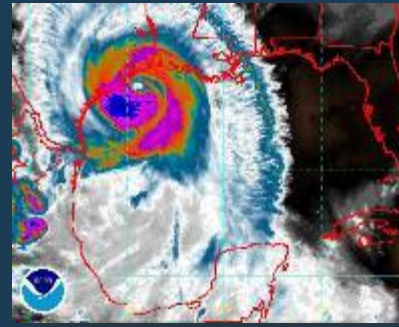


# H-GAC 2024 Webinar/Workshop Series



## Disaster Debris Workshop

### WORKSHOP DATE:

JUNE 11, 2024

### TIME:

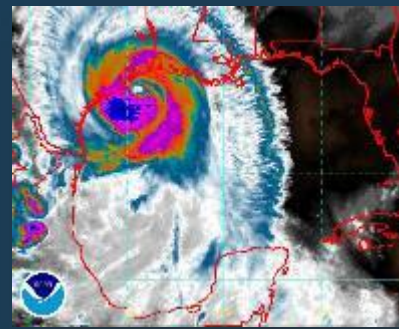
8:30 A.M. TO 12:00 P.M.



# Agenda



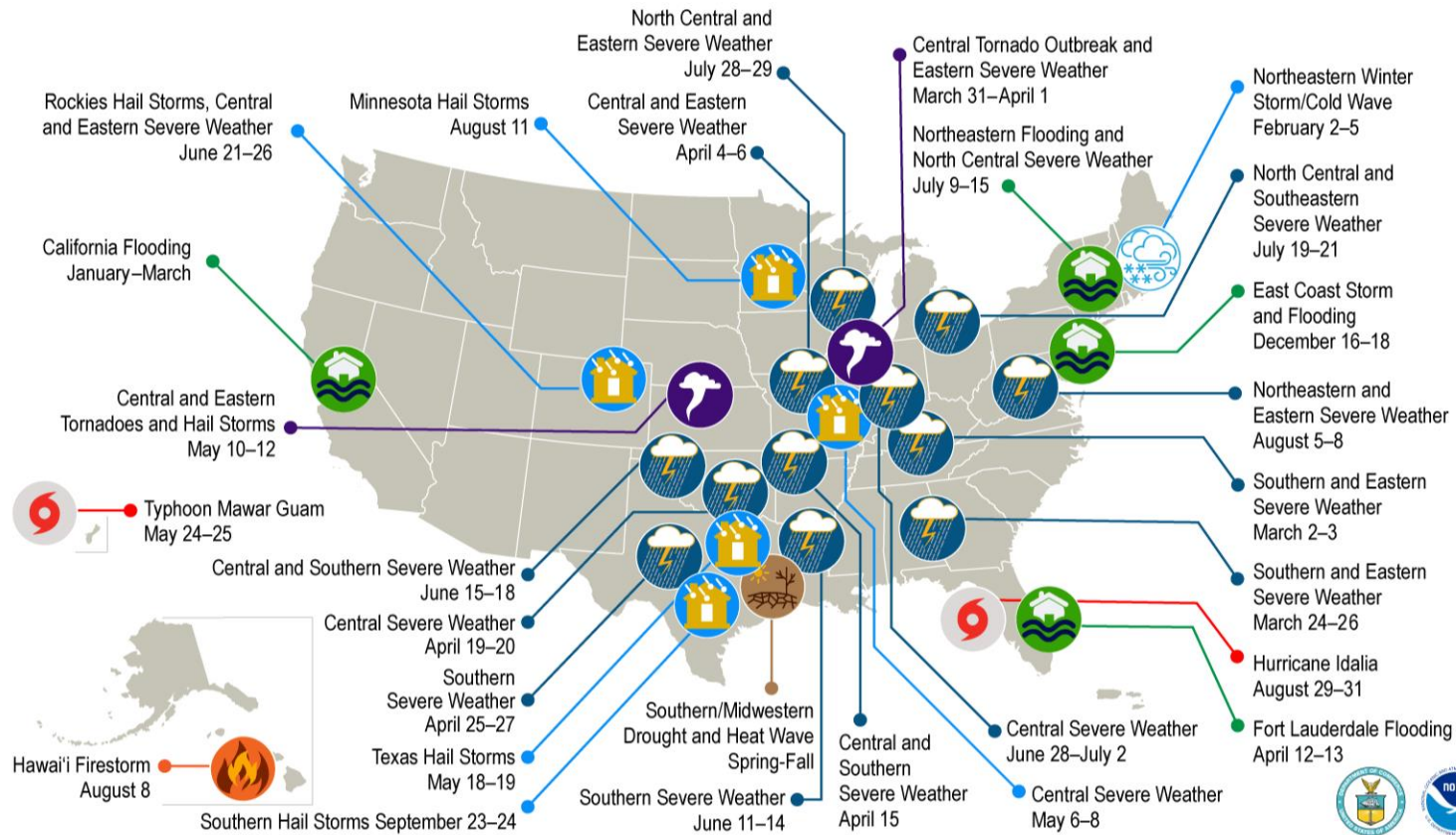
1. Recent Incidents
2. Preparations For Jurisdictions To Ease the Burden in Disaster Debris Operations
3. Debris Management Resources for Residents
4. Debris Management Resources for Businesses
5. Damage Assessment Processes and Tips
6. Waterway Debris Considerations
7. Wildfire Debris Considerations



# Part 1: Recent Incidents



## U.S. 2023 Billion-Dollar Weather and Climate Disasters



This map denotes the approximate location for each of the 28 separate billion-dollar weather and climate disasters that impacted the United States in 2023.



From 1980 to present, the overall damage/cost of climate disasters exceeds \$2.4 trillion (341 events)

# Recent Incidents - January 2024

- Flooding



The image is a screenshot of a news article from KHOU-11. The top navigation bar includes the station logo 'KHOU-11', and links for 'News', 'Weather', 'Sports', and 'VERIFY'. Below this is a secondary navigation bar with links for 'HARRIS COUNTY', 'HURRICANE SEASON', 'POSTAL PROBLEMS', and 'GRACE CAN HELP'. A red banner at the top of the article area reads 'BREAKING NEWS LIVE: Meteorologist Kim Castro is tracking a line of storms moving into the Houston area'. The main headline is 'Southeast Texas flooding updates: Disaster declarations issued for Montgomery, San Jacinto counties'. Below the headline is a sub-headline: 'Heavy swaths of rain fell in Southeast Texas Wednesday, dropping more water on an already-saturated ground.' The article is accompanied by a photograph of a flooded street with trees and a stop sign in the background.

KHOU News – Southeast Texas


# Recent Incidents - February & March 2024

Austin American-Statesman 14 new restaurants to try in Austin, and 11 eateries  
SERVING OUR COMMUNITY SINCE 1871





[ News ] Sports Hookem.com Austin360 Opinion Advertise Obituaries eNewspaper Legals


STATE

## Smokehouse Creek Fire, the largest wildfire in Texas history, is now 100% contained

 [Alexis Simmerman](#)  
Austin American-Statesman

Published 8:58 a.m. CT March 18, 2024 | Updated 8:58 a.m. CT March 18, 2024



**FOX** The Smokehouse Creek fire has been burning in the Texas panhandle for nearly  
10:45 PM 67° TO OREGON **FOX** VOLCANO IN ICELAND ERUPTS FOR 4TH TIME IN 3 MONTH NATIONAL

- Smokehouse Creek (North Texas) Fire

# Angleton Severe Storms - March 15, 2024

- Severe storms damaging structures in Angleton


abc 13 menu WATCH LIVE

STORM DAMAGE

## Dramatic video shows moments Angleton business wall collapses during severe weather

Saturday, March 16, 2024

Facebook X YouTube LinkedIn Email Link



"We're gonna try to put it back together and move forward, that's all we can do. It's a rough road," an Angleton golf center owner told ABC13 after witnessing the severe storm that arrived Friday night.

# Recent Incidents - April 10, 2024

The image is a screenshot of a news website. At the top left is the KHOU 11 logo. To its right are navigation links for News, Weather, Sports, and VERIFY. Further right is a red button with the KHOU 11+ logo and a small video thumbnail. Below these are four menu items: HARRIS COUNTY, HURRICANE SEASON, POSTAL PROBLEMS, and GRACE CAN HELP. The main content area features a 'LOCAL NEWS' section with a large headline: 'Your photos, videos: Area-wide damage after strong storms swept through parts of Southeast Texas'. Below the headline is a sub-headline: 'A brief tornado hit the Katy area, causing a Firestone Tire Shop building to collapse.' At the bottom of the article is a video player with a large play button. The video player is divided into three panels: the left panel shows two news anchors in a studio setting; the top right panel shows a reporter standing in front of a damaged building; the bottom right panel shows another reporter standing in front of a large pile of debris.

**KHOU 11** News Weather Sports VERIFY KHOU 11+

HARRIS COUNTY HURRICANE SEASON POSTAL PROBLEMS GRACE CAN HELP

LOCAL NEWS

## Your photos, videos: Area-wide damage after strong storms swept through parts of Southeast Texas

A brief tornado hit the Katy area, causing a Firestone Tire Shop building to collapse.

Video player showing news anchors and field reports of damage.



# Recent Incidents - May 4, 2024

- Severe storms with flooding and high winds.

U.S.

