



# Sound the Alarm! Natural Disasters, Immediate Response, and Preservation Funding

Disaster Planning and Response in Historic Texas Cemeteries

# Zoom Webinar Housekeeping

- Trouble with computer audio? Try using your phone instead.
  - 1-346-248-7799 Webinar ID 893 3265 1269
- All attendees are in listen-only mode
- This session is being recorded for later viewing
- Use the **chat box** to
  - Ask for help
  - Make comments during the presentation
  - Share links or tips
- Use the **Q & A box** to
  - Ask the presenters a question
  - We'll answer them live at the end of the presentation



## Online Training Series: Disaster Preparedness & Response for Historic Cemeteries

- **Goal:** Provide cemetery caretakers with the knowledge and skills necessary to build greater resiliency to withstand and recover from future disasters
- **Timeline:** Summer 2021 – Summer 2022
- **Project Team:** Led by Terracon Consultants, Inc.
- **Program:** Six webinars + six stakeholder meetings



*Rockport Cemetery, Aransas County*

## Instructional Webinars

1. Lay of the Land: Cemetery Orientation
2. Cemetery Survey and Data Collection
3. Risk Assessment & Pre-Disaster Planning
4. Immediate Response to Natural Disasters, plus Preservation Funding
5. Post-Disaster Recovery & Restoration
6. People's Choice!

## Stakeholder Meetings

- Highly interactive
- Group discussions
- Feedback opportunities



*McGaffey Cemetery, Jefferson County*

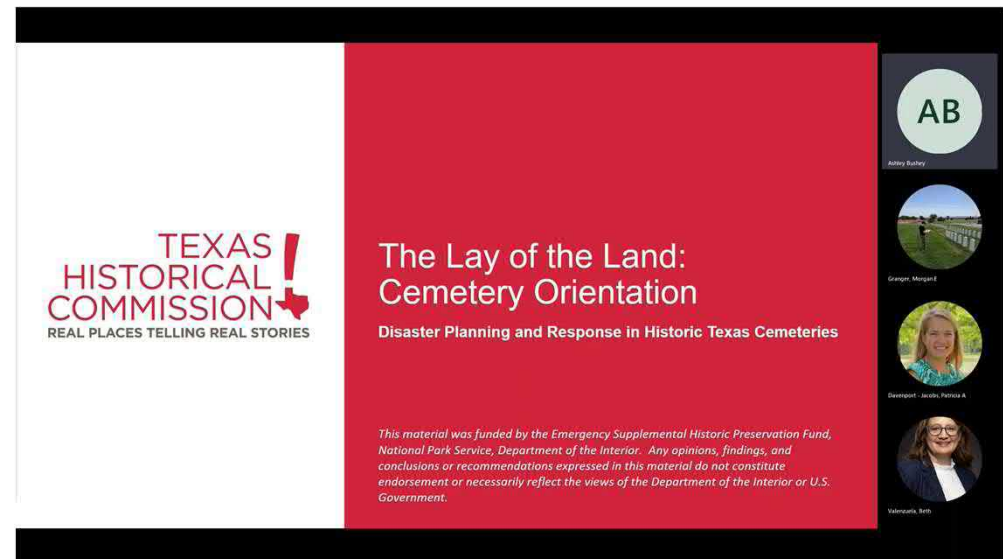
**Stay Up to Date!**

[www.thc.texas.gov/Harvey-cemeteries](http://www.thc.texas.gov/Harvey-cemeteries)

## Webinar 1

### Lay of the Land: Cemetery Components, Cultural Practices, and Materials

- Recognize the physical components of cemeteries beyond grave markers
- Recognize common cultural funerary practices and recognize items located at gravesites may reflect cultural traditions that should be determined prior to removal or disturbance of these features
- Understanding of basic cemetery safety practices.



## Webinar 2

### Survey and Data Collection

- Historic significance of cemeteries and be able to convey the essential history contained in cemeteries to community stakeholders and potential funding partners.
- Baseline understanding of cemetery documentation methods
- Pre-disaster documentation strategies and data protection methods.

