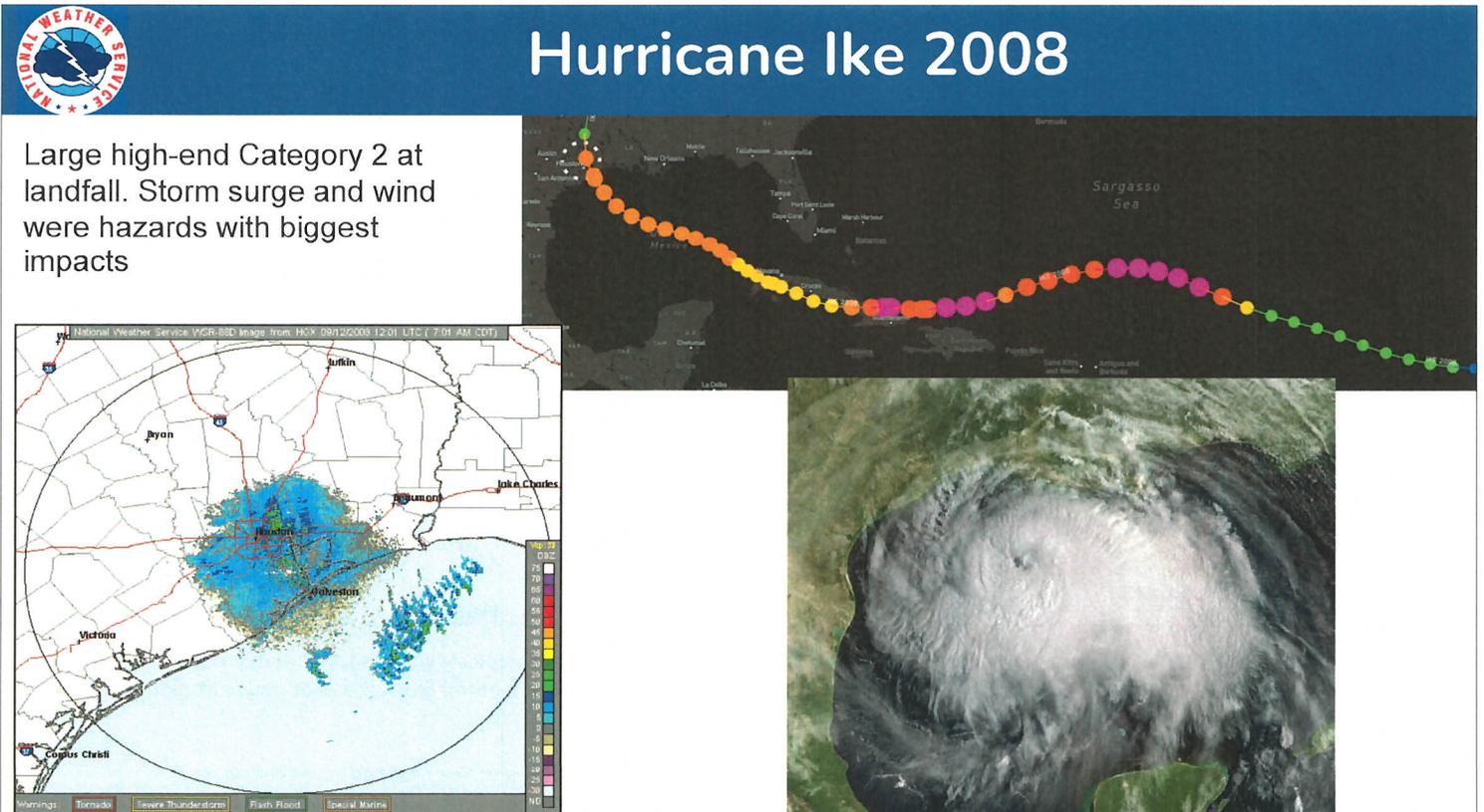
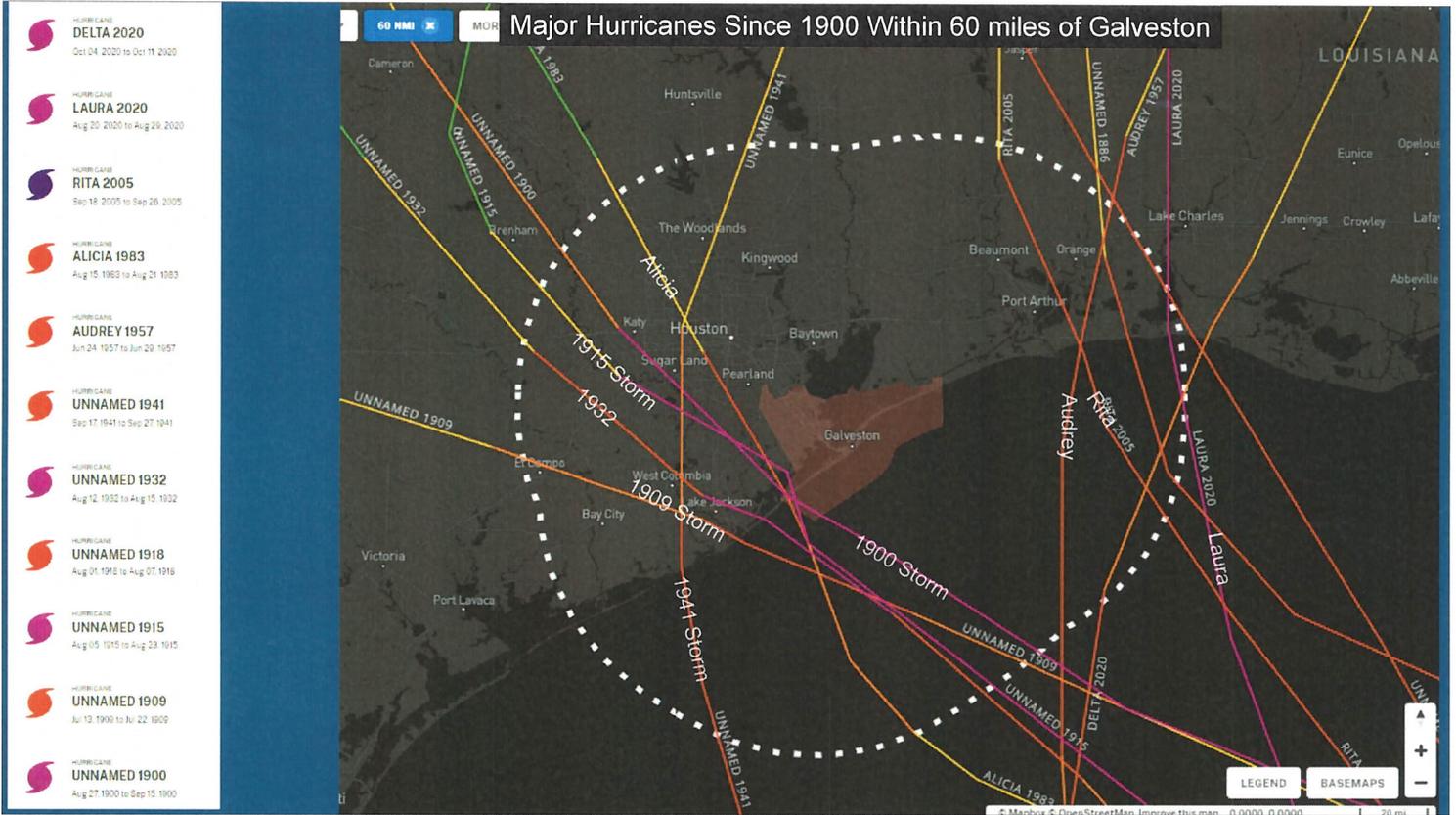
- HURRICANE DELTA 2020
Oct 04, 2020 to Oct 11, 2020
- HURRICANE LAURA 2020
Aug 20, 2020 to Aug 29, 2020
- HURRICANE HARVEY 2017
Aug 10, 2017 to Sep 02, 2017
- HURRICANE RITA 2005
Sep 18, 2005 to Sep 25, 2005
- HURRICANE BRET 1999
Aug 18, 1999 to Aug 25, 1999
- HURRICANE ALICIA 1983
Aug 15, 1983 to Aug 21, 1983
- HURRICANE ALLEN 1980
Jul 21, 1980 to Aug 11, 1980
- HURRICANE CELIA 1970
Jul 21, 1970 to Aug 05, 1970
- HURRICANE BEULAH 1967
Sep 05, 1967 to Sep 24, 1967
- HURRICANE CARLA 1961
Sep 03, 1961 to Sep 18, 1961