## Hundreds rescued from floodwaters around Houston as millions in Texas, Oklahoma, remain under threat

Updated on: May 4, 2024 / 11:46 PM EDT / CBS/AP

f X



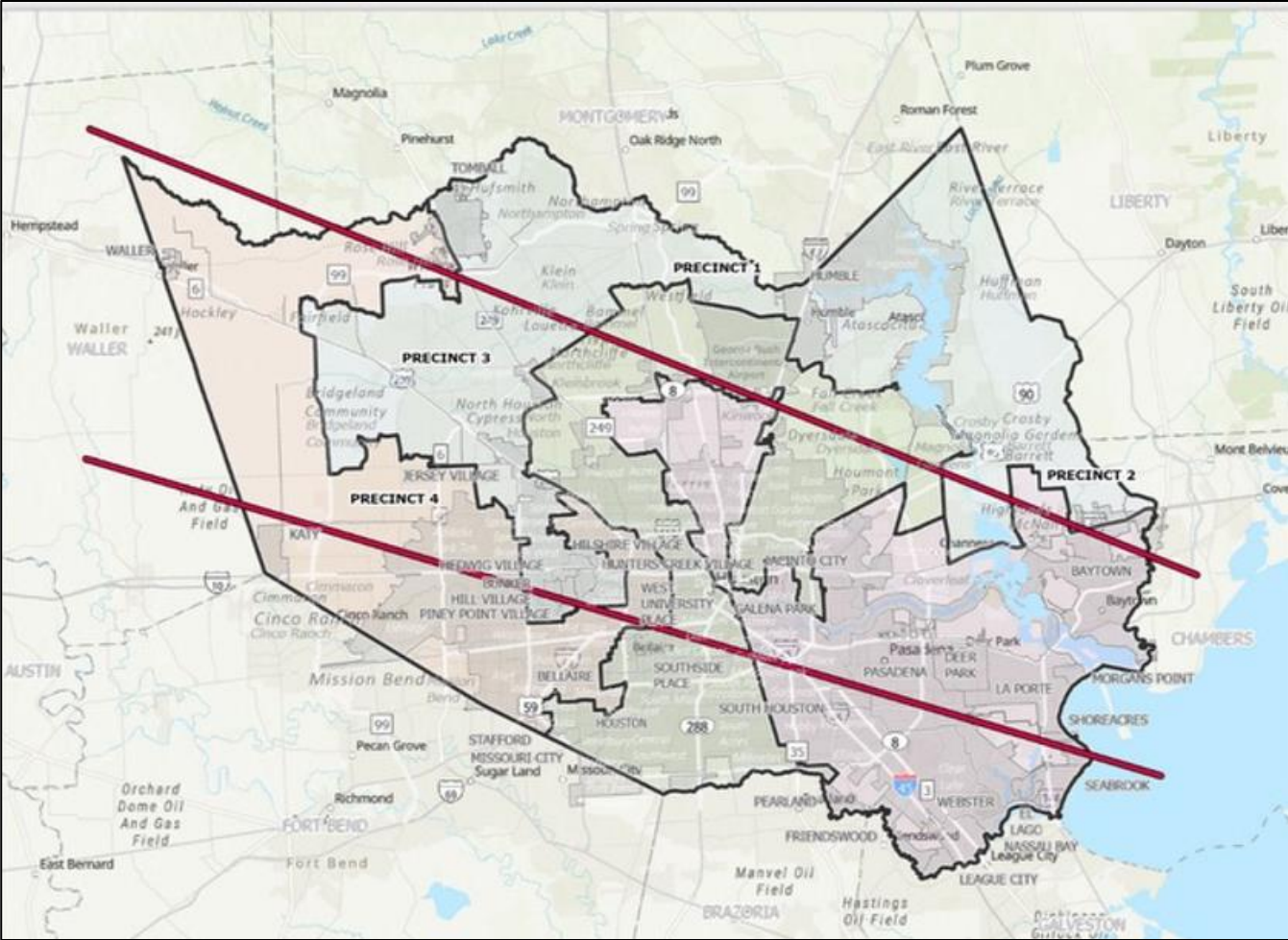
**More News**

Giant Foo  
area ban  
thwart th

CBS News – Southeast Texas

# Recent Incidents - May 17, 2024

## Derecho



# Recent Incidents - May 22, 2024

NBC NEWS

Tornado causes havoc in Texas as record-breaking heat wave looms

SHARE & SAVE -



U.S. NEWS

## Tornado causes havoc in Texas as record-breaking heat wave looms

Temple, northeast of Austin, declared a state of emergency and opened a shelter for displaced people after a twister caused widespread devastation.



NBC News – Temple, Texas

# DR-4781-TX

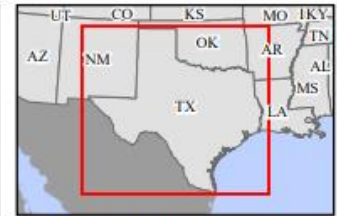
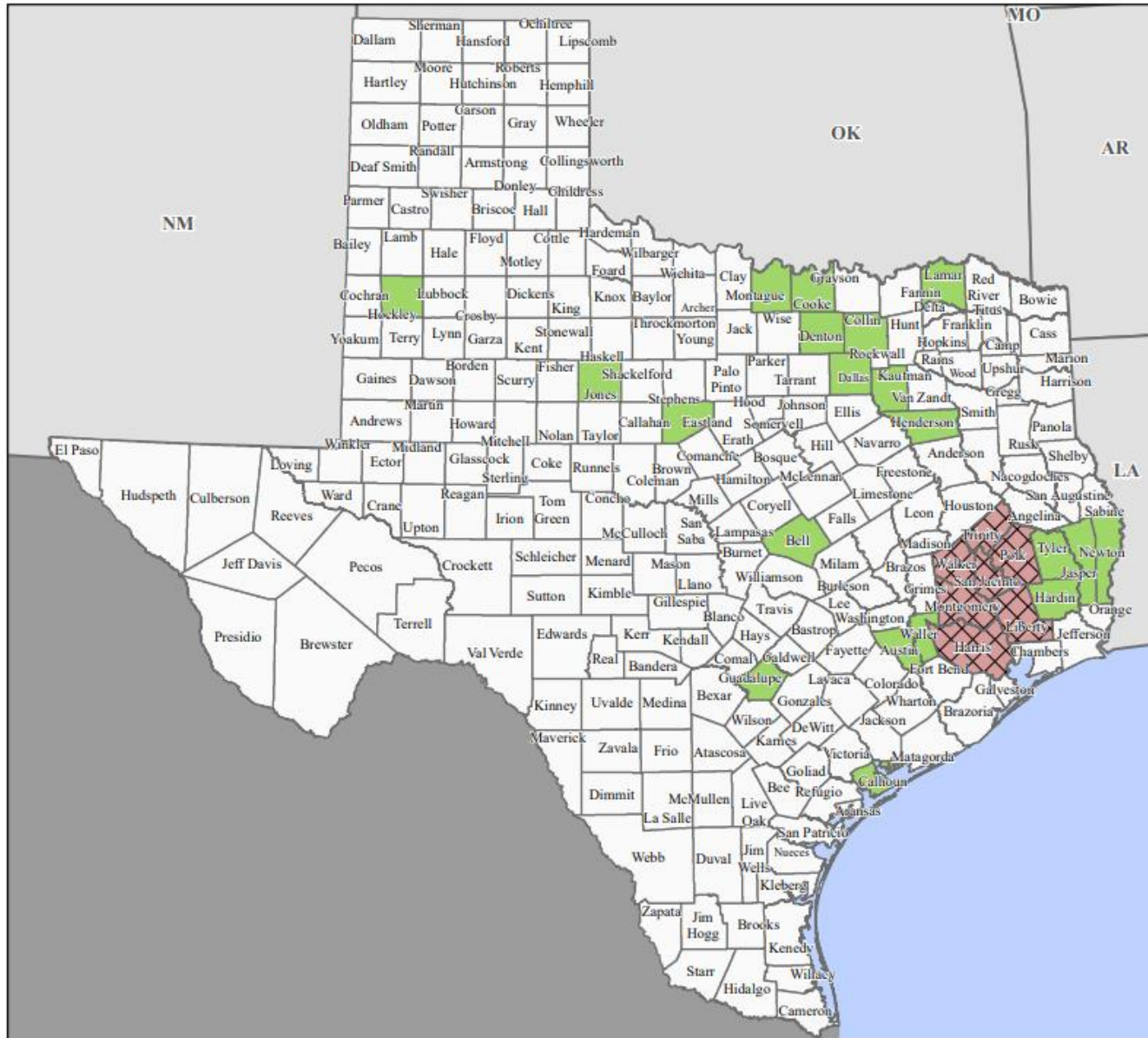
- Texas Severe Storms, Straight-line Winds, Tornadoes, and Flooding.
- Incident Period: April 26 to June 5, 2024.



# DR-4781-TX Timeline

Date	Action
April 26, 2024	Initial incident - tornados, severe storms
May 4, 2024	Severe storms and flooding
May 17, 2024	Disaster declaration date
May 20, 2024	Amendment 001 - Added areas to the May 17th declaration
May 21, 2024	Amendment 002 - Added areas to the May 17th declaration
May 22, 2024	Amendment 003 - Added areas to the May 17th declaration
May 23, 2024	Amendment 004 - Inclusion of public assistance to affected areas.
May 27, 2024	Amendment 005 - Added areas to the May 17th declaration.
May 29, 2024	Amendment 006 - Added areas to the May 17th declaration.
June 4, 2024	Amendment 007 - Added areas to the May 17th declaration.
June 5, 2024	Closed out incident period.

# FEMA-4781-DR, Texas Disaster Declaration as of 05/29/2024

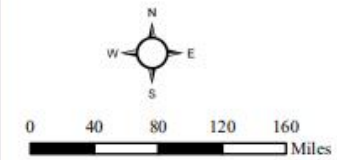


**Data Layer/Map Description:**  
The types of assistance that have been designated for selected areas in the State of Texas.

All areas in the State of Texas are eligible to apply for assistance under the Hazard Mitigation Grant Program.

Additional designations may be made at a later date if requested by the state and warranted by the results of further damage assessments.

- Designated Counties**
- No Designation
  - Individual Assistance
  - Individual Assistance and Public Assistance (Categories A - G)



**Data Sources:**  
FEMA, ESRI;  
Initial Declaration: 05/17/2024  
Disaster Federal Registry Notice: Amendment #7: 06/04/2024  
Datum: North American 1983  
Projection: Lambert Conformal Conic

# DR-4781-TX Public Assistance Categories A - G (Counties)

- Austin
- Bosque
- Brown
- Caldwell
- Calhoun
- Clay
- Coleman
- Concho
- Cooke
- Coryell
- Eastland
- Falls
- Freestone
- Grimes
- Hamilton
- Hardin
- Harris
- Hockley
- Houston
- Jasper
- Lamar
- Lampasas
- Lee
- Leon
- Liberty
- Limestone
- Madison
- Mills
- Montgomery
- Newton
- Polk
- San Jacinto
- San Saba
- Trinity
- Tyler
- Walker
- Waller
- Washington

# DR-4781-TX Individual Assistance (Counties)

- Austin
- Bell
- Calhoun
- Collin
- Cooke
- Dallas
- Denton
- Eastland
- Guadalupe
- Hardin
- Harris
- Henderson
- Hockley
- Jasper
- Jones
- Kaufman
- Lamar
- Liberty
- Montague
- Montgomery
- Newton
- Polk
- San Jacinto
- Trinity
- Tyler
- Walker
- Waller



# DR-4781-TX Individual Assistance

Total Housing Assistance (HA) - Dollars Approved	\$28,910,249.45
Total Other Needs Assistance (ONA) - Dollars Approved	\$46,102,221.00
<b>Total Individual &amp; Households Program Dollars Approved</b>	<b>\$75,012,470.45</b>
Individual Assistance Applications Approved	37,229



# Things to Consider

- Incidents that have occurred this year have occurred with little or no notice.



# Things to Consider

- Many jurisdictions have had significant staff turnover since previous incidents:
  - Last major wind event - Hurricane Ike in 2008
  - Last major flood event - Hurricane Harvey in 2017



# Things to Consider

- Weather forecasters are predicting a very active hurricane season this year.
  - 17 to 25 total named storms
  - 8 to 13 are forecast to become hurricanes
  - 4 to 7 major hurricanes

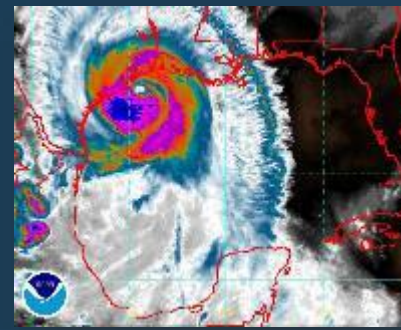


National Oceanic and  
Atmospheric Administration  
U.S. Department of Commerce

Search NOAA sites

[Home](#) / [News & Features](#)

## NOAA predicts above-normal 2024 Atlantic hurricane season



## Part 2: Preparations For Jurisdictions To Ease the Burden in Debris Operations



# Prepositioned Contracts

- FEMA encourages jurisdictions to award prepositioned contracts, or advance contracts, before an incident occurs.
  - Allows applicants to conduct a deliberate procurement process outside of the pressure and immediate demands of a disaster.
  - Helps to ensure that jurisdictions have contractors ready to perform work quickly after an incident occurs.

# Pre-Positioned Contracts

- Other communities may be competing with the same resources following a disaster.
- Can save time in an emergency.
- Provides an opportunity to negotiate better rates than at the time of an emergency.
- Contractors may be stretched thin and may not be willing to take on any new business after a disaster.