The screenshot shows a webinar slide with a white background on the left and a red background on the right. The Texas Historical Commission logo is on the white background. The red background contains the title 'Survey and Data Collection' and the subtitle 'Disaster Planning and Response in Historic Texas Cemeteries'. Below the subtitle is a disclaimer: 'This material was funded by the Emergency Supplemental Historic Preservation Fund, National Park Service, Department of the Interior. Any opinions, findings, and conclusions or recommendations expressed in this material do not constitute endorsement or necessarily reflect the views of the Department of the Interior or U.S. Government.' On the right side of the slide, there is a vertical list of four circular icons: a photo of a woman, a photo of a cemetery, a circle with the letters 'AB', and a photo of a woman.

TEXAS  
HISTORICAL  
COMMISSION  
REAL PLACES TELLING REAL STORIES

Survey and Data Collection  
Disaster Planning and Response in Historic Texas Cemeteries

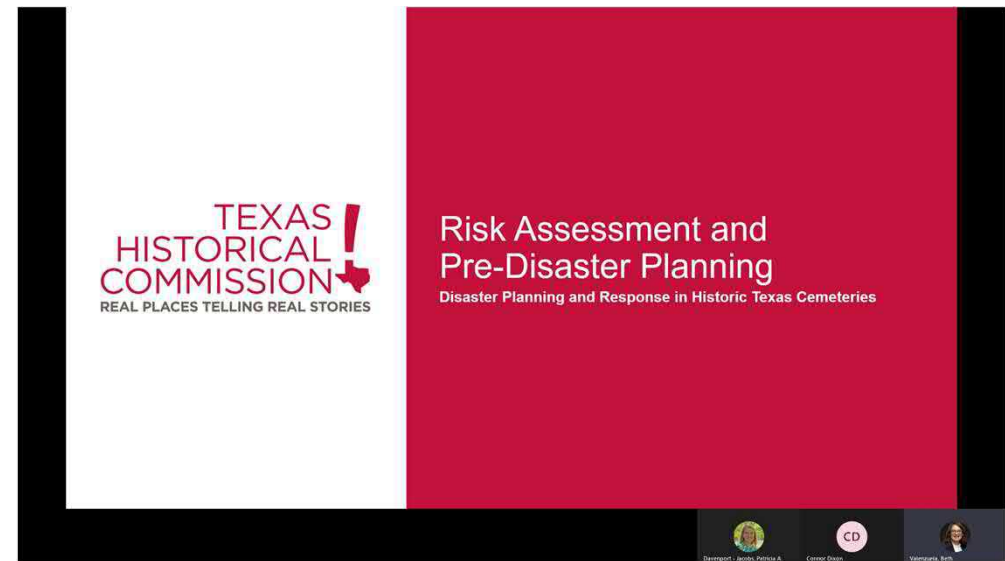
*This material was funded by the Emergency Supplemental Historic Preservation Fund, National Park Service, Department of the Interior. Any opinions, findings, and conclusions or recommendations expressed in this material do not constitute endorsement or necessarily reflect the views of the Department of the Interior or U.S. Government.*

Overstreet, Jessica, Patricia A.  
Greene, Morgan E.  
AB  
Ashley Buckley  
Vannoy, Beth

## Webinar 3

### Risk Assessment and Pre-Disaster Planning

- Potential threats to the cemetery from natural disaster events and identification tools
- Maintenance, landscape, and pre-disaster preparedness plans and mitigation strategies
- Tools for implementing pre-disaster mitigation plans including basic through comprehensive measures







# Sound the Alarm! Natural Disasters, Immediate Response, and Preservation Funding

Disaster Planning and Response in Historic Texas Cemeteries

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## Learning Objective 1

- Participants will have tools for identifying appropriate post-disaster response actions.



*Kennard Cemetery, Grimes County*

## Learning Objective 2

- Participants will have tools for identifying funding support and technical assistance.



# AFTER A DISASTER

## HOW TO RECOVER

Keeping Safe	2
Repairing Tree Damage	2
Basic First Aid	3
Operating a Portable Generator Safely	3
Clearing Debris	4
Chain Saw Safety	4

### Learning Objective 3

- Participants will understand unique safety considerations when working in a post-disaster cemetery environment.



*Dory Hill Cemetery - Black Hawk, CO*

### Learning Objective 4

- Participants will have an understanding of what is required in post-disaster documentation.