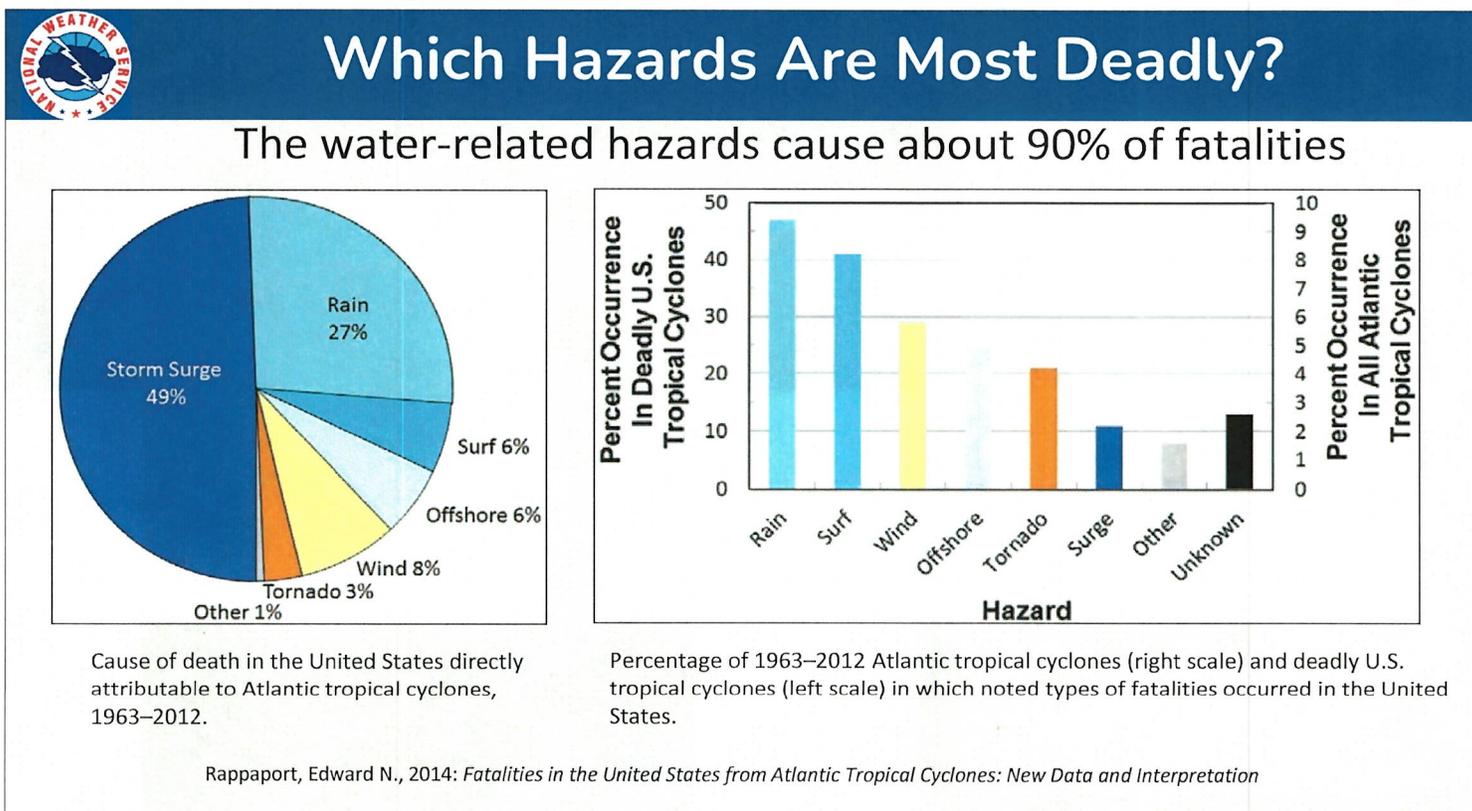


Most Texas hurricanes/ tropical storms develop or rapidly intensify over the Gulf of Mexico.

Not much time between formation and landfall for Gulf Developers, need to be prepared to accelerate timelines.

<https://coast.noaa.gov/hurricanes>



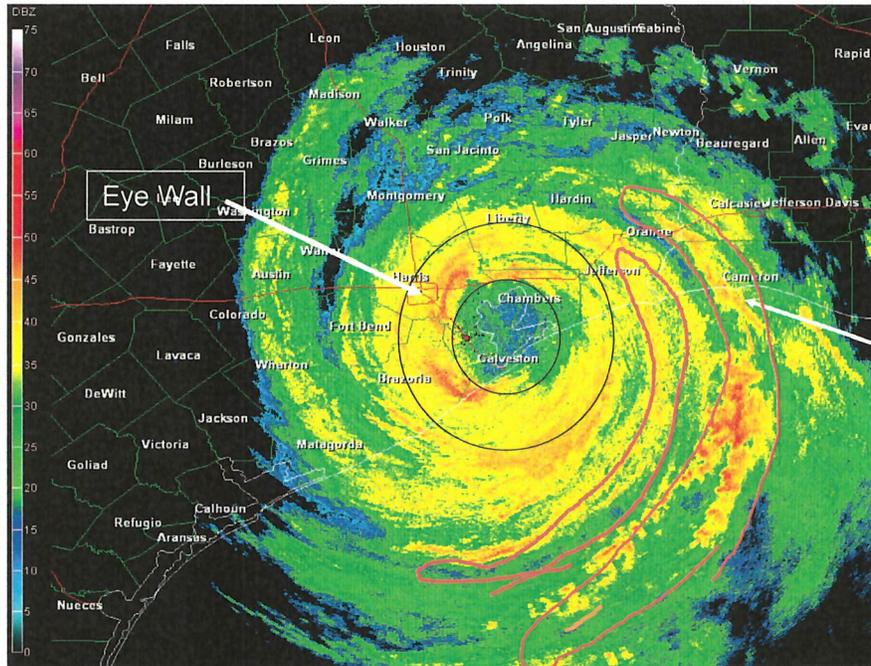




Anatomy of Hurricane. Hazard Distribution

Highest winds in the eyewall of the hurricane

For Hurricane Ike, eyewall swept over a large area, many without power for days/weeks.