## Prepositioned Contract Checklist. The Jurisdiction Must Ensure:

- **Full and open competition.**
- **The scope of work includes anticipated disaster work.**
- **Include small and minority businesses, women's business enterprises, and labor surplus area firms.**
- **Evaluate and document the contractor's integrity, compliance with public policy, record of past performance, and financial and technical resources.**

# Prepositioned Contract Checklist.

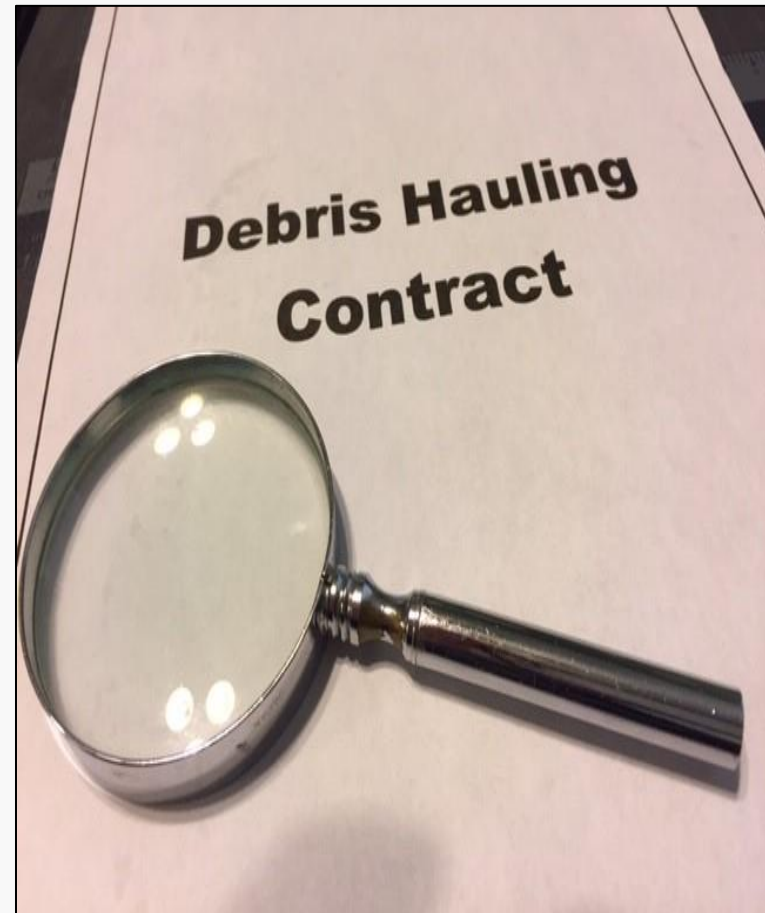
## The Jurisdiction Must Ensure:

- Ensure that the contractor was **not suspended or debarred**.
- Prohibit the use of statutorily or administratively **imposed geographic preferences** in evaluating bids or proposals except where expressly encouraged by applicable Federal law.
- **Exclude contractors that develop or draft specifications**, requirements, statements of work, or invitations for bids or requests for proposals.

# Prepositioned Contract Checklist.

## The Jurisdiction Must Ensure:

- The contract was **procured in compliance** with the federal procurement regulations.
- Contract **costs are reasonable** in the current market environment.



# Procurement Methods

- FEMA may reimburse costs incurred under a contract procured through a noncompetitive proposal only when:
  - The item is only available from a single source.
  - The public exigency or emergency for the requirement will not permit a delay resulting from competitive solicitation.
  - FEMA or the Recipient expressly authorizes a noncompetitive proposal in response to a written request from the Applicant.
  - After solicitation of a number of sources, competition is determined inadequate.

# Procurement Disaster Assistance Team (PDAT) Field Manual

- Provides guidance regarding the mandatory requirements for FEMA award recipients and subrecipients using federal funding to finance the procurement of property and services.

- Found at:

[https://www.fema.gov/sites/default/files/documents/fema\\_PDAT-field-manual\\_102021.pdf](https://www.fema.gov/sites/default/files/documents/fema_PDAT-field-manual_102021.pdf)



## Procurement Disaster Assistance Team (PDAT) Field Manual

Procurement Information for FEMA Award Recipients  
and Subrecipients

October 2021

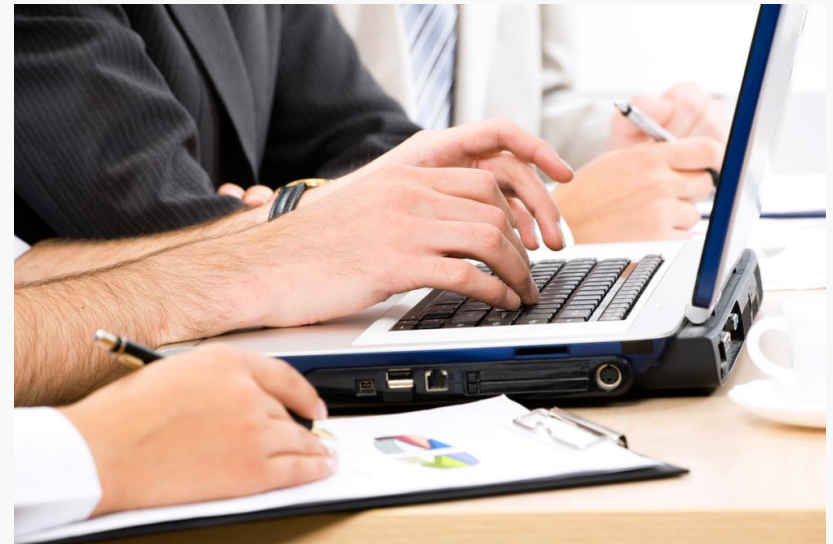
(FM-207-21-0002)



FEMA

# Scoring and Contractor Selection

- Maintain records sufficient to detail the history of the procurement:
  - Rationale for the method of procurement
  - Selection of contract type
  - Contractor selection or rejection
  - The basis for the contract price



# Coordinate Planning with Contractors



- Contractors are accustomed to attending meetings with client jurisdictions.
- Coordinate with contractors in planning, training, or exercises.
- Clarify responsibilities, response times, and the equipment that can be brought to bear in response to a debris-generating incident.

# Identify Debris Management Sites Before a Disaster

- Determine the types and quantities of debris the sites can handle.
- Determine the reduction methods to be used.
- Get any needed agreements to use the land.
- Consider the proximity of the community being served by the DMS as well as disposal or recycling sites for the processed debris.





# Maintain a List of Internal Resources

- Conduct an asset inventory.
- Assign an asset identification number to facilitate tracking of equipment use.





# Maintain Accessibility of GIS Files

- Ensure you can access GIS files in an emergency.
- Maintain ability to print maps for contractors and other response personnel.
- Document areas of hazards and damage.
- Document the progress of debris operations.



# Maintain Priority Road Lists

- Ensure that priority road lists and critical facility lists are updated periodically to help prioritize road clearance and debris collection activities.



# Have a Plan for Coordinating Public Information



- Information should be consistent, accurate, and timely.
- Provide guidance regarding segregation of debris, safety, progress of debris operations, etc.
- Utilize social media tools. Monitor for misinformation.
- Coordinate the message with city departments, neighboring jurisdictions, and state and federal officials.

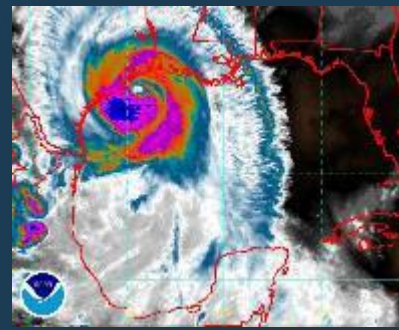
# Maintain and Update an All-Hazards Debris Management Plan

- Overview
- Events and assumptions
- Debris collection and removal strategies
- DMS and disposal locations
- Debris removal from private property
- Use and procurement of contracted services
- Use of force account labor
- Monitoring of debris operations
- Health and safety requirements
- Regulatory considerations
- Public information
- Identification of debris removal contractors

# Evaluate Resources in the Region

- Metal recyclers
- Mulching capabilities
- Landfills
- Hazardous waste facilities
- Electronic waste recyclers
- Composting facilities





# Part 3: Debris Management Resources for Residents





# Crisis Cleanup

- Mission: To help volunteers help more people after disasters.
- Crisis Cleanup is a collaborative disaster work order management platform that improves coordination, reduces duplication of efforts, improves efficiency, and improves volunteers' experience.





## 2-1-1 Texas


<https://www.211texas.org/>

- Service of the Texas Health and Human Services Department to connect Texan with resources such as: evacuation, shelter, employment, food, disaster relief, income, legal aid, veteran's services and criminal justice services.
- Residents can call 2-1-1 or go to the website for available disaster resources.

# VOADS

- VOADS like SBP are national disaster recovery and resilience organizations dedicated to shrinking the time between disaster and recovery.
  - Rebuilds damaged homes.
  - Provides funding, training, and capacity building services.
  - Provides guidance in mucking out houses following a disaster.
  - <https://www.volunteerhou.org>

## Muck & Gut Guide



Mucking and gutting is the first step in the rebuilding process. This phase of construction consists of removing damaged belongings from the home, removing damaged construction materials and prepping the home for mold treatment. The muck and gut process presents a set of health hazards. For this reason, protecting oneself against potential injuries or illnesses is extremely important. This guide provides a step-by-step overview of mucking and gutting and explains how to prepare the home and how to protect yourself. Following completion of a muck and gut the house must be dried out and properly treated for mold.

**Materials Needed:**


Respirators (P-100)	Duct Tape	Wheelbarrows	Floor Scraper
Safety Goggles	Tyvek Suits	Hammers	Contractor Garbage Bags
Hard Hats	Boots	Sledge Hammer	Utility Knives
Nitrile Gloves	Shovels	Crowbar/Pry-bar	Clorox Wipes
Leather Work Gloves	Hand Sanitizer	Tile Chisel	Water

**Before You Begin:**

- Make sure the homeowner has taken pictures of all damages before beginning work. These will be helpful for any future FEMA or insurance claims.
- Ensure that the electricity and gas are shut off to the property. Electricity can be shut off at the breaker box or exterior electrical panel. Gas can be shut off at the meter or via shut off valves to individual appliances.
- It may be helpful to also turn off the water to the home. This will prevent possible further water damage from incidentally damaged pipes during gutting. Water can be turned off at the water meter generally located in front of the home.
- Make sure the home is safe to enter. Inspect the roof and exterior of the home for damage that could compromise the structural integrity of the home.
- Before you enter the home, make sure you are wearing your respirator, tyvek suit, goggles, and gloves.

**Putting on PPE:**

- Put on the tyvek suit over your clothing. If the suit does not include shoe covers, be sure to cover your footwear (footwear must be closed-toe).
- Put on nitrile gloves. Place leather work gloves over nitrile gloves.
- Put on goggles and respirator.
- The above equipment must be worn at all times when inside the home.

SBPusa.org 

# Avoiding Contractor Scams

- The Texas Department of Insurance (TDI) offers tips in avoiding insurance scams at <https://www.tdi.texas.gov/tips/contractor-scams.html>



# TDI Tips

- Get more than one bid.
- Watch what you sign.
- Beware of misleading language.
- Don't pay up front.
- Skip offers to waive your deductible.



**Texas Department  
of Insurance**

# Red Cross Emergency Preparedness

<https://www.redcross.org/get-help/how-to-prepare-for-emergencies/types-of-emergencies.html>

- Tips for preparation and recovery from several types of incidents such as:
  - Fire
  - Flood
  - Hurricane
  - Tornado
  - Winter Storms
  - Nuclear Explosion

## Emergency Preparedness Tips from the Red Cross


The Red Cross can help you prepare your family, your pets and your home for common emergencies and natural disasters. Read below for information about emergencies that can occur where you live, and learn the difference between a "watch" and a "warning". Get tips for preparedness steps you can take today, what to do in an emergency, and how to repair and rebuild afterward.


**Need Help Now?**  
If you are in an immediate need of help, please contact your local Red Cross or find an open shelter >


**Disasters Where You Live**  
Some disasters can occur anywhere. Others are more common in specific parts of the country. See which disasters are most important for you to prepare for.

### This Month's Common Emergencies

It's June, which means it's time to be prepared for hurricanes, wildfires, and floods.


 Hurricane Safety Tips >


 Wildfire Safety Tips >


 Flood Safety Tips >


### Prepare Your Home and Family for 23 Different Emergencies


From chemical spills to winter storms, the Red Cross has easy to follow tips for preparing your family - as well as for how to stay safe during and after the emergency.