*Broadway Cemetery, Galveston*



*Dory Hill Cemetery - Black Hawk, CO*

### Common threats to historic cemeteries

- Development pressure
- Weathering
- No caretaker or cemetery association
- Theft
- Insufficient mapping
- Lack or loss of records
- Animals
- Natural forces and man-made disasters

## What Constitutes a Disaster?



**Tornado**

**Fire**

**Drought**

**Sea level rise**



**Hurricane**

**Coastal erosion**

**Soil condition changes**

**Flooding**



**Graffiti**

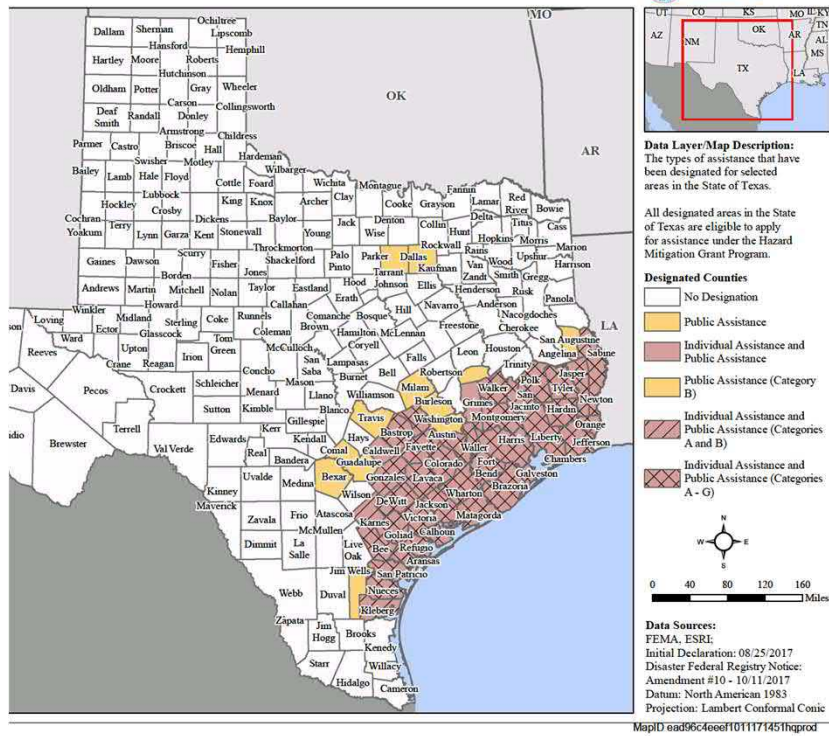
**Theft**

**Desecration**

**Vehicular crashes**

# What Constitutes a Disaster?

R, Texas Disaster Declaration as of 10/11/2017

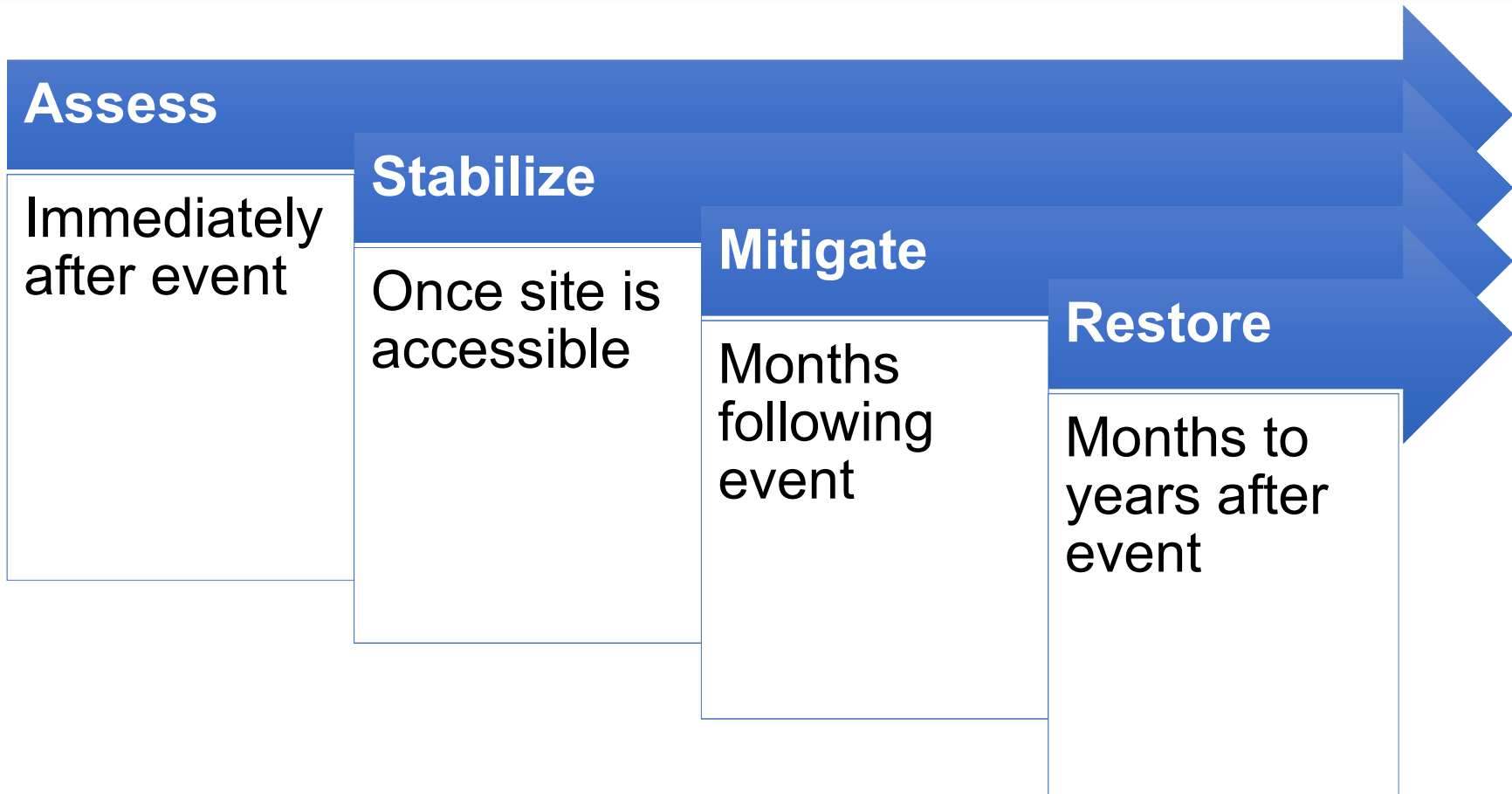


