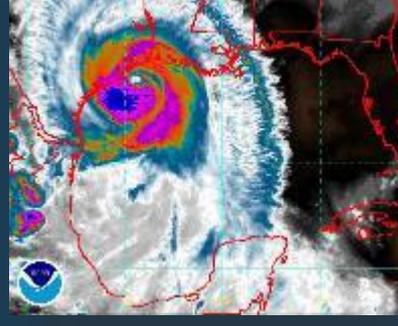


# H-GAC 2024 Webinar/Workshop Series



## Strategies for Debris Management Challenges

### WEBINAR DATE:

AUGUST 29, 2024

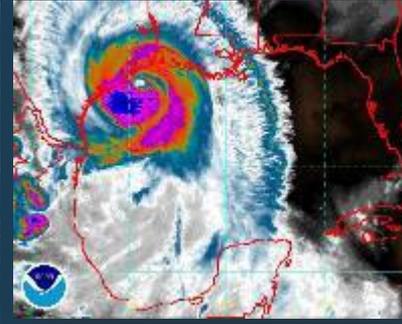
### TIME:

10:00 A.M. TO 12:00 P.M.



# Agenda

1. Debris management challenges caused by staff turnover and tips for overcoming them.
2. Finding qualified contractors and maintaining good contractor relations.
3. Social vulnerability and social justice considerations in disaster debris management operations.
4. Public information tools to enhance the message.



# Part 1: Debris Management Challenges from Staff Turnover and Tips For Overcoming Them



# Issues in Staffing

- Many jurisdictions are facing challenges in staffing.



The screenshot shows the top of a news article on the Governing website. The header features the Governing logo with the tagline "For the people making government work." and a navigation menu with links for Policy, Management, Finance, More News Topics, Papers, Podcasts, Webinars, Magazine, and Newsletters. The article is categorized under "WORKFORCE" and has the title "Help Wanted: Counties Look for Ways to Address Staffing Shortages". The lead paragraph states: "Across the country, turnover and vacancies are high. Counties are raising salaries but still can't compete with the private sector." The article is dated "Aug. 1, 2023" and written by "Alan Greenblatt". Social media sharing icons for Facebook, LinkedIn, Twitter, Email, and Print are visible. At the bottom of the screenshot, there is a close-up image of a hand holding a red pen, filling out an "Application for Employment" form. The form includes fields for "First Name", "City", "Date of Application", "Middle Initial", and "Date Available". A section of the form is highlighted with a red box, containing the text: "We provide accommodations for persons with disabilities in the hiring process. If your disability requires special accommodations, please let us know, and we will provide assistance."