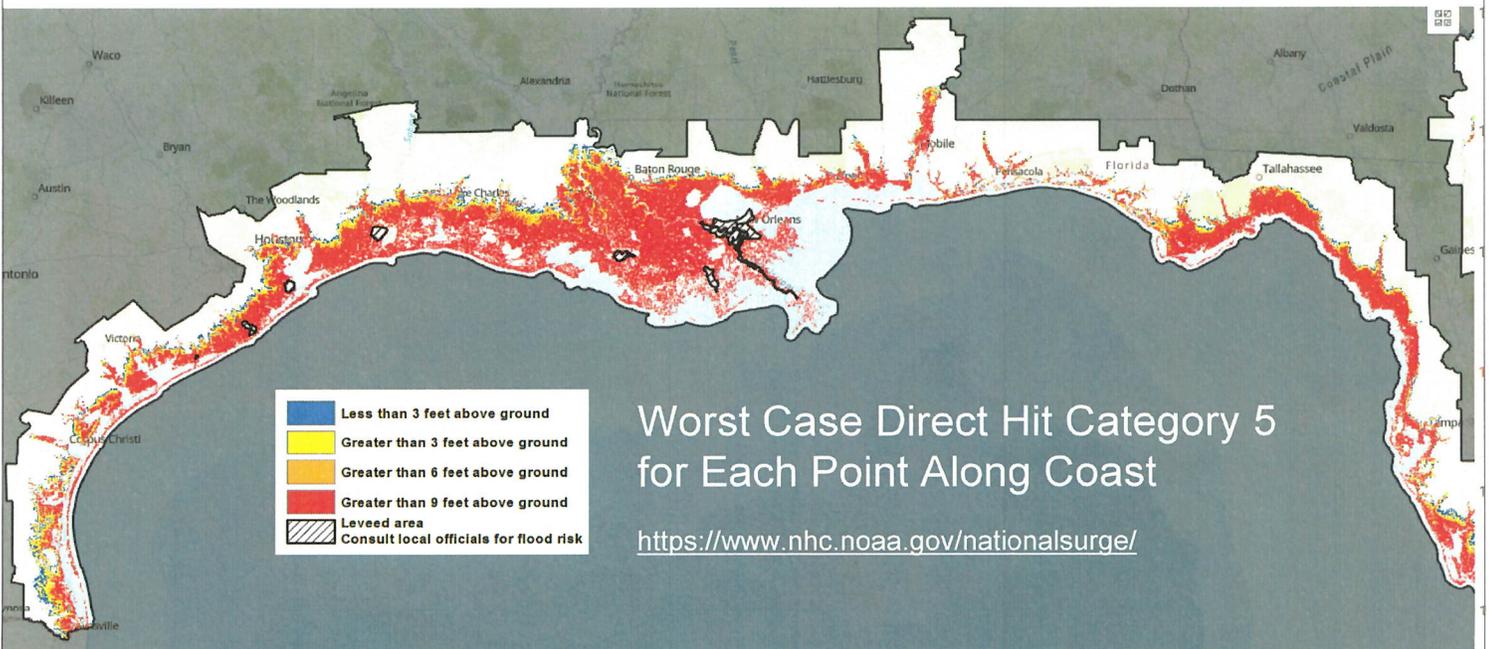


Spiral Bands

Heavy downpours, gusty winds and tornadoes in the spiral bands (especially on the right side of the track)