## Disaster Declarations

- The Stafford Act
- Pre-disaster emergency declaration
- Emergency declarations (federal primary responsibility)
- Major disaster declarations

FEMA - Hurricane Harvey Disaster Declaration Map





## Step 1

**Assess**

Stabilize

Mitigate

Restore





*Tivoli Cemetery, Refugio County*

### Respond once its safe to do so

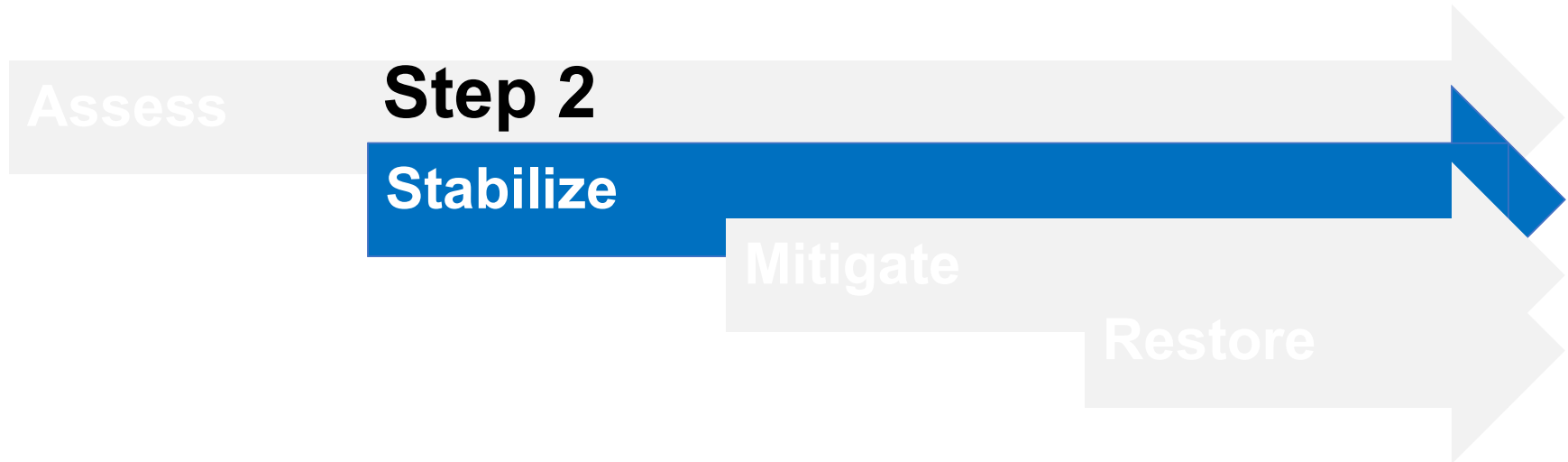
- Stick to the plan – don't rush decision making or site cleanup post-disaster
- Don't get in the way of other emergency services in your community
- Follow local disaster orders and don't burden infrastructure by going out to the cemetery if conditions are not yet stable