# Issues in Staffing

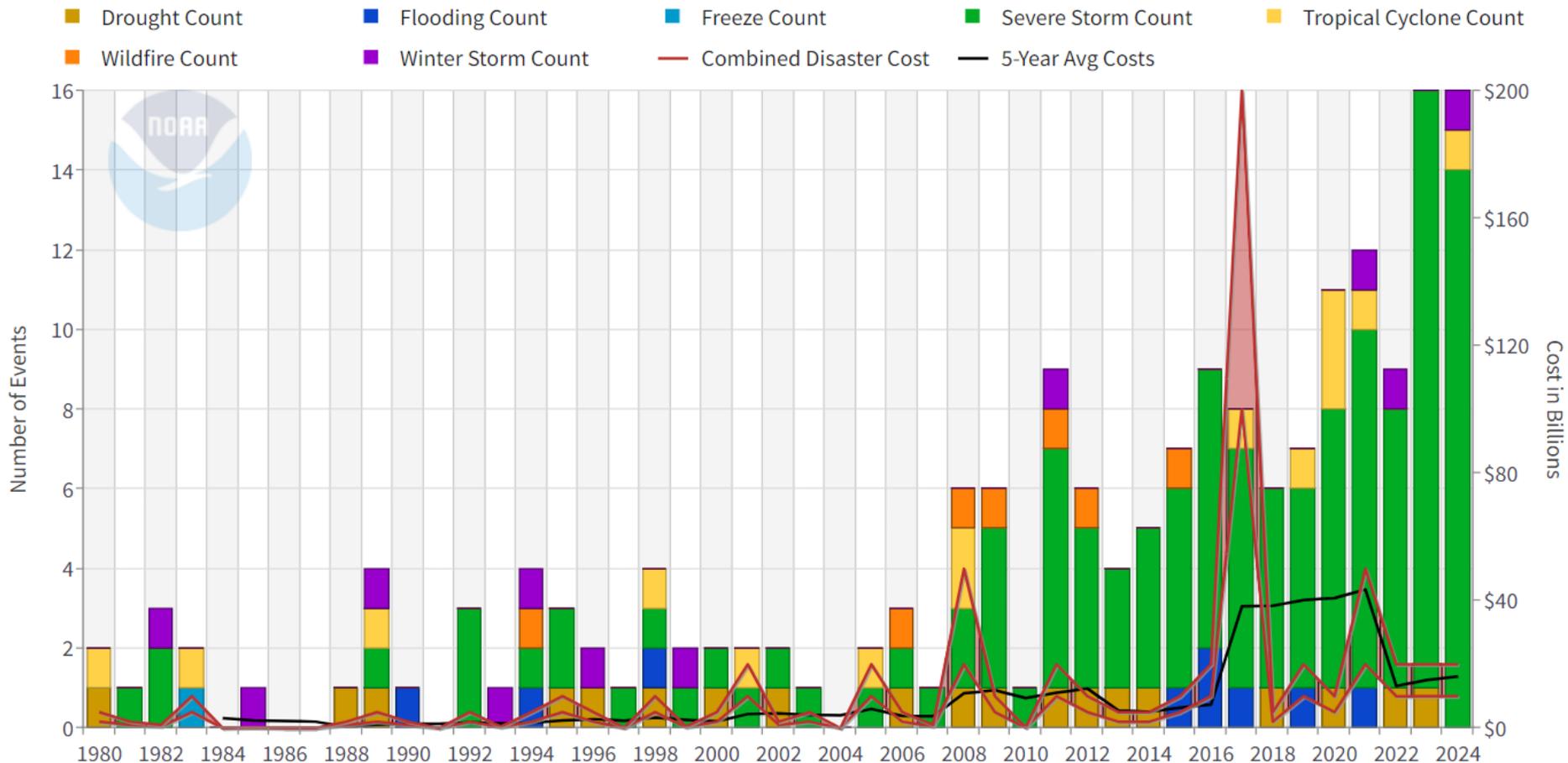
- Baby boomers are retiring.
- Some people have not returned to work post COVID.
- Local governments are having difficulty competing with private sector salaries.
- Turnover rates in state and local governments have been high.
- New inexperienced staff.
- New elected leaders.



# Increased Disasters and Retention of Staff

- Disasters are increasing but staffing is not leading to a work-life imbalance that can result in reduced retention of staff.

Texas Billion-Dollar Disaster Events 1980-2024 (CPI-Adjusted)



# Possible Staffing Solutions: Identify the Need

- Talk through scenarios and identify possible staffing needs.
- Need a team that can hit the ground running for the first couple of days following a disaster.



# Possible Staffing Solutions: Reassignment of Tasks

- Reassign and cross train available staff in possible emergency/debris management responsibilities.



# Possible Staffing Solutions: Contractor Support

- Training (May need a crash course in debris management)
- Debris clearing
- Debris collection
- Monitoring
- Emergency operations center support
- Documentation support