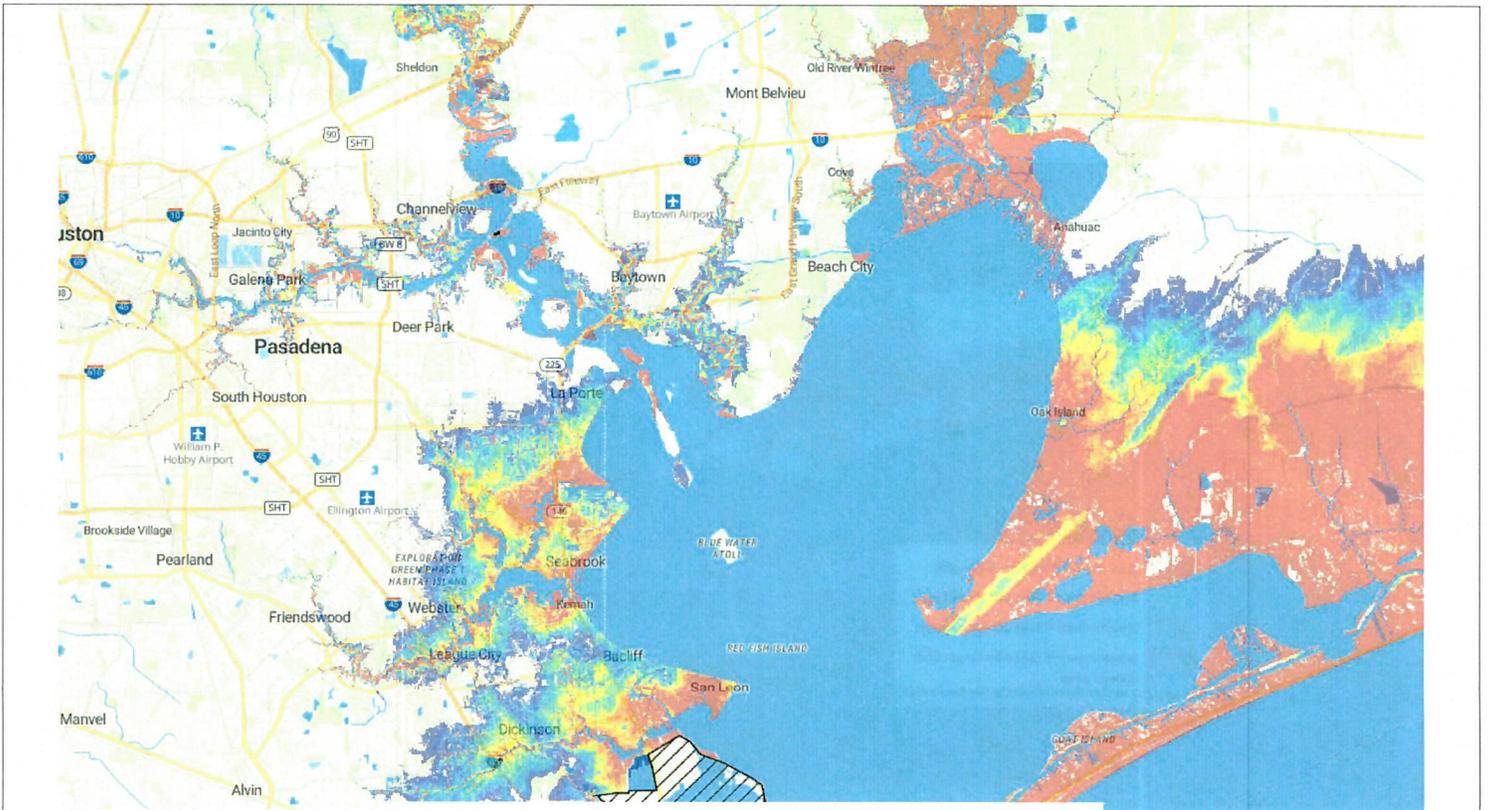
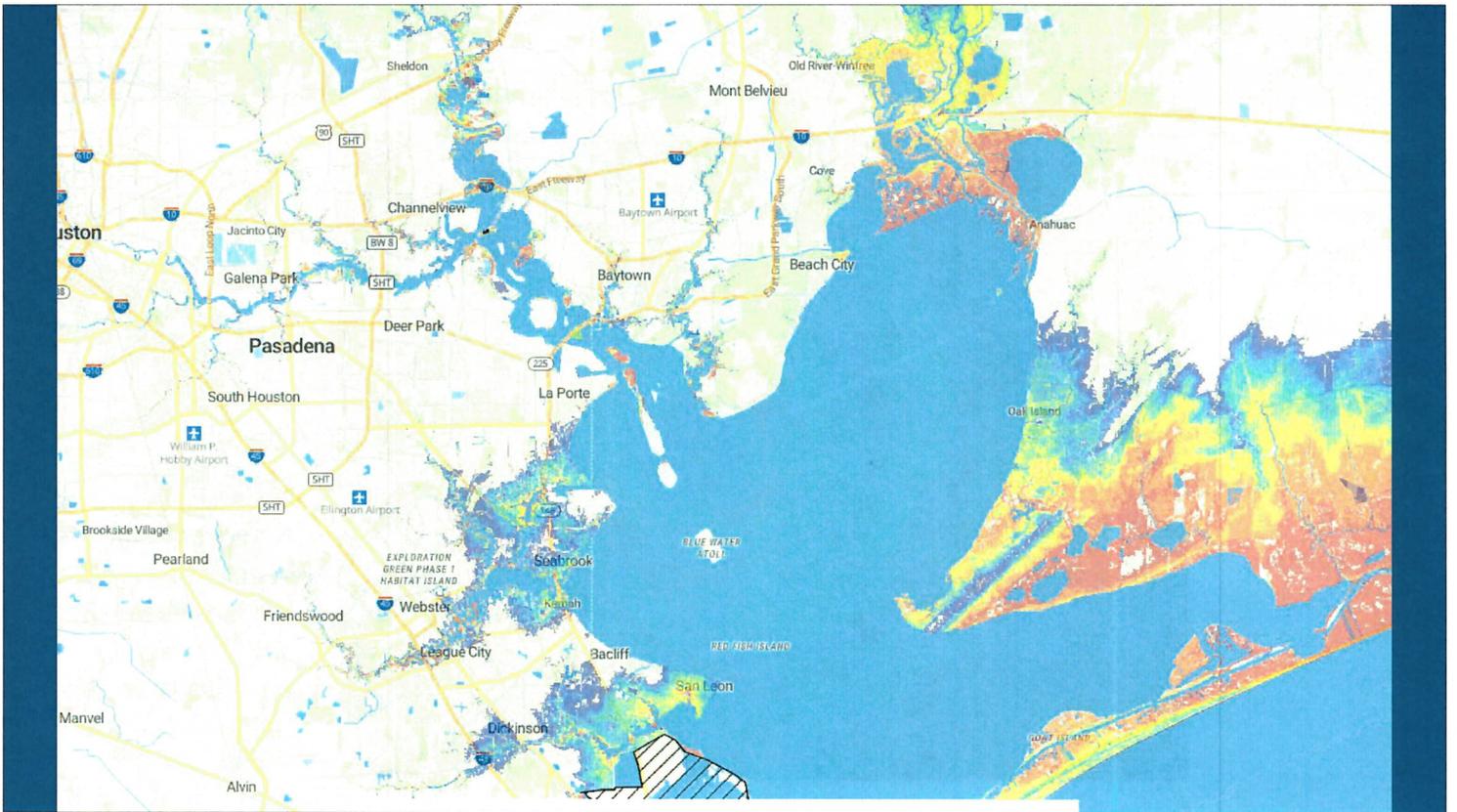