### Prioritize assessment tasks

- Respecting the remains of those interred is top priority
- **Initial assessment of hazards and conditions**
  - Based on pre-disaster hazard and threat identification
  - Can be limited in scope if access is limited



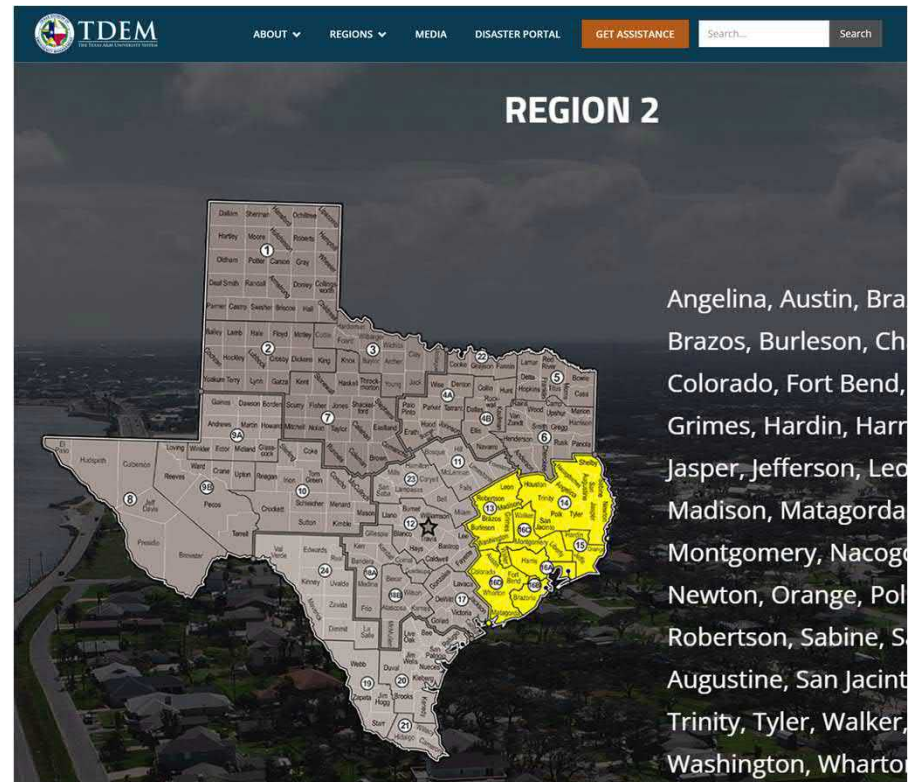
*Sabine Pass Cemetery, Jefferson County*



## Step 2 – Stabilization (Planning)

### Coordinate with Local Recovery Efforts

- Contact local/regional Emergency Operations Coordinators
- Contact local funeral homes and gravedigger services
- Pool resources with other cemeteries in your area



*Texas Division of Emergency Management Regional Contacts*

## Step 2 – Stabilization (Planning)



*San Antonio de Padua, Aransas County*

### Top Priorities for Stabilization

1. Life Safety
2. Secure displaced caskets
3. Documentation of post-disaster conditions



*Rockport Cemetery, Aransas County*

### Life Safety

- Do not enter or work in the cemetery if there are life safety concerns
  - Downed power lines
  - Standing water
  - Overhead threats
- Mark off hazardous areas
- Stabilize immediate threats