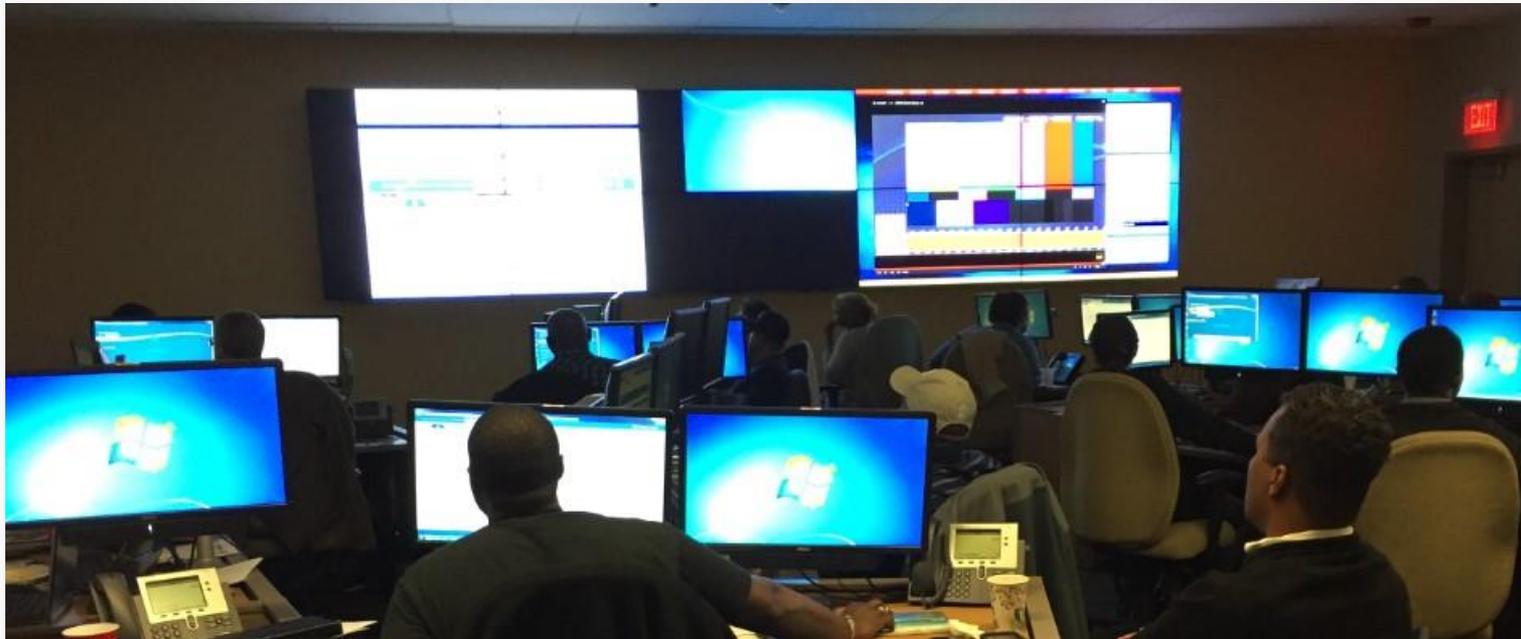


# Possible Staffing Solutions: Know Who to Call

- Identify key stakeholders in debris operations.
  - Staff
  - Contractors
- Have procedures in place to contact staff and contractors during a disaster.
- Test the system regularly to ensure the contact information is accurate.
- Have backup systems in place.
  - Cell, email, text
- Wireless Priority Service (WPS)
- Government Emergency Telephone Services (GETS)

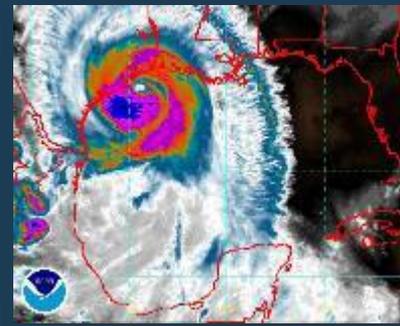
# Communications

- Keep responding staff well informed as to the status of operations.
- Let them know they are appreciated.



# Reduce Stress Levels

- Disaster response and recovery is stressful work, but there are things a jurisdiction can do to ease the stress levels.
  - Attend to the well-being of staff to prevent burnout.
  - Schedule time during the disaster preparation phase for staff to take care of home and family.
  - Allow breaks away from the action to eat and de-stress.
  - Schedule overlap of relief staff.



## Part 2: Finding Qualified Contractors and Maintaining Good Contractor Relations.



# Contractor Procurement

- **Good Example**
  - Meets federal procurement standards for contractors.
  - Competitive bid process.
  - Scope of work includes anticipated disaster work.
  - Well documented process for decision making.
- **Bad Example**
  - My brother-in-law has a truck and trailer. I'll just pay him.
  - We have a grass mowing contractor. Perhaps we can just have them conduct the debris clearing and removal under their existing contract.

# Contractor Procurement

- Good Examples
  - Qualifications and Experienced Based
  - Using up to date bid items and specifications.
  - Checking contractor references
  - Including factors other than Price
  - Considering your risk tolerance in “Low Bid selections”.
  - Ranking contractor awards (Primary, Secondary, etc)

# Pre-Event Activities

- Conduct pre-event meetings and coordinate planning with the contractor, and key resources.
- Conduct training and exercises so expectations are clear.



# Debris Contracting Response/Recovery Considerations

- Ask how many cubic yards can you haul in a day as opposed to how many trucks can you get here? Is more than one contractor needed?



# Debris Contracting Response/Recovery Considerations

- Establish realistic timelines, expectations, and costs based on credible estimates.
- Establish who will run the show.