 Chemical Emergency >


 Coronavirus >


 Drought >

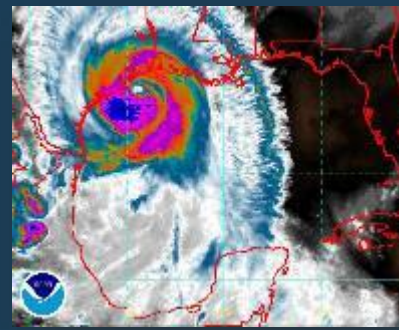
 Earthquake >











# Part 4: Debris Management Resources for Businesses



# Small Business Administration (SBA)

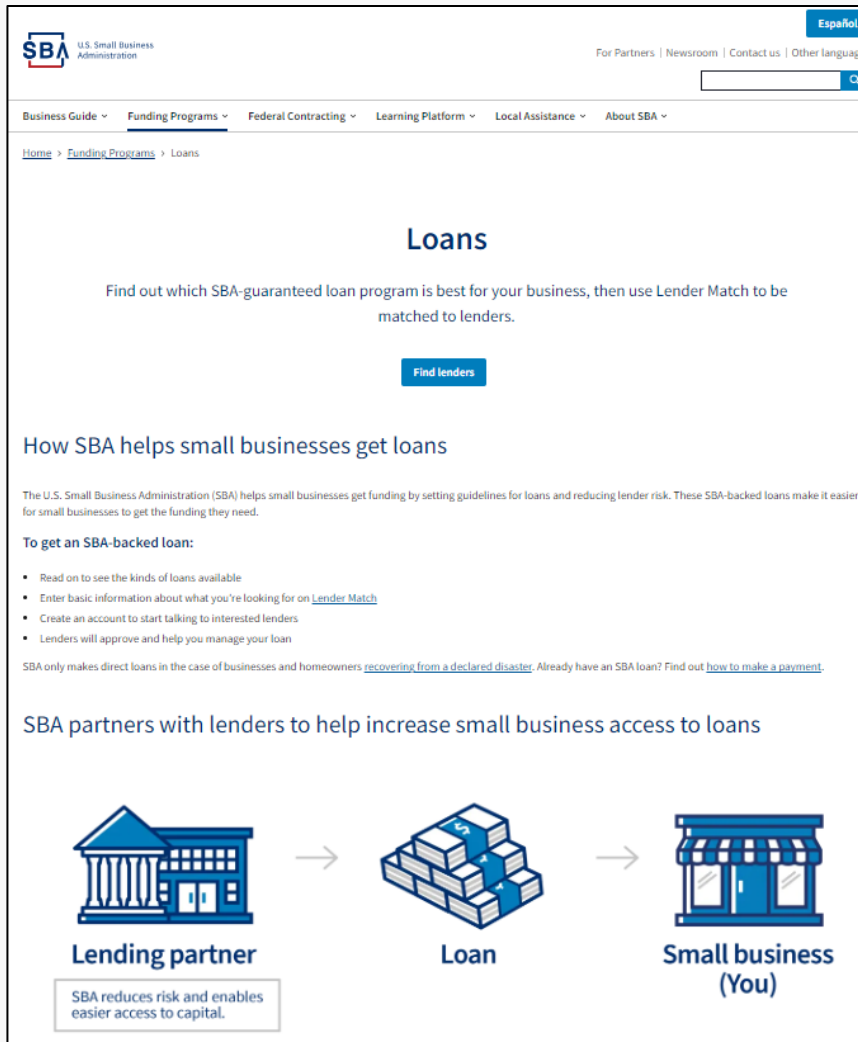
- The SBA offers disaster assistance in the form of low interest loans to businesses, nonprofit organizations, homeowners, and renters located in regions affected by declared disasters.
- At <https://www.sba.gov/funding-programs/disaster-assistance>
- Or the virtual business recovery center at (800) 659-2955 or [FOCWAssistance@sba.gov](mailto:FOCWAssistance@sba.gov).



U.S. Small Business  
Administration



# SBA Lender Match Tool



**SBA** U.S. Small Business Administration

For Partners | Newsroom | Contact us | Other language

Business Guide ▾ Funding Programs ▾ Federal Contracting ▾ Learning Platform ▾ Local Assistance ▾ About SBA ▾

Home > Funding Programs > Loans

## Loans

Find out which SBA-guaranteed loan program is best for your business, then use Lender Match to be matched to lenders.

[Find lenders](#)

### How SBA helps small businesses get loans


The U.S. Small Business Administration (SBA) helps small businesses get funding by setting guidelines for loans and reducing lender risk. These SBA-backed loans make it easier for small businesses to get the funding they need.

**To get an SBA-backed loan:**

- Read on to see the kinds of loans available
- Enter basic information about what you're looking for on [Lender Match](#)
- Create an account to start talking to interested lenders
- Lenders will approve and help you manage your loan

SBA only makes direct loans in the case of businesses and homeowners [recovering from a declared disaster](#). Already have an SBA loan? Find out [how to make a payment](#).

### SBA partners with lenders to help increase small business access to loans



**Lending partner** → **Loan** → **Small business (You)**

SBA reduces risk and enables easier access to capital.

- Helps businesses find SBA-backed lenders in their area.
- At <https://www.sba.gov/funding-programs/loans>

# Community Development Financial Institutions (CDFIs)

- Can help small businesses obtain affordable credit to recover from disasters.
- At <https://www.ofn.org/cdfi-locator/>

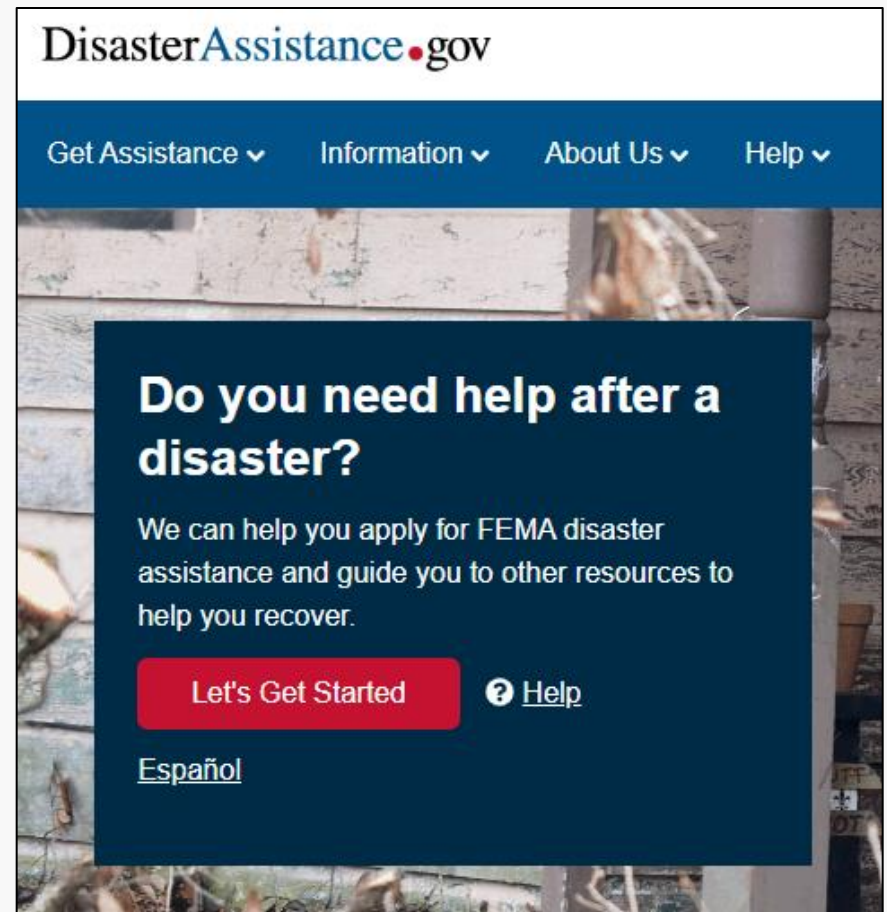


# Disaster Unemployment Assistance

- Provides unemployment benefits for individuals who lost their jobs or self-employment or who are no longer working as a direct result of a major disaster for which a disaster assistance period is declared, and who applied but are not eligible for regular unemployment benefits.
- At <https://www.twc.texas.gov/programs/unemployment-benefits/disaster-unemployment-assistance>

# FEMA's DisasterAssistance.gov

- Helps identify local, county and state resources and emergency management agencies for assistance before and after disasters.
- At <https://www.disasterassistance.gov/>



# Internal Revenue Service

- Offers information on the most recent tax relief provisions for taxpayers affected by disaster situations.
- For Texas: <https://www.irs.gov/newsroom/around-the-nation-texas>

A screenshot of the IRS website's news page. The top navigation bar is dark blue with the IRS logo on the left and links for Help, News, English (with a dropdown arrow), Charities & Nonprofits, and Tax Pros on the right. Below this is a secondary navigation bar with links for File, Pay, Refunds, Credits & Deductions, and Forms & Instructions, along with a search bar. The main content area has a breadcrumb trail: Home / News / Tax Relief in Disaster Situations / IRS announces tax relief for taxpayers impacted by severe storms, straight-line winds, tornadoes and flooding in Texas. The headline reads: "IRS announces tax relief for taxpayers impacted by severe storms, straight-line winds, tornadoes and flooding in Texas". At the bottom, there is a note: "Updated on 5/30/2024: This news release has been updated to include Bell, Henderson, and Tyler counties." and a "Topics in the News" link.

IRS

Help | News | English ▾ | Charities & Nonprofits | Tax Pros

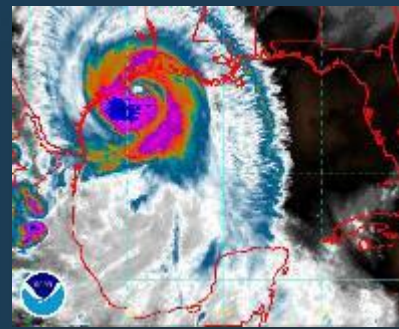
File Pay Refunds Credits & Deductions Forms & Instructions Search

Home / News / Tax Relief in Disaster Situations / IRS announces tax relief for taxpayers impacted by severe storms, straight-line winds, tornadoes and flooding in Texas

**IRS announces tax relief for taxpayers impacted by severe storms, straight-line winds, tornadoes and flooding in Texas**

Updated on 5/30/2024: This news release has been updated to include Bell, Henderson, and Tyler counties.

Topics in the News




# Part 5: Damage Assessment Processes and Tips



# Declare and Submit a Local State of Disaster

- The chief elected official of the jurisdiction has the responsibility to declare a local state of disaster requesting disaster recovery assistance.

  
HARRIS COUNTY  
EMERGENCY MANAGEMENT  
TEXAS  
County Judge Lina Hidalgo  
DIRECTOR

DECLARATION OF DISASTER

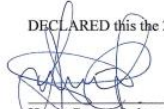
WHEREAS, beginning April 30, 2024, Harris County, Texas has suffered widespread or severe damage, injury, or loss of life or property resulting from severe weather and flooding due to heavy rain, and

WHEREAS, the County Judge of Harris County, Texas has determined that extraordinary measures must be taken to alleviate the suffering of people and to protect or rehabilitate property,

NOW, THEREFORE, BE IT PROCLAIMED BY THE COUNTY JUDGE OF HARRIS COUNTY, TEXAS:

1. That a local state of disaster is hereby declared for Harris County, Texas pursuant to section 418.108(a) of the Texas Government Code.
2. Pursuant to section 418.108(b) of the Texas Government Code, the state of disaster shall continue for a period of not more than seven days from the date of this declaration unless continued or renewed by the Commissioners Court of Harris County, Texas.
3. Pursuant to section 418.108(c) of the Texas Government Code, this declaration of a local state of disaster shall be given prompt and general publicity and shall be filed promptly with the County Clerk.
4. Pursuant to section 418.108(d) of the Texas Government Code, this declaration of a local state of disaster activates the Harris County emergency management plan.
5. That this proclamation shall take effect immediately from and after its issuance.