### Casket Displacement

- Contact local professionals immediately
- Secure floating caskets
- Document current locations of displaced caskets
  - Include interred information, if available



*Sabine Pass (Pace) Cemetery, Jefferson County*



*Evergreen Cemetery, Jefferson County*

### Casket Displacement

- Assess if human remains have been ***exposed and disinterred***
  - Cover with staked tarps
- Assess if human remains have been ***exposed and dislocated***
  - Cover with staked tarps
  - Determine original location
- Contact qualified individual to assist with reinternment

### Documentation

- Complete rapid assessment survey form
- Photographs
- Condition assessment narratives
- Statements by professionals involved in post disaster assessment



*Broadway Cemetery, Galveston*

### Make site accessible

- **Do No Harm**
  - Consider intact historic features and overall character of cemetery
- **Safety first**
  - Qualified professionals present when turning on utilities in case of system failure
  - Fire extinguishers nearby when re-establishing power (risk of fire)



*McGaffey Cemetery, Jefferson County*

## Step 2 – Stabilization (Actions)



*Rockport Cemetery, Aransas County*

### Prepare for assistance (volunteer and professional)

- Site Considerations:
  - Ground will be saturated
  - Weak roots and soggy ground contribute to risk of toppling trees and collapsing burials
  - Use caution with heavy machinery
  - Keep vehicular traffic on existing roads

## Step 2 – Stabilization (Actions)

### Prepare for assistance (volunteer and professional)

- Volunteer briefings at the beginning of each day or shift change.
  - Personal Protective Equipment provided for each clean-up task
- Mark utility locations
- Mark areas for debris piling



*Pinehurst Cemetery, Jacksonville, Florida*

## Step 2 – Stabilization (Actions)



*Pinehurst Cemetery, Jacksonville, Florida*



### Priority Clean Up Tasks

- Remove vegetative and trash debris
- Remove damaged trees or hanging limbs
- Detailed condition assessment



*Olivewood Cemetery, Harris County*



### Detailed Condition Assessment

- Use previous surveys as a starting point
- Update copies of existing survey forms and note conditions for cemetery elements
  - General condition of the cemetery
  - Each individual resource
  - Cemetery feature



*Old City Cemetery, Jacksonville, FL*





*Broadway Cemetery, Galveston*

### Mitigation Plan Components

- Detailed condition assessment (if not completed earlier, post-disaster).
- Prioritized list of repair actions
- Phased timeline
- Cost estimates

### Cemetery Condition Assessment

- 20 markers broken
- 15 markers intact but displaced
- Roof damage to sexton's office (complete replacement)
- Erosion damage at 5 burial sites
- Erosion damage at pedestrian walkways (1500 linear feet)
- Fence replacement - 500 linear feet
- Fence repair - 2500 linear feet

### Repair Projects Timeline

- Stone Conservator - 6 months
- Roof replacement - 2 months
- Sitework to correct erosion and drainage - 6 months
- Fence repair and replacement - 6 month lead-time on replacement components; 2 months to install once on-site

### Repair Projects Budget

- Stone Conservator - \$150,000 [Estimate 4/12/2022, #12345]
- Roof replacement - \$125,000 [Estimate 5/1/2022, #578]
- Sitework to correct erosion and drainage - \$250,000 [Fee proposal 4/28/2022]
- Fence repair and replacement - \$75,000 [Estimate 4/16/2022 #5789]
- TOTAL - \$600,000

### Receiving Aid after a Disaster

- If the cemetery has an annual budget, it is recommended that some funding be put aside for disaster mitigation efforts.
- State and Federal aid is highly competitive
- Documentation of pre- and post-disaster conditions is key
- Federal and state funds are often tied to National Register eligibility



#### GUIDELINES FOR EVALUATING AND REGISTERING CEMETERIES AND BURIAL PLACES



### Determination of Eligibility (DOE)

- Reference data compiled as part of previous survey report(s)
  - History of the cemetery
  - Clearly labeled current color photographs
  - Current and historic maps and plans
  - Copies of historic photos
- Submit DOE electronically via “DOE Direct” web application