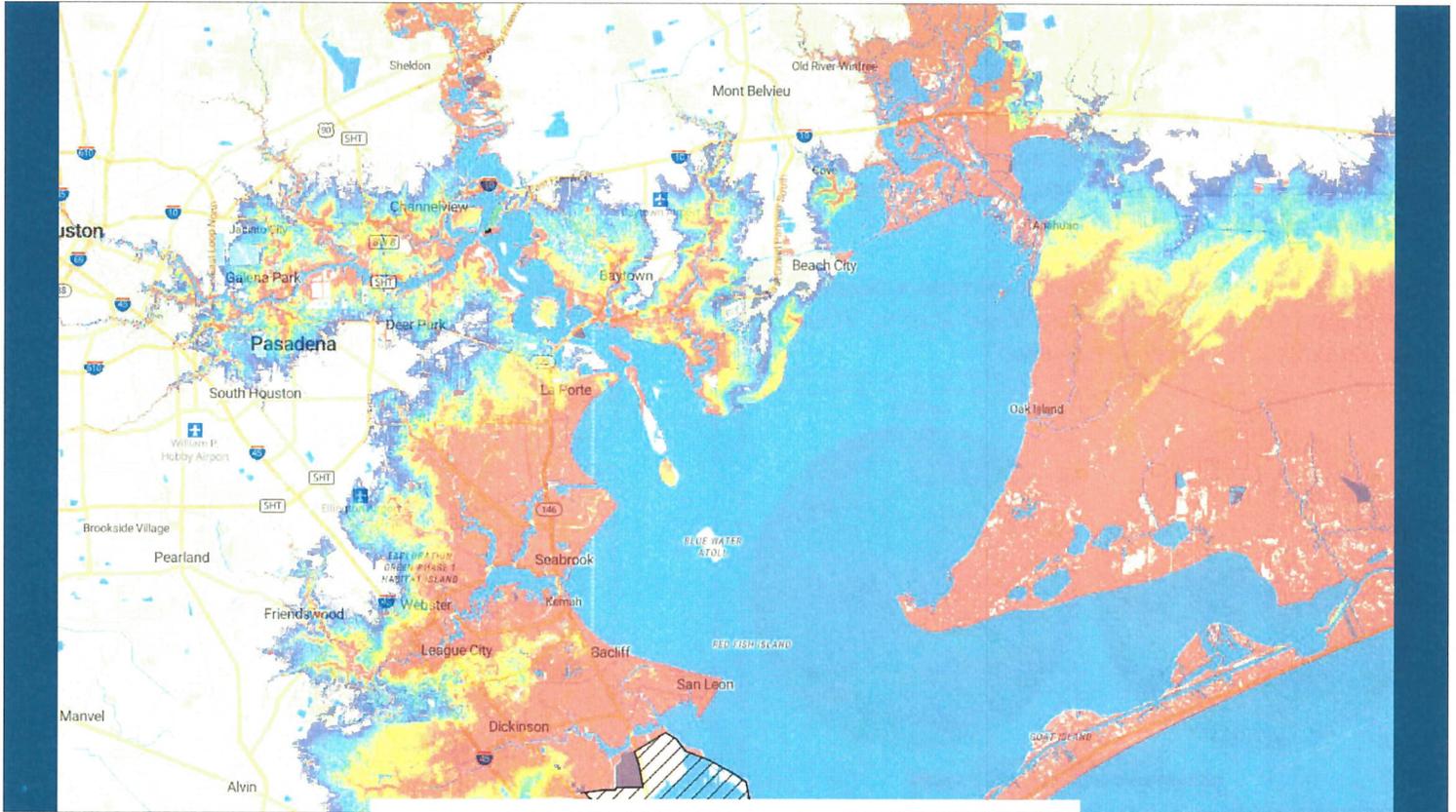
Storm Surge Risk Maps



Worst Case Direct Hit Category 5 for Each Point Along Coast

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





'Average' Atlantic Hurricane Season

*** Effective 2021**

1981-2010

**12 Named Storms
6 Hurricanes
3 Major Hurricanes**



1991-2020

**14 Named Storms
7 Hurricanes
3 Major Hurricanes**

* Numbers for an average season reflect the climate record for tropical storms and hurricanes and use the most recent 3 decades as the period of reference. More at: <http://bit.ly/NOAAHurricaneSeasonAverages>