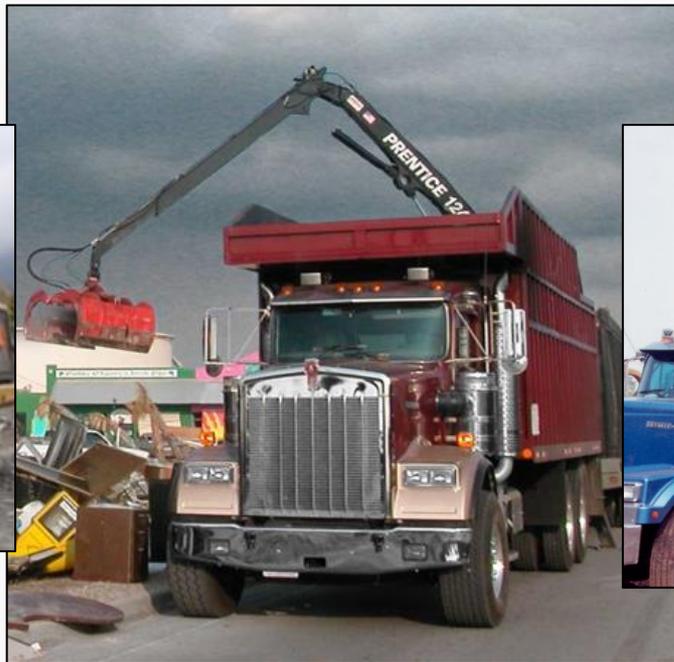
# Debris Contracting Response/Recovery Considerations

- Understand the different needs in response and equipment that may be dictated by the type and severity of an incident (e.g., flood, ice storm, hurricane, wildfire, etc.).



# Debris Contracting Response/Recovery Considerations

- Consider a full-service approach, from road clearing, debris management site operations, right of way debris removal, to final disposal.



# Debris Contracting Response/Recovery Considerations

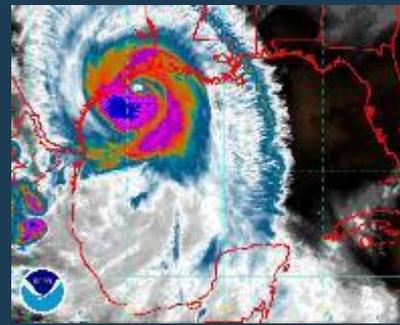
- Consider the capacity requirements for the response and use of liquidated damages.
  - Liquidated damages are an exact amount of money, or a set formula to calculate the amount of money, a party will owe if it breaches a contract.



# Debris Contracting Response/Recovery Considerations

- Conduct daily meetings.
  - Identify priorities.
  - Establish expectations.
  - Discuss/resolve issues.