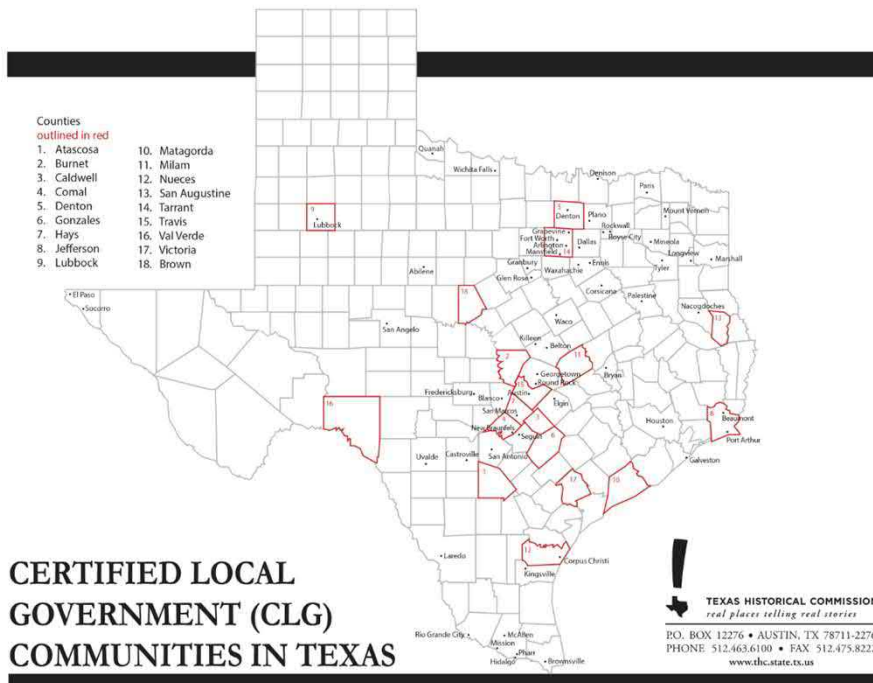
The screenshot shows the 'Request Determination of Eligibility' web application interface. At the top right is the Texas Historical Commission logo. Below it is a navigation bar with links for 'National Register', 'Home', 'Search', 'Eligibility', and 'About'. The user is logged in as 'Hello beth.valenzuela@terracon.com'. The main heading is 'Request Determination of Eligibility', followed by a progress indicator: '1) Property Information → 2) Add Owners → 3) Submit DOE File → 4) Finish'. A note states: 'Please prepare a Determination of Eligibility before submitting a request. You will received a confirmation email once you have completed the process.' The form includes input fields for 'Current Name', 'Historic Name', and 'Address', and a dropdown menu for 'County' with the text 'Select County'. Below these fields is a section titled 'Please check the boxes below that apply:' with seven checkboxes and their corresponding questions: 'Does Applicant / Nominator have owner's permission?', 'Is the owner seeking Federal or State Tax Incentives?', 'Is the Nomination receiving CLG funding?', 'Does the property have any local designations?', 'Does the property have any city designations?', 'Does the property have any state designations?', and 'Is this application for a historic district?'. At the bottom right of the form are 'Cancel' and 'Save' buttons.