DECLARED this the 2nd day of May 2024.

  
Harris County Judge

6922 Katy Road Houston, Texas 77024 | Phone (713) 881-3100 | Fax (713) 881-3077 | www.readyharris.org

# Disaster Summary Outline (DSO)

Disaster Summary Outline (DSO) Web App

Enter Incident PIN # and Add Confirm # if an update

DSO PIN:

Update a DSO?:


**Instructions**

- You will need an event specific Incident PIN in order to submit a DSO.
- Please contact your TDEM District Chief or call the State Operations Center (SOC) at 512-424-2208 for help and/or to obtain the PIN.
- For a new DSO, enter just the PIN. To update an existing DSO, enter PIN and Confirmation #.
- If you do not receive an email with Confirmation # after submitting a DSO, email [soc@tdem.texas.gov](mailto:soc@tdem.texas.gov) or call 512-424-2208.
- If you have any other issues using this webform, please email TDEM Operations Technology at [support@tdem.texas.gov](mailto:support@tdem.texas.gov) or call 512-424-5333.

**State of Texas Assessment Tool Surveys**

For Individual State of Texas Assessment Tool Surveys (iSTATs) please visit <https://damage.tdem.texas.gov/>

For Public State of Texas Assessment Tool Surveys (pSTATs) please visit <https://pstat.tdem.texas.gov/>



Need Help? Contact TDEM Operations Technology at 512-424-5333 or via Email

- As soon as possible, all jurisdictional departments should begin gathering response costs and initial damage estimates for the DSO.
- Figures don't have to be exact.
- The DSO will automatically be submitted to the State Operations Center

<https://dso.soc.texas.gov/>



# Public Assistance State of Texas Assessment Tool (pSTAT)

- A mobile platform to capture storm-related damages to public infrastructure, debris, and other FEMA designated categories of work.
- At <https://pstat.tdem.texas.gov/>



**TDEM pSTAT & iSTAT Jurisdiction Portal**

---

The Jurisdiction Portal survey tool is designed and intended for local officials to use for any event to submit damaged properties and infrastructure through pSTAT Section below and to report damaged residences, businesses, and agricultural losses through the iSTAT Section further below that have not already been submitted by their respective owners / renters.

County Jurisdictions can use their unique login to review pSTAT and iSTAT Dashboards which allow immediate access to assess the scale and severity of disaster, view specific property information, photos and GIS data.

The Texas Division of Emergency Management will use the same pSTAT and iSTAT submitted data to facilitate any potential funding streams that may be available depending on the disaster.

[Jump to pSTAT Surveys](#)

[Jump to iSTAT Surveys](#)

# pSTAT Survey123 for Local Jurisdictions

- pSTAT is designed for local officials and trained damage assessment teams to collect location, severity and costs associated with public infrastructure losses.
- The tool is intended for local jurisdictions to provide direct access with various download options for tactical and strategic decision making.

# Information That Should be Collected

- Both GIS location and street address of damaged properties.
- Dimensions, materials and size or capacity of damaged facilities.
- Photos of the damage showing the scale and the information being reported.
- Begin collecting supporting documentation that may need to be submitted in the event of a federally declared disaster.

# iSTAT Survey123 for Local Jurisdictions and Designated Partners:

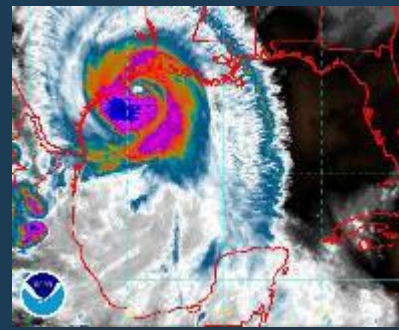
The screenshot shows the iSTAT Survey123 mobile application interface. At the top, the status bar displays the time 12:27 and signal strength. Below that, a green header bar contains a close button (X), the text "Individual State of Texas Assessment Tool (iSTAT)", and a menu icon (three horizontal lines). The main content area has a white background with a green border. It starts with a message: "Please submit **one survey** per impacted address." Below this is a light green box with text: "Reporting damages to Emergency Management is a voluntary activity, is not a substitute for reporting damage to your insurance agency, and does not guarantee disaster relief assistance." The form fields include: "Incident ID Number: \*" with a dropdown menu labeled "TDEM WebEOC Incident ID"; "Field Team Submitter's Name: \*" with a text input field labeled "Your Name"; and "Owner/Renter Contact Information:" with a dropdown arrow. Below this is a question: "Is the impacted location a Residence or Business? \*" with two radio button options: "Residence" (selected) and "Business".

- Citizens are encouraged to report damage to property, homes and businesses, using the Individual State of Texas Assessment Tool (iSTAT) damage survey.
- At <https://pstat.tdem.texas.gov/#iSTATForms>

# Tools to Aid in Damage Assessment Collection

- ArcGIS QuickCapture
- Timestamp app
- Drones

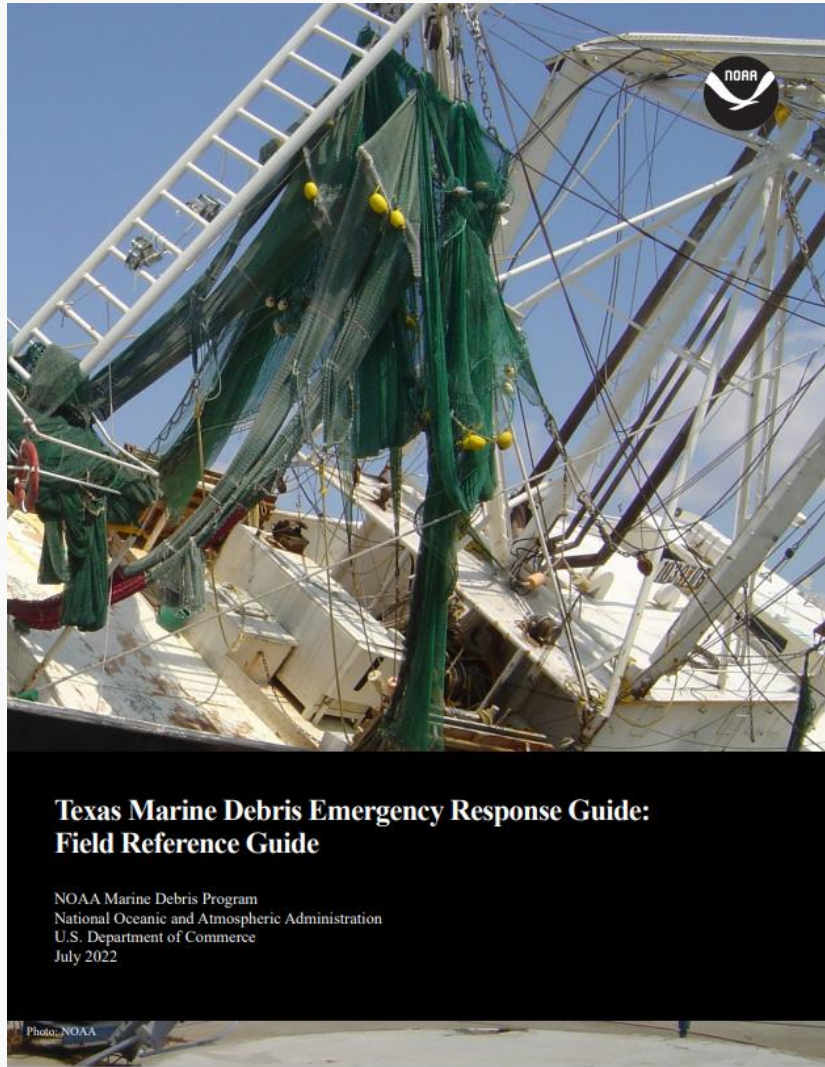




# Part 6: Waterway Debris Considerations



# Texas Marine Debris Emergency Response Guide



## Texas Marine Debris Emergency Response Guide: Field Reference Guide

NOAA Marine Debris Program  
National Oceanic and Atmospheric Administration  
U.S. Department of Commerce  
July 2022

Photo: NOAA

- Improve preparedness for response and recovery operations following an acute waterway debris incident in coastal Texas.
- At <https://marinedebris.noaa.gov/emergency-response-guides/texas-marine-debris-emergency-response-guide>

# Texas Waterway Debris Emergency Response Flowchart

**Flowchart Key**

- Response to waterway debris that could be exposed to or release oil, hazardous substances, pollutants, or contaminants
- Response to waterway debris that is not exposed to and does not have the potential to release oil, hazardous substances, pollutants, or contaminants
- Indicates response may occur under Stafford Act authorities and/or funds

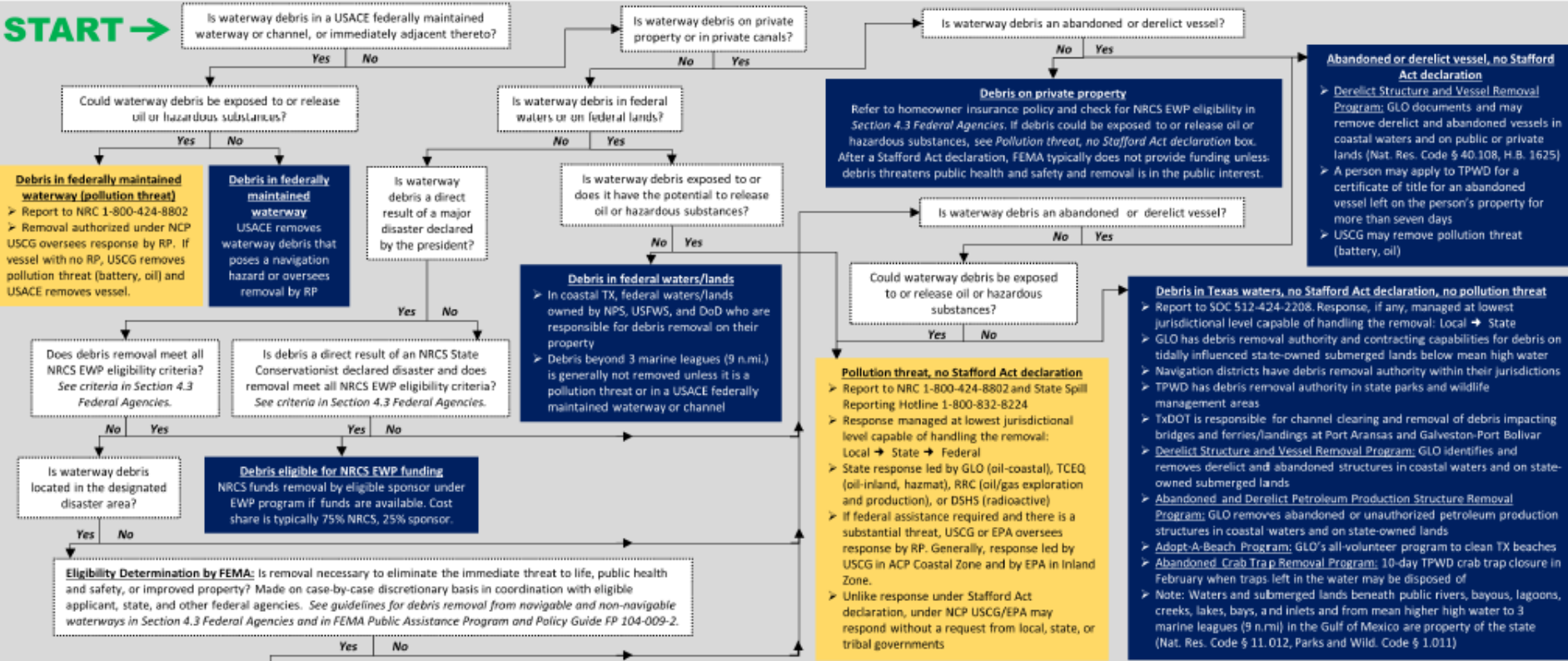
**Acronyms**

- ACP – Area Contingency Plan
- DoD – Department of Defense
- DSHS – TX Department of State Health Services
- EPA – U.S. Environmental Protection Agency
- ESF – Emergency Support Function
- EWP – Emergency Watershed Protection
- FEMA – Federal Emergency Management Agency
- GLO – TX General Land Office
- NCP – National Oil & Hazardous Substances Contingency Plan
- NDOW – Natural Disaster Operational Working Group
- NPS – National Park Service
- NRC – National Response Center
- NRCS – Natural Resources Conservation Service
- RP – Responsible Party (Owner, Operator, Lessee)
- RRC – Railroad Commission of TX
- SOC – TX State Operations Center
- TCEQ – TX Commission on Environmental Quality
- TDEM – TX Division of Emergency Management
- THC – TX Historical Commission
- TPWD – TX Parks and Wildlife Department
- TxDOT – TX Department of Transportation
- USACE – U.S. Army Corps of Engineers
- USCG – U.S. Coast Guard
- USFWS – U.S. Fish and Wildlife Service