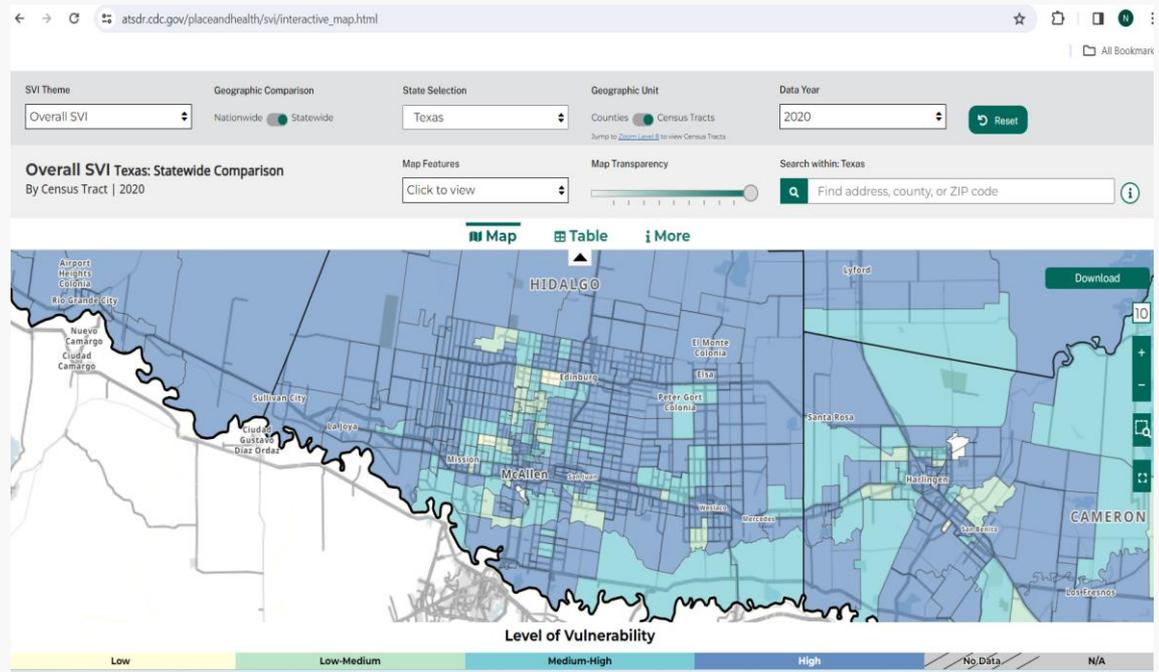


# Part 3: Social Vulnerability and Social Justice



# Executive Order 12898, Environmental Justice

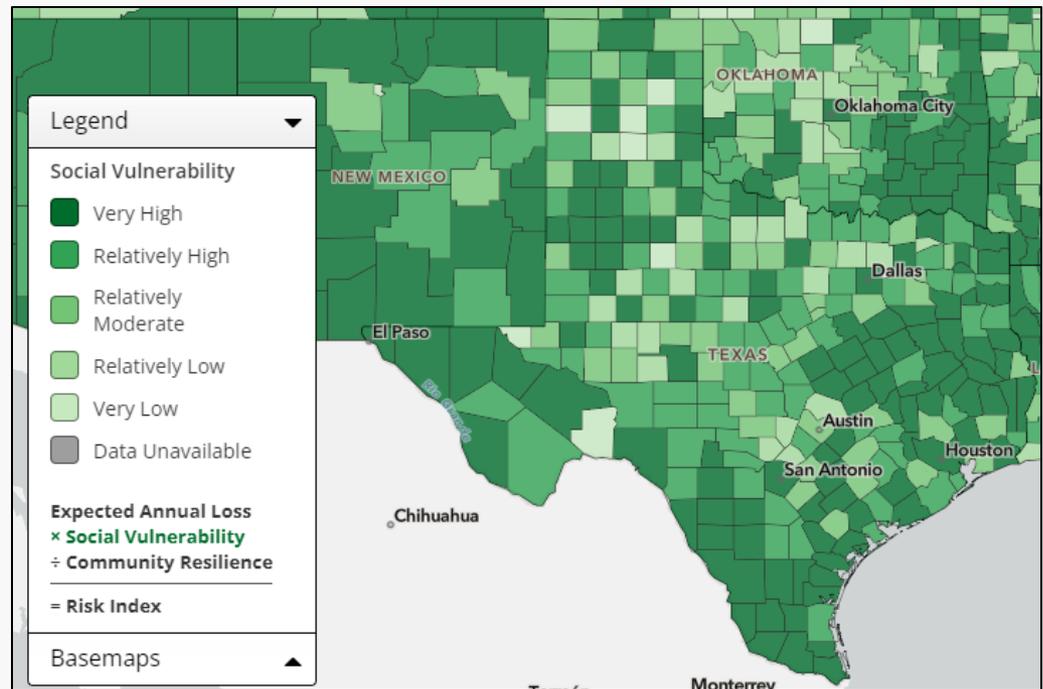
- The Executive Order 12898 requires federal agencies to identify and address any disproportionately high and adverse human health or environmental effects on minority and low-income populations as a result of their actions.



# Definitions - Social Vulnerability

- The susceptibility of social groups to the adverse impacts of natural hazards, including disproportionate death, injury, loss, or disruption of livelihood.
- County ratings have been developed to represent the relative level of a community's social vulnerability

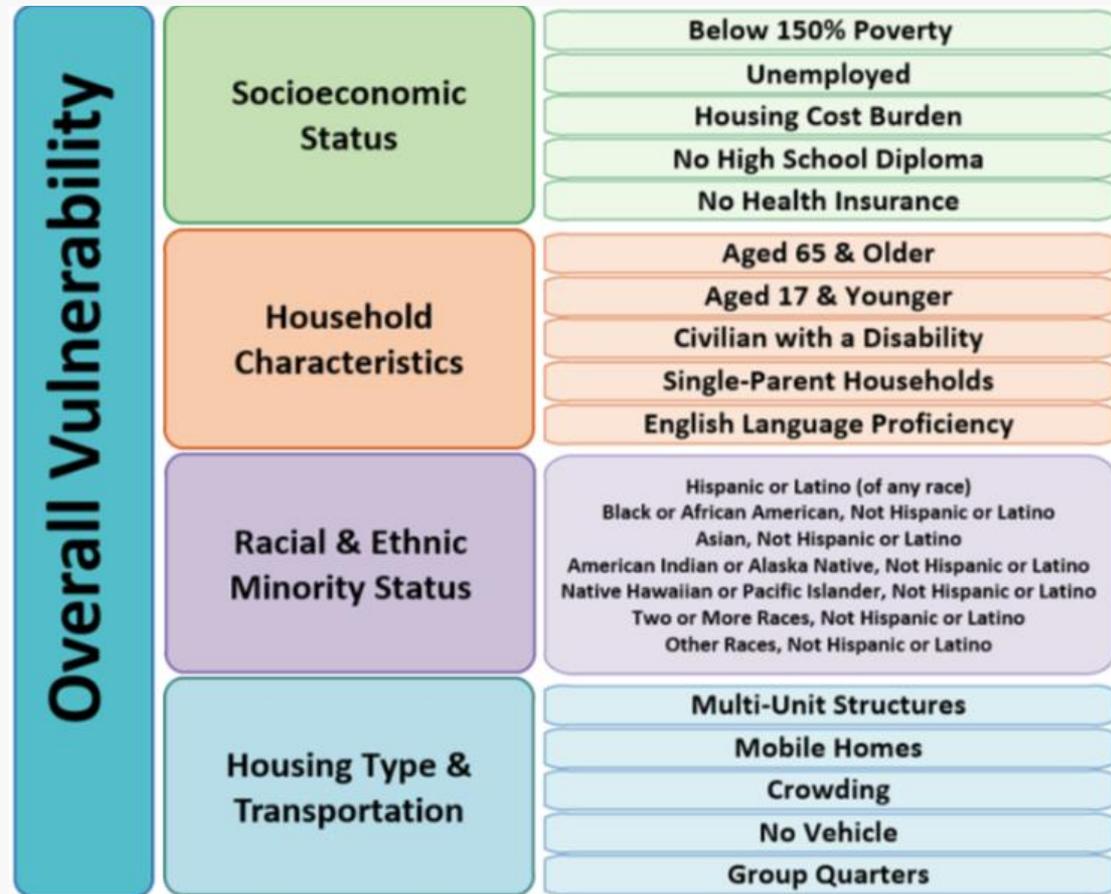
FEMA National Risk Index Website:  
<https://hazards.fema.gov/nri/social-vulnerability>