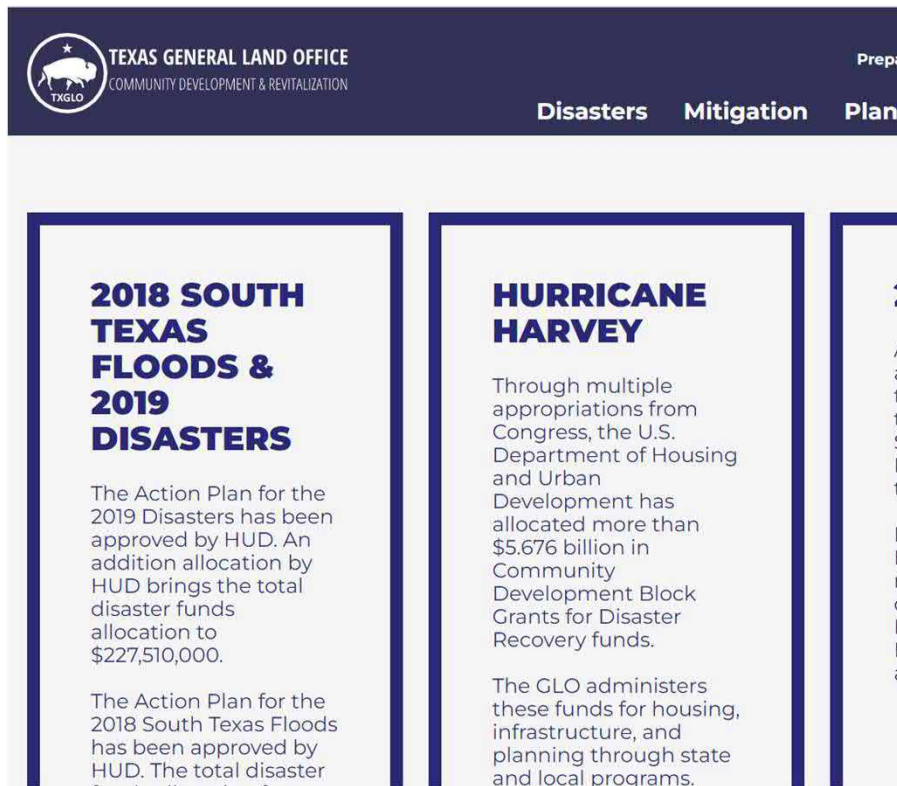


### Connect with Certified Local Governments

Within the 41 counties affected by Hurricane Harvey

- **Cities**
  - Corpus Christi
  - Houston
  - Galveston
  - Beaumont
  - Port Arthur
- **Counties**
  - Nueces County
  - Victoria County
  - Matagorda County
  - Jefferson County





The screenshot shows the Texas General Land Office (TXGLO) website. The header includes the TXGLO logo and the text "TEXAS GENERAL LAND OFFICE COMMUNITY DEVELOPMENT & REVITALIZATION". Below the header, there are navigation tabs for "Disasters", "Mitigation", and "Plan". The main content area features two columns of text. The left column is titled "2018 SOUTH TEXAS FLOODS & 2019 DISASTERS" and describes the HUD-approved action plan for these disasters, mentioning a total allocation of \$227,510,000. The right column is titled "HURRICANE HARVEY" and describes the funding from Congress and the U.S. Department of Housing and Urban Development, totaling over \$5.676 billion, used for disaster recovery funds. It also notes that the GLO administers these funds for housing, infrastructure, and planning through state and local programs.

## Receiving Aid after a Disaster

- Federal-level grants most often go to community infrastructure, restoring essential services, construction of new or repair of existing housing
- Connect with city and county officials

### How to Overcome Obstacles to Funding

- Demonstrate need
- Demonstrate significance
  - Determination of Eligibility
- Connect with larger efforts in your community



*Broadway Cemetery, Galveston*



### Repair and Rehabilitation of Site Elements

- **Do No Harm**
  - Consider intact historic features and overall character of cemetery
  - Prioritize work based on significance and vulnerability to future threats



*St. Joseph Cemetery No. 1, New Orleans, LA*

### Repair and Rehabilitation of Site Elements

- **Displaced or broken items**
  - Document location found and original location
  - Flag and label
  - Store in safe, secure place, such as a lock box
- **Webinar 5**
  - Cleaning
  - Repair and resetting techniques



*Old City Cemetery, Jacksonville, FL*



### Contact List

- Refer to pre-disaster plan contact list. Can include:
  - Arborist or forester
  - Architectural conservator
  - Archeologist
  - Mortician
  - Contractor for debris removal

- Reviewed unique safety considerations when working in a post-disaster cemetery environment.



*Dory Hill Cemetery - Black Hawk, CO*



- Reviewed tools for identifying appropriate post-disaster response actions.



*Kennard Cemetery, Grimes County*

- Reviewed what is required in post-disaster documentation.



*Broadway Cemetery, Galveston*

- Identified what is needed for funding support and technical assistance.

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AGRI LIFE  
EXTENSION



## AFTER A DISASTER

### HOW TO RECOVER

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### Handouts

- NCPTT Rapid Cemetery Assessment
- NCPTT Conditions Survey Form
- Webinar 4 Slides

### Resources

- General and Cemetery Preservation
- Pre- and Post-Disaster Response
- Preservation Funding
- Risk Assessment
- Legal/Legislative References
- Landscape Preservation Planning and Maintenance



Thank you!

Questions?

Next time... Post-Disaster  
Recovery and Restoration of  
Historic Cemeteries

Disaster Planning and Response in Historic Texas Cemeteries

a Terracon Pinyon production