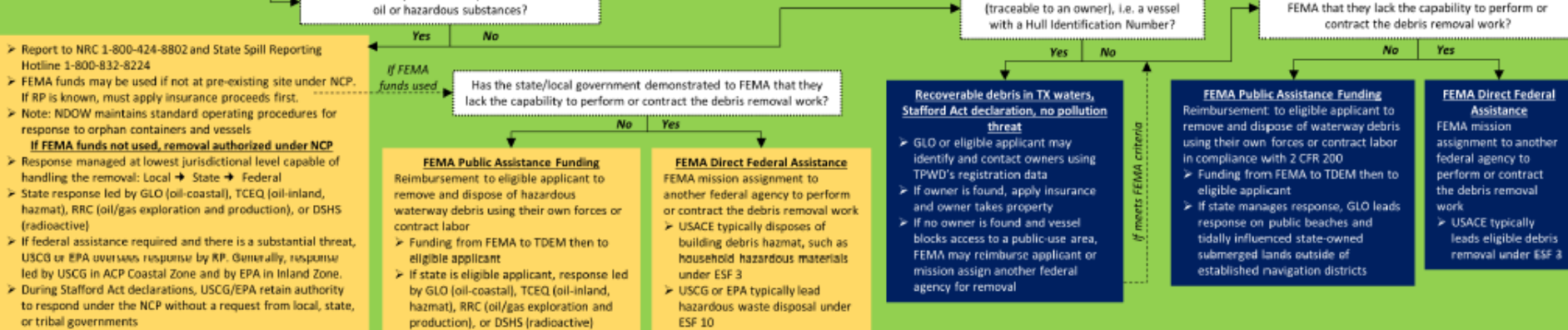
**Confirm Compliance**

Consult with appropriate authorities to determine whether permits or other approvals are needed prior to debris removal. Debris may be historic property and/or debris response may impact archaeological sites or other protected resources. See Section 5 Permitting and Compliance Requirements in Texas for details.

**START** →

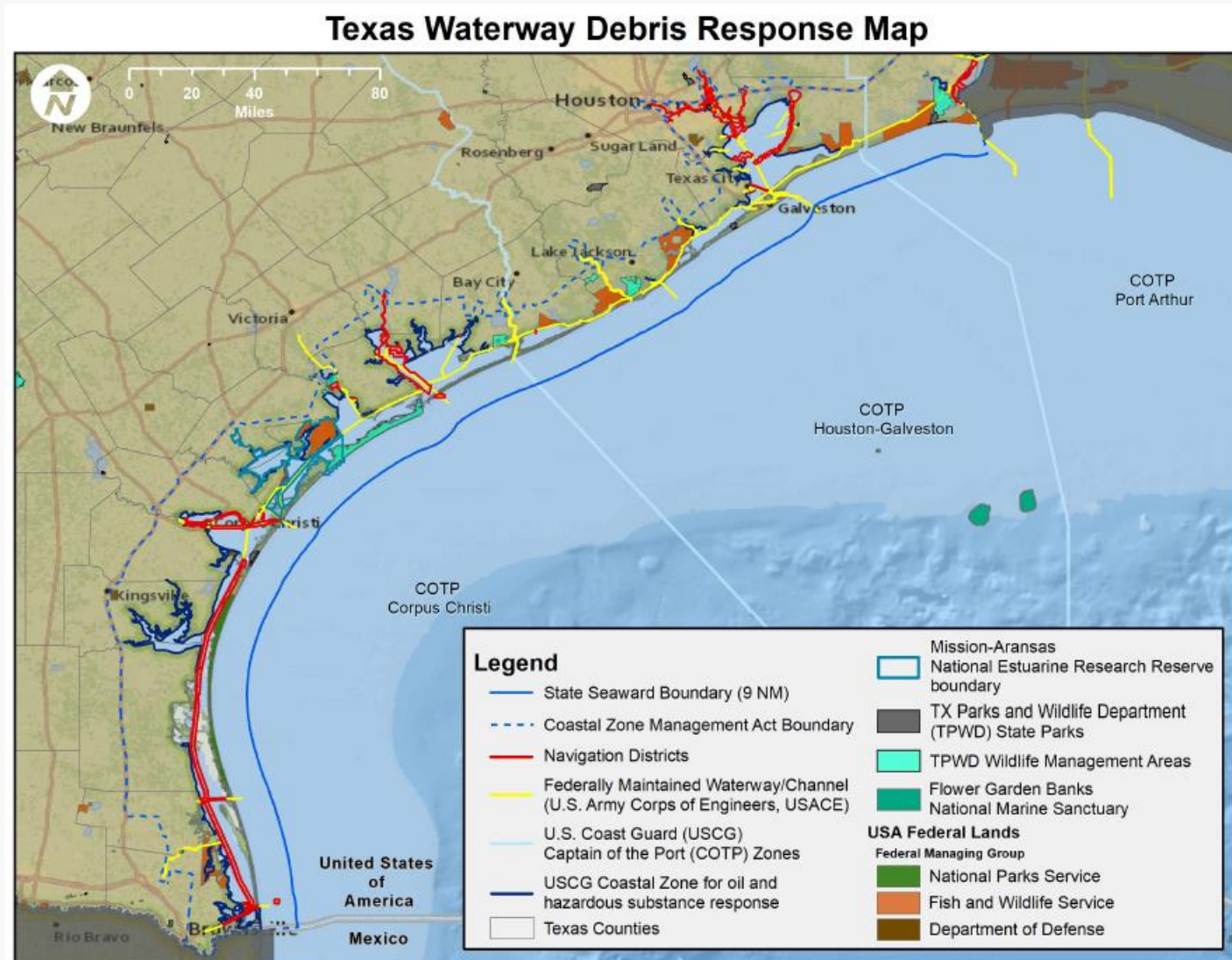


**Stafford Act Declaration**





# Map of Agency Jurisdiction Boundaries



# Table of Agency Capabilities

## 3.2 Response Capabilities

		Local				State					
		Chambers-Liberty Counties Nav. District	Port of Corpus Christi Authority	Port Freeport	Port Isabel-San Benito Nav. District	GLO		RRC, Oil & Gas Division	THC <sup>1</sup>	TPWD, Coastal Fisheries	UTMSI/Mission-Aransas NERR
Yes (Y) - Verified In-house Capability											
Cont. (C) - Contracted Capability											
Technology	Aerial photography and video			Yes		Y	C				
	Remote sensing (LIDAR)						C				
	Sub-Surface Detection: Side scan, Single-beam, or Multi-beam sonar		Cont.	Yes		Y	C		Yes	Yes	Cont.
Equipment	Aircraft					Cont.					
	Heavy equipment: Barge, self-loading barge, crane, knuckleboom crane, environmental clamshell dredge, excavator					Cont.					
	Remotely Operated Vehicle (ROV)										
	Specialized equipment for working in sensitive habitats or accessing remote/challenging areas			Yes		Cont.					
	Unmanned Aerial Vehicle (UAV)/ Surveillance drone with FAA trained operator	Yes		Yes		Yes			Yes	Yes	
	Vessels	Yes	Yes	Yes <sup>1</sup>		Yes			Yes	Yes	Yes
	Debris modeling expertise (volume, transport, hindcasting, etc.)					Cont.					Yes

# Permit Requirements

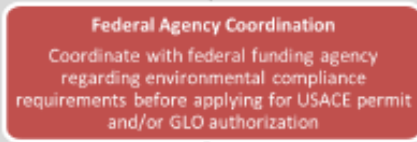
## Permitting and Compliance for Waterway Debris Removal in Texas

- In Texas's coastal zone, a U.S. Army Corps of Engineers (USACE) permit, a Texas General Land Office (GLO) authorization, and/or a Texas Historical Commission (THC) authorization may be required if debris removal involves dredging, the discharge of dredge or fill material, or involves structures or work impacting the navigability of a waterway.
- The **lead federal agency** is responsible for National Environmental Policy Act (NEPA) compliance and consulting with tribal agencies, Texas Commission on Environmental Quality (TCEQ), THC, Texas Parks and Wildlife Department (TPWD), U.S. Fish and Wildlife Service (USFWS), and the National Oceanic and Atmospheric Administration (NOAA) as required.

### Compliance Process if USACE Permit or GLO Authorization is Required

#### Federally Funded Removal

(for example, FEMA funding under Stafford Act declaration)



- Lead federal agency responsible for NEPA compliance, federal coastal consistency, and consultations with tribal agencies, TCEQ, THC, TPWD, USFWS, and NOAA as required.
- FEMA is lead federal agency under Stafford Act declaration
- Debris removal under Stafford Act declaration may trigger emergency permitting process.

#### No Federal Funding

(state, local, or privately funded removal)



As the lead federal agency, USACE ensures NEPA compliance, federal consistency with Texas's Coastal Management Program, and consults with tribal agencies, TCEQ, THC, TPWD, USFWS, and NOAA as required.

#### Permit(s) Issued

Review all permit conditions including GLO and resource agency requirements.

#### Debris Removal

All permit conditions and GLO and resource agency requirements must be followed during debris removal activities.

#### About NEPA

The National Environmental Policy Act (NEPA) requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions.