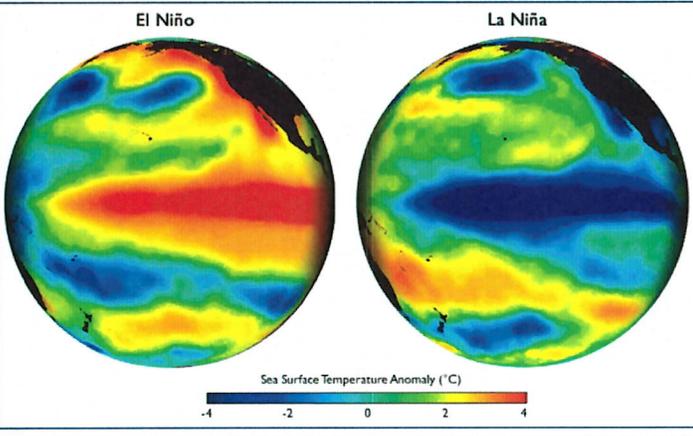
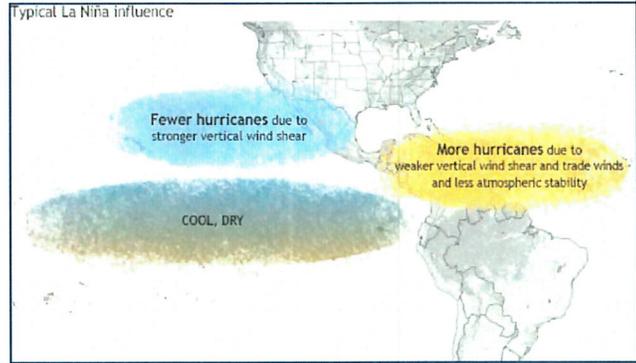
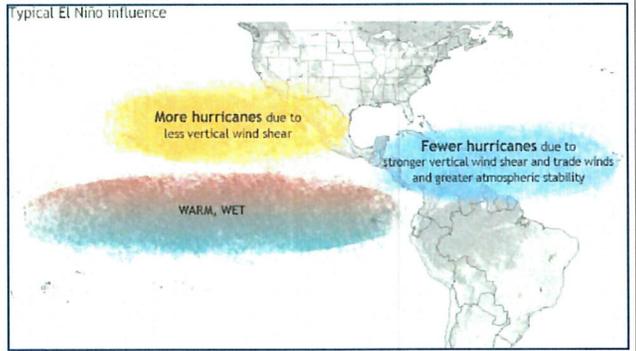




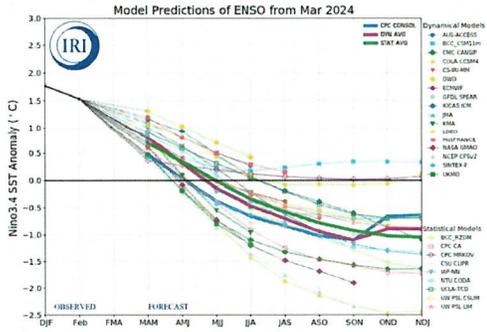
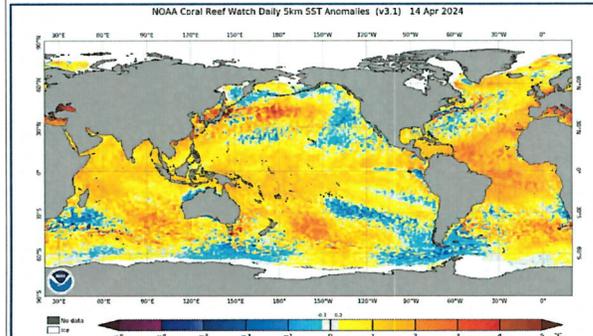
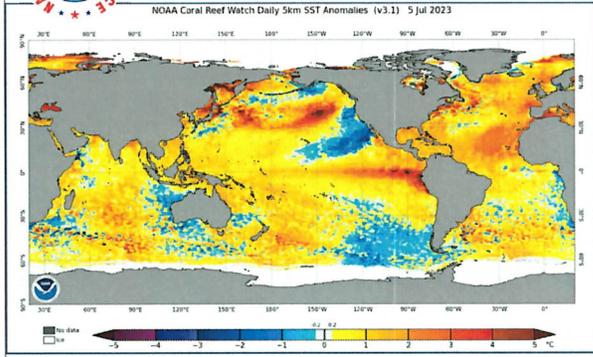
Seasonal Forecast: El Nino/La Nina Impacts on Atlantic Hurricane Season

El Nino characterized by unusually warm waters near the equator Eastern Pacific, La Nina unusually cold water same region. This pattern in sea surface temperatures impacts weather across the globe!