# Social Vulnerability Index (SVI)

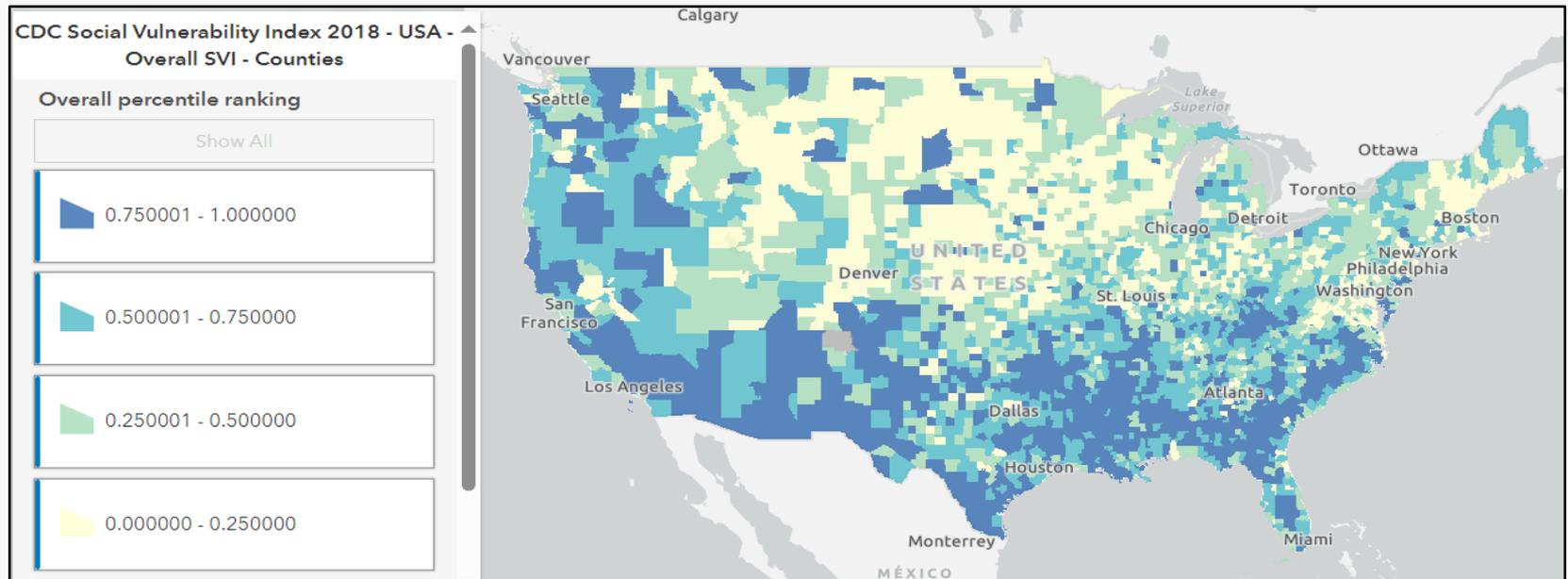
## Potential Adverse Effects by Category

- FEMA funded projects that have the following types of human health and environmental impacts may trigger environmental justice concerns:
  - Health and Safety
  - Visual impacts
  - Social affects
  - Economic Impact