# Roles and Contact Info for Agencies

## Primary Agency Requirements and Contact Numbers

<p><b>TX General Land Office (GLO)</b>  <b>Upper Coast Field Office</b>            281-470-1191  <b>Lower Coast Field Office</b>            361-886-1600</p>	<ul style="list-style-type: none"> <li>Authorization may be required for debris removal on state-owned lands (including state-owned submerged lands) that involves dredging or other habitat disturbance</li> <li>Reviews state and federal actions and limited local actions in the Texas coastal zone</li> </ul>	<p><b>TX Historical Commission (THC)</b>  <b>TX State Historic Preservation Office (SHPO)</b>            512-463-6100</p>	<ul style="list-style-type: none"> <li>Serves as the State Historic Preservation Office and ensures compliance with National Historic Preservation Act and Antiquities Code of Texas</li> <li>If waterway debris response involves a federal agency (USACE permit, FEMA funding, etc.), the lead federal agency must consult with THC if activities could affect historic properties</li> <li>Consultation required for ground-breaking activities on public land owned or managed by the state or a political subdivision of the state</li> <li>Archeological investigations or monitoring, conducted under a THC-issued permit, may be required for ground-disturbing actions that have the potential to affect archeological sites</li> </ul>
<p><b>U.S. Army Corps of Engineers (USACE)</b>  <b>Regulatory Division Galveston District</b>            409-766-3869</p>	<ul style="list-style-type: none"> <li>Permit may be required if debris removal involves dredging, the discharge of dredged or fill material, or involves structures or work impacting the navigability of a waterway</li> <li>Some permits that may be required for debris removal in waterways/wetlands               <ul style="list-style-type: none"> <li><b>SWG-2010-00605</b> authorizes GLO to temporarily place dredged/fill materials to remove debris, derelict vessels, derelict structures, and abandoned pipelines from waters and state-owned submerged land</li> <li><b>NWP-3 Maintenance</b> for removal/maintenance of culverts, sediments or debris accumulated around outfalls, bridges, etc.</li> <li><b>NWP-18 Minor Discharges</b> of dredge or fill material</li> <li><b>NWP-19 Minor Dredging</b> of no more than 25 cubic yards</li> <li><b>NWP-22 Removal of Vessels</b> for removal of wrecked, abandoned, or disabled vessels or other man-made obstructions to navigation</li> </ul> </li> </ul>	<p><b>National Oceanic and Atmospheric Administration (NOAA)</b>  <b>National Marine Fisheries Service (NMFS)</b>            ESA: 727-824-5312            EFH: 409-766-3699</p>	<ul style="list-style-type: none"> <li>Consultation required if waterway debris response involves federal permits and/or funding (USACE permit, FEMA funding, etc.) to comply with:               <ul style="list-style-type: none"> <li>Endangered Species Act (ESA) to ensure actions do not jeopardize the continued existence of any listed endangered or threatened marine species or adversely modify designated critical habitat</li> <li>Magnuson-Stevens Fisheries Conservation and Management Act to ensure actions do not adversely affect Essential Fish Habitat (EFH)</li> </ul> </li> </ul>
<p><b>TX Commission on Environmental Quality (TCEQ)</b>  <b>Waste Permits Division</b>            512-239-2335  <b>Water Quality Division</b>            512-239-4671</p>	<ul style="list-style-type: none"> <li>Provides oversight and guidance for debris management and disposal</li> <li>Authorizes temporary debris management sites for declared state or federal disasters</li> <li>Reviews federal permit applications for discharges of dredged or fill material into waters of the United States, including wetlands, to determine whether a proposed discharge will comply with state water quality standards</li> </ul>	<p><b>U.S. Fish and Wildlife Service (USFWS)</b>  <b>TX Coastal Ecological Services Field Office</b>            281-286-8282 x 237</p>	<ul style="list-style-type: none"> <li>Consultation required if waterway debris response involves federal permits and/or funding (USACE permit, FEMA funding, etc.) to comply with:               <ul style="list-style-type: none"> <li>Endangered Species Act (ESA) to ensure actions do not adversely modify designated critical habitat or jeopardize the continued existence of any listed endangered or threatened land or freshwater species and certain marine species such as manatee</li> <li>Coastal Barrier Resources Act to ensure actions do not encourage development on coastal barriers along Texas's coast</li> </ul> </li> </ul>

Rev. 4/1/21

# What is Eligible for Public Assistance Funding?

- Must be a threat to life, public health and safety.
- If it does not meet this criteria, it is not eligible even if the incident is the reason the debris is where it is.



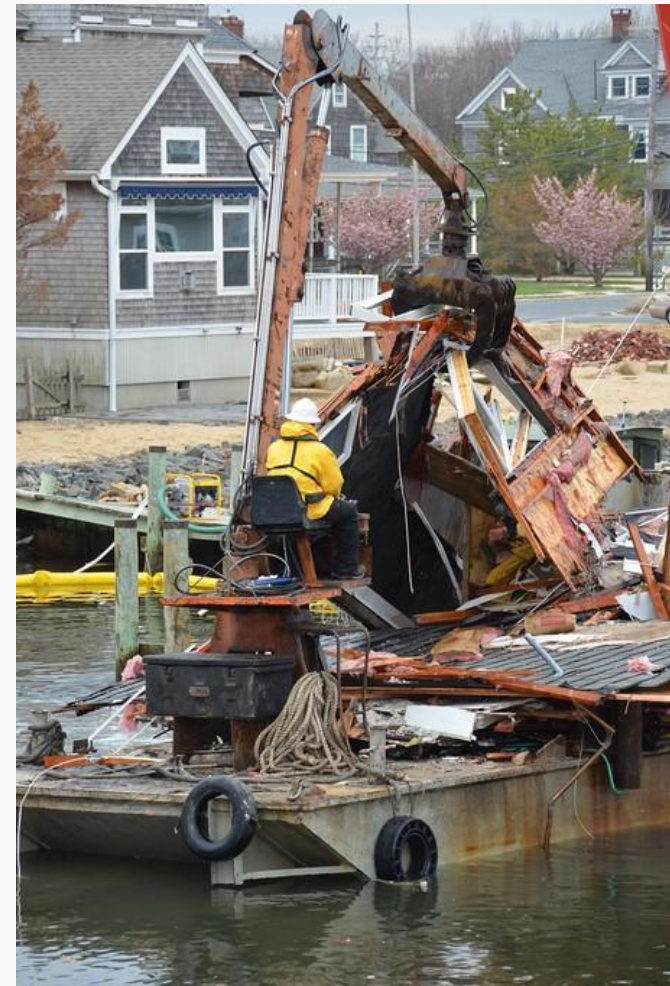
# Proving Eligibility

- The applicant must provide documentation showing:
  - Legal responsibility
  - The basis for immediate threat determination
  - The location, types, and quantities of debris
  - Demonstrate the debris was deposited by the incident and was not pre-existing.



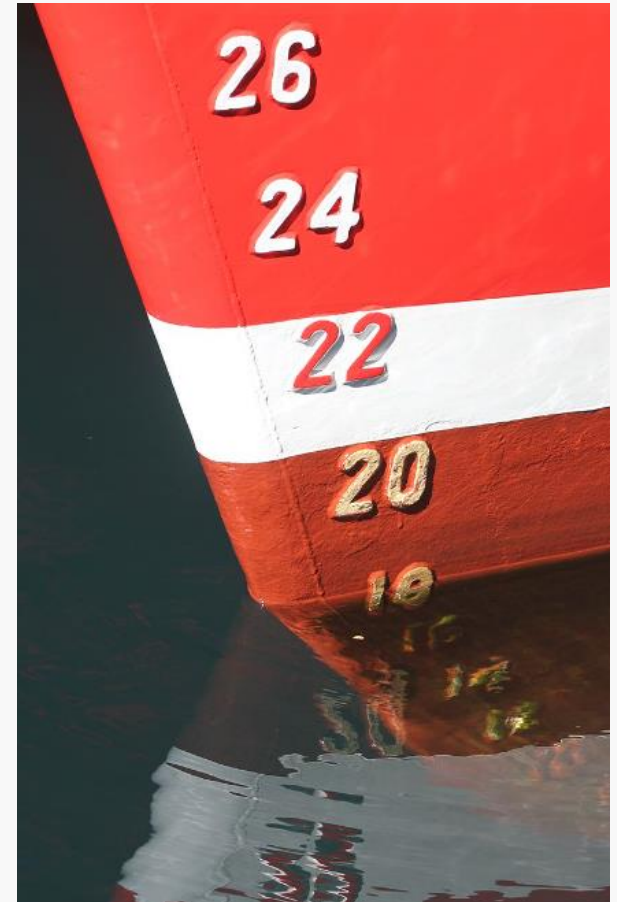
# Navigable Waterways

- For applicants that have a legal responsibility for maintenance of a navigable waterway:
  - Debris that obstructs the passage of vessels is eligible to a maximum depth of 2 feet below the low-tide draft of the largest vessel that utilized the waterway prior to the incident.



# Draft Defined

- Draft = Vertical distance between the waterline and the bottom of the hull (keel), with the thickness of the hull included.  
(Wikipedia)





# Trees in Waterways

- If a tree is still rooted to an embankment and is floating or submerged, the cost to cut the tree at the water's edge is eligible.



# Federally Maintained Navigable Waterways

- The U.S. Coast Guard (USCG) and the U.S. Army Corps of Engineers (USACE) have specific authorities for removal of debris from federally maintained navigable waterways.
- Not eligible for local jurisdictions.



# Non-Navigable Waterways

- Includes natural waterways or a constructed channel, including flood control works.



## Debris is Eligible for Removal from Non-Navigable Waterways if:

- Obstructs, or could obstruct, intake structures.
- Could cause damage to structures, such as bridges and culverts.
- Is causing, or could cause, flooding to improved public or private property during the occurrence of a 5-year flood.

# Natural Resources Conservation Services (NRCS)

- Operates the Emergency Watershed Protection Program (EWP)



# Emergency Watershed Protection Program

- Provides financial and technical assistance to:
  - Remove debris from stream channels, road culverts, and bridges.
  - Reshape and protect eroded banks.
  - Correct damaged drainage facilities.
  - Establish cover on critically eroding lands.
  - Repair levees and structures.
  - Repair conservation practices.

# Public Assistance and the EWP

- Removal of debris from non-navigable waterways is eligible for applicants even in streams where debris removal would also be eligible under the EWP unless the NRCS provides assistance for the debris removal.
- Debris removal from flood control works under the authority of the NRCS are not eligible.

# USACE Rehabilitation and Inspection Program (RIP)

- Provides rehabilitation for flood risk reduction structures.



<http://www.nws.usace.army.mil/Portals/27/docs/Levees/Levee%20Safety/6.%20Rehabilitation%20and%20Inspection%20Program.pdf>



# Public Assistance and the RIP

- Debris removal is eligible for public assistance funding for flood control works eligible for the RIP.
- The USACE does not reimburse applicants for debris removal but will conduct debris operations directly when necessary.

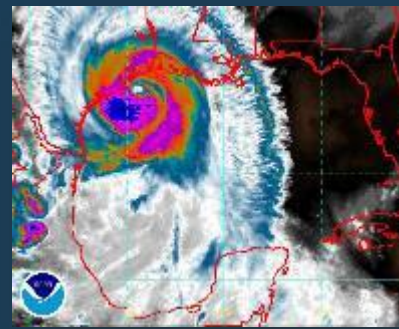
# Finding the Debris Under the Waves

- The applicant is responsible for identifying the debris that poses an immediate threat.
- Random surveys to look for debris, such as using side scan radar, are not eligible.
- FEMA may provide PA funding if the applicant identifies an area of debris impacts and identifies the need for a survey to identify the specific immediate threat. This can include the use of side scan radar.

# Side Scan Radar (Sonar)

- Commonly used tool to detect debris items and other obstructions on the seafloor that may be hazardous to shipping.
- The device can be towed from a surface vessel or mounted on the ship's hull.





# Part 7: Wildfire Debris Considerations



# Case Study - Maui Wildfire

- 1,350 homes destroyed.
- 250-300 commercial buildings destroyed.
- Approximately 250,000 tons of debris removed to date.
- Established a debris management site to cut down on transportation time to the island's only landfill.
- 4,000 burnt trees.
- 3,000 burnt automobiles.



# Case Study - Maui Wildfire

- Getting ready to begin multi-family dwellings debris removal.
- Conducting soil sampling to properties where debris is being removed.
- A geologist is drilling and testing groundwater to ensure there is no contamination.
- Arborists are on site to inspect affected trees.
- Certified asbestos consultants are also on hand to identify and ensure the safe and proper collection and disposal of asbestos.



# Wildfire Statistics

- Texas ranks the highest among states by number of wildfires (2022).

Rank	State	Number of fires
1	Texas	12,571
2	California	7,884
3	North Carolina	6,222
4	Georgia	3,621
5	Oklahoma	2,811
6	Florida	2,784
7	Alabama	2,710
8	Oregon	2,117
9	Montana	2,087
10	Mississippi	1,980

Source: National Interagency Fire Center.

# Wildfire Statistics

- The State of Texas ranks third among states for homes at risk from wildfires.