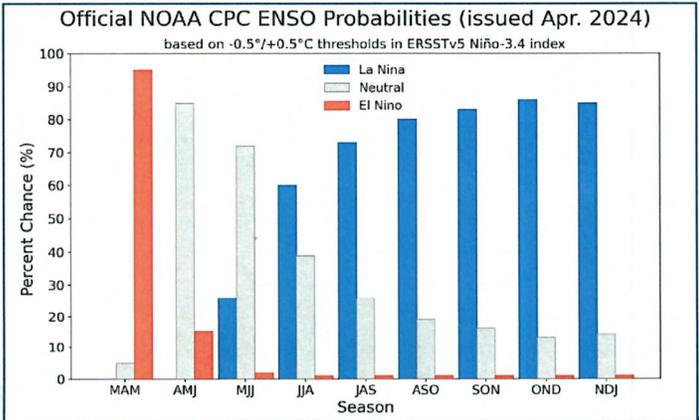
La Nina would imply more storms with more favorable conditions for formation, El Nino fewer storms. What are we expecting this hurricane season?



Seasonal Forecast



Starting with an El Nino/Neutral this Winter, more neutral condition now, climate models show transition to a La Nina pattern by hurricane season



Colorado State University Forecasting Very Active Hurricane Season

ATLANTIC BASIN SEASONAL HURRICANE FORECAST FOR 2024

Forecast Parameter and 1991–2020 Average (in parentheses)	Issue Date
Named Storms (NS) (14.4)	April 4, 2024
Named Storm Days (NSD) (69.4)	23
Hurricanes (H) (7.2)	115
Hurricane Days (HD) (27.0)	11
Major Hurricanes (MH) (3.2)	45
Major Hurricane Days (MHD) (7.4)	5
Accumulated Cyclone Energy (ACE) (123)	13
ACE West of 60°W (73)	210
Net Tropical Cyclone Activity (NTC) (135%)	125
	220

Current El Niño conditions are likely to transition to La Niña conditions this summer/fall, leading to hurricane-favorable wind shear conditions. Sea surface temperatures in the eastern and central Atlantic are currently at record warm levels and are anticipated to remain well above average for the upcoming hurricane season. A warmer-than-normal tropical Atlantic provides a more conducive dynamic and thermodynamic environment for hurricane formation and intensification. This forecast is of above-normal confidence for an early April outlook. We anticipate a well above-average probability for major hurricanes making landfall along the continental United States coastline and in the Caribbean. As with all hurricane seasons, coastal residents are reminded that it only takes one hurricane making landfall to make it an active season. Thorough preparations should be made every season, regardless of predicted activity.

<https://enr.source.colostate.edu/researchers-predicting-well-above-average-2024-atlantic-hurricane-season/>

For Harris County, chance of a track within 50 miles

2024 Forecast Probability of Named Storm impact	2024 Forecast Probability of Hurricane impact	2024 Forecast Probability of Major Hurricane impact	Average Probability of Named Storm impact	Average Probability of Hurricane impact	Average Probability of Major Hurricane impact	# Named Storms 1880-2020	# Hurricanes 1880-2020	# Major Hurricanes 1880-2020
45%	25%	7%	29%	16%	4%	49	24	6

https://tropical.colostate.edu/TC_impact.html

Stay Informed

Web

National Hurricane Center: <https://www.nhc.noaa.gov/>
 Houston/Galveston Weather Forecast Office: [weather.gov/hgx](https://www.weather.gov/hgx)
 WFO Tropical Page: <https://www.weather.gov/srh/tropical?office=hgx>

Twitter

National Hurricane Center: @NHCAtlantic, @NWSNHC
 Houston/Galveston Weather Forecast Office: @NWSHouston

Facebook

<https://www.facebook.com/NWSNHC>
<https://www.facebook.com/NWSHouston>

Youtube

Youtube.com/NWSNHC
 Youtube.com/NWSHouston

Contact info:

Dan Reilly, dan.reilly@noaa.gov



SCAN ME

The Official Southeast Texas
**HURRICANE &
 SEVERE WEATHER
 GUIDE**

2023



**IT ONLY TAKES
 ONE STORM!**



WEATHER.GOV/HOUSTON

Source: NOAA

Deer Park LEPC

Report March 27-April 23, 2024

Plant Incident Reports Summary

Level 1 - Courtesy Notification	17
Level 2 - (Watch) Potential Off Site Impact	0
Level 3 - (Warning) Off Site Impact	0
Drill, Exercise or Fire Training	8
System Test	49
Training Report Submittal	12