# Social Vulnerability Index (SVI)

- This feature layer visualizes the 2018 overall SVI for U.S. counties and tracts and indicates the relative vulnerability
- 15 social factors grouped into four major themes
- Index value calculated for each county for the 15 social factors, four major themes, and the overall rank



# Environmental Justice Concerns In Debris Management Operations (1 of 2)

- Examples of common project types funded by FEMA that may trigger environmental justice considerations to minimize, mitigate, or avoid high and adverse effects on low income and minority communities.
  - Hauling
  - Debris Burning
  - Road Repairs
  - Relocation of Public Facilities
  - Closure, relocation of housing, employment opportunities, public schools

# Environmental Justice Concerns In Debris Management Operations (2 of 2)

- Closure, relocation of housing, employment, schools
- Utility return to pre-disaster condition
- Alternate/Improved projects, new construction, mitigation construction, communication towers
- Site locations of temporary or permanent housing
- Flood mitigation

# Environmental Justice Concerns In Debris Management Operations

- If FEMA determines that a proposed project would have disproportionately high and adverse effects on minority or low-income populations, then FEMA will work with an applicant or sub-applicant to revise the scope of work to mitigate the effects.

# Implementing & Addressing Social Justice in Disasters

- Consider social vulnerability in decisions made regarding mitigation measures, preparedness activities, and in response and in recovery from disasters.



# Implementing & Addressing Social Justice in Disasters

- Ensure there is collaboration of different agencies and government at all levels. This leads to equitable treatment based on color, race, gender, disability, age, nationality, economic status, and religion.

The screenshot shows the volunteerHOUSTON website interface. At the top left is the logo for volunteerHOUSTON, featuring a blue star with orange brushstrokes below it, and the text "volunteerHOUSTON" in blue and orange, with "A PROGRAM OF INTERFAITH MINISTRIES" in smaller blue text below. To the right of the logo is a blue box with white text that reads "Volunteer to help your neighbor after Hurricane Beryl." Below this is an orange button with white text that says "CLICK HERE TO VOLUNTEER NOW".

The main content area has a blue header with a home icon, a group of people icon, and the text "Hurricane Beryl 2024 Disaster Response". Below the header is a breadcrumb trail: "Home > Needs > Hurricane Beryl 2024 Disaster Response > Volunteers for Beryl debris/tree clean up needed!". The main content area features a large blue box with white text that reads "Volunteers for Beryl debris/tree clean up needed!". To the right of this box is a red button with white text that says "EXPIRED" and a share icon.

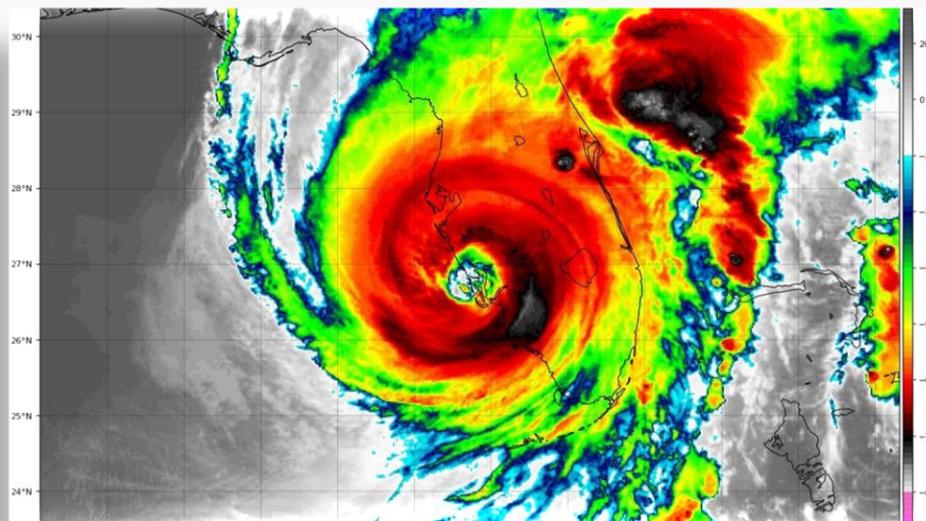
On the left side of the interface is a navigation menu with the following items: DASHBOARD, NEEDS, EVENTS, AGENCIES, and HURRICANE BERYL.