Rank	State	Number of housing units
1	California	1,279,214
2	Colorado	332,716
3	Texas	233,434
4	Oregon	124,401
5	Arizona	121,761
6	New Mexico	115,790
7	Idaho	100,233
8	Montana	84,370
9	Utah	68,135
10	Washington	54,162

Source: National Interagency Fire Center.



# Wildfire Statistics

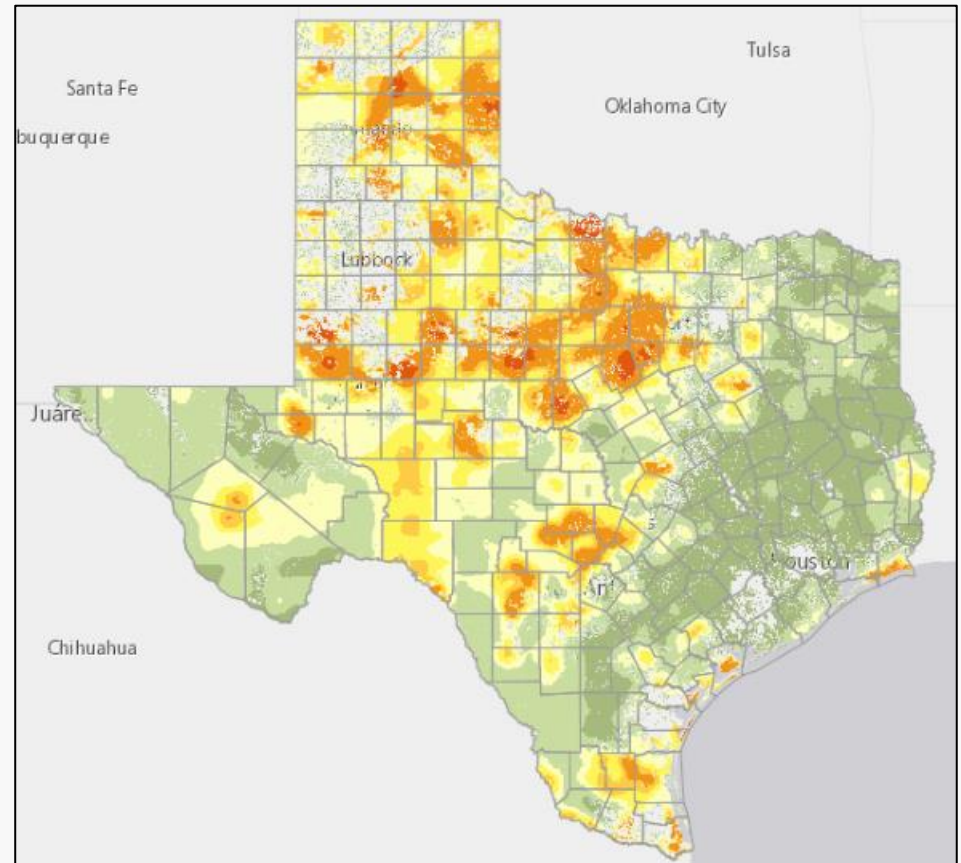
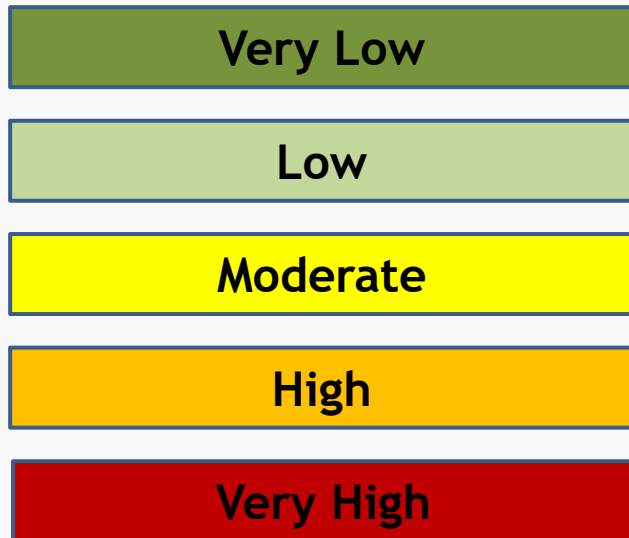
- Nearly 85 percent of wildland fires are caused by humans.
  - Arson
  - Burning of debris
  - Equipment and vehicle use
  - Firearms and explosives use
  - Power generation/transmission and distribution
  - Railroad operations and maintenance
  - Recreation and ceremony
  - Smoking
  - Electric fences



<https://www.nifc.gov/fire-information/fire-prevention-education-mitigation/wildfire-investigation>

# Current Wildfire Risk to Texas

- Texas Wildfire Risk Explorer shows areas at risk from wildfire.



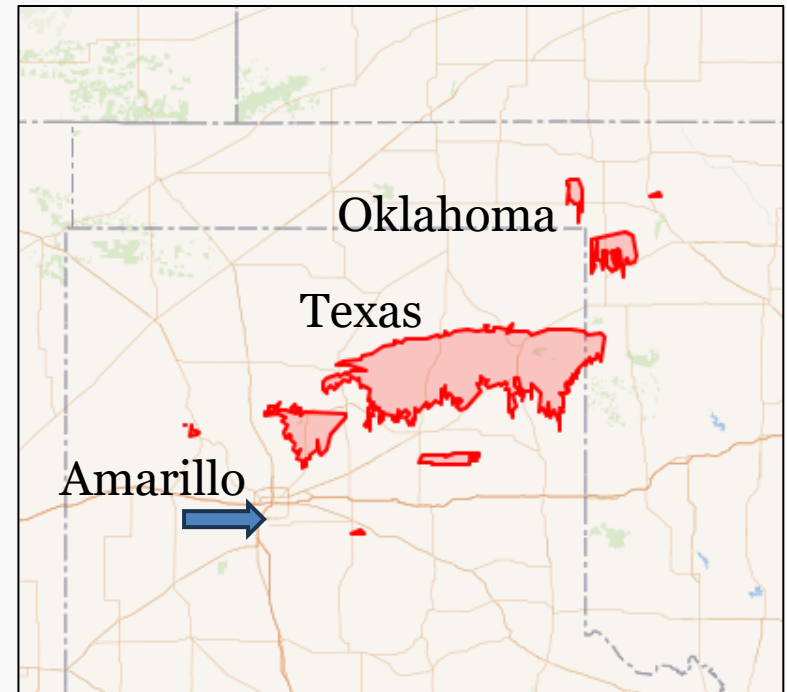
# Debris From Wildfires

- Vegetative
- Personal property
- Household hazardous waste
- White goods
- Soil, mud and sand
- Burnt metals
- Vehicles
- Ash
- Asbestos, and other hazardous wastes



# Smokehouse Creek Fire

- Largest wildfire in Texas's history.
- Started on February 26, 2024.
- 100% on March 16, 2024
- Burned 1,058,482 acres.
- Caused by downed power lines.
- Driven by strong winds and unusually warm temperatures.
- 2 fatalities
- 130 homes destroyed.
- 7,000 to 10,000 cattle killed.



# Firewise USA

<https://www.nfpa.org/education-and-research/wildfire/firewise-usa>

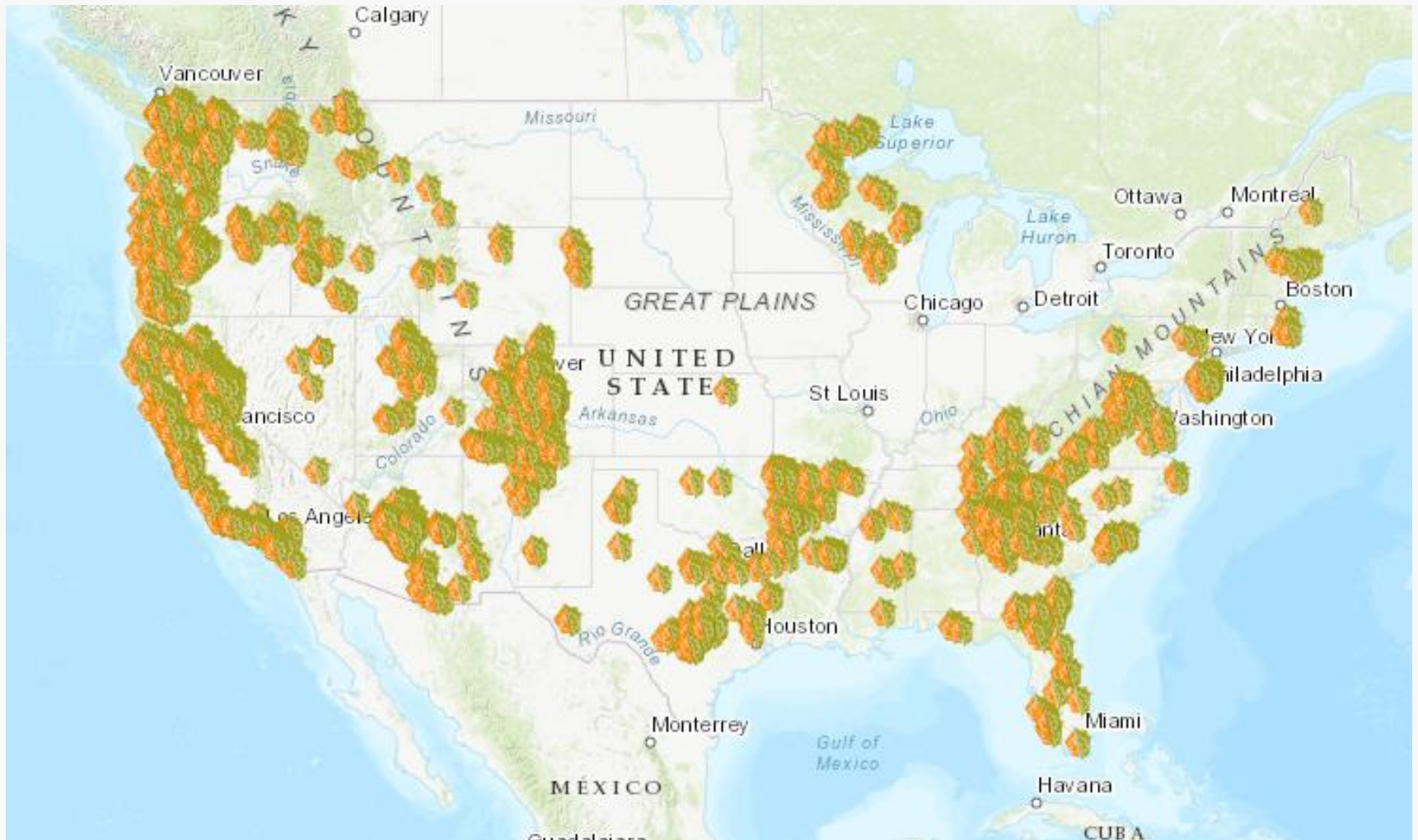
- The national recognition program's annual criteria is designed to empower and engage residents living in wildfire prone areas with a plan and actions that can increase their home's chances of surviving a wildfire; while also making it safer for firefighters.



# Steps to Achieving National Recognition Under Firewise USA

- Complete a written wildfire assessment.
- Form a committee of residents and other stakeholders.
- Develop an action plan to reduce risk.
- Conduct at least one wildfire risk reduction educational outreach event annually.
- Invest the equivalent value of one volunteer hour per dwelling unit in risk reduction actions annually.
- Create a site profile at [www.Portal.firewise.org](http://www.Portal.firewise.org).

# Firewise Sites in the US



# Wildfire Mitigation Measures for Homeowners



- Fire resistant roof
- Protect vent openings
- Keep combustibles 5 feet from home.
- Noncombustible fences
- Maintain under decks
- Noncombustible eaves
- Fire rated doors
- Noncombustible area at the base of exterior walls

<https://ibhs1.wpenginepowered.com/wp-content/uploads/Home-Mitigations-that-Matter-FINAL.pdf>



# Questions?



# Thank You!