# Hurricane Ian - Case Study

## Event Recap (DR-4673):

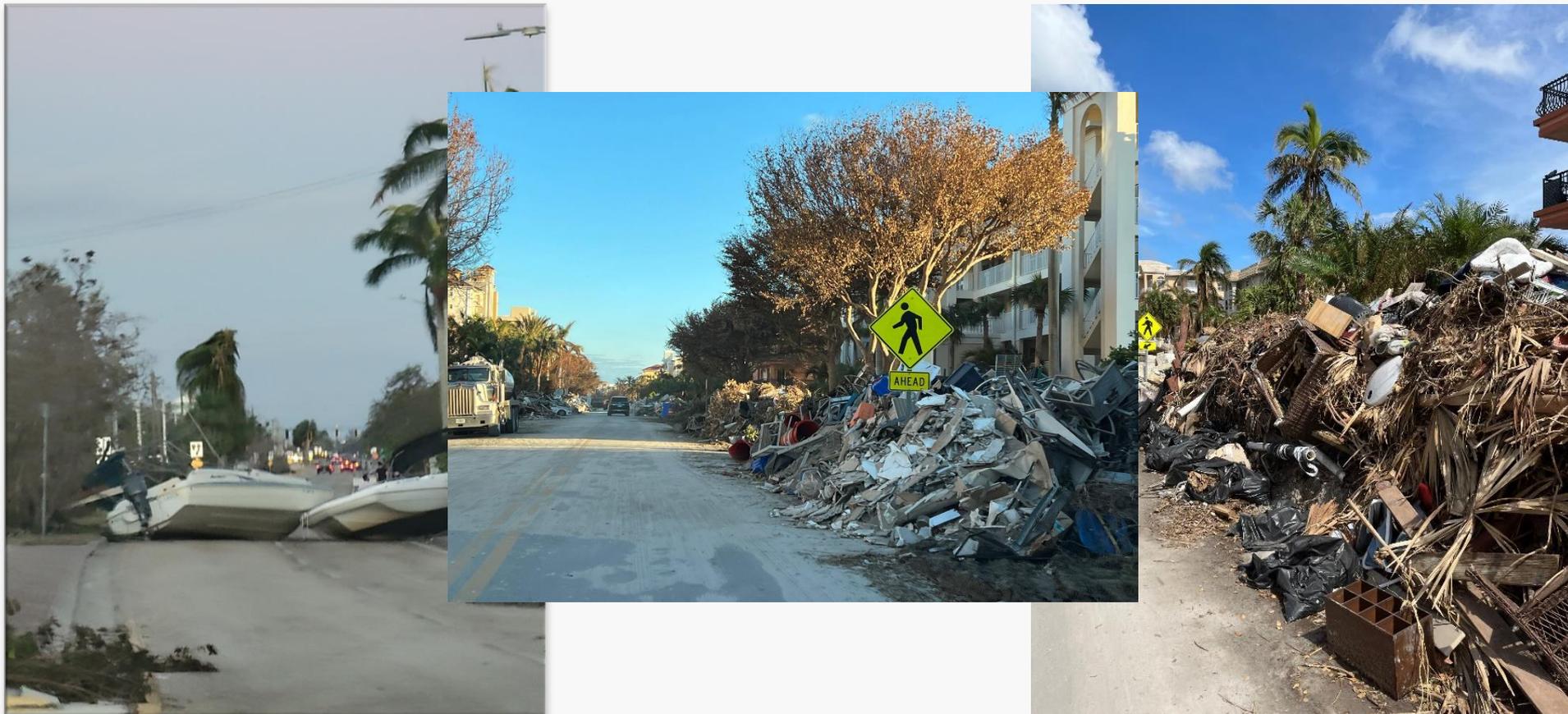
Hurricane Ian was a devastating Category 4 hurricane that made landfall in Southwest Florida on September 28, 2022. A destructive storm surge was pushed inland in coastal areas like Fort Myers & Punta Gorda, while high winds and extreme rainfall caused catastrophic damage and flooding across Florida's interior. It is estimated that Hurricane Ian caused more than \$50 - \$90 billion in damages in Florida.

FEMA PA funding to support recovery



# Hurricane Ian - Impacts

- Category 4 hurricane with sustained winds of 150 mph.



# Hurricane Ian - Impacts



110 Pier E  
Naples FL 34112  
United States  
Oct 18, 2022 at 2:51:43 PM

# Hurricane Ian Challenges

- Resource logistics
- Communication/Technology
- Changing workforce
- Misinformation
  - PPDR Guidance
  - Commercial Debris
  - FEMA alternative procedures
  - Social Media



# Hurricane Ian

- Given the widespread debris impacts, questions arose during the response regarding debris removal from commercial and private gated communities.



# Hurricane Ian - FEMA Guidance

FEMA issued guidance and granted waivers for certain debris programs such as:

- Private/gated communities
- Commercial Debris Removal.

So what's the Catch?

- Required analysis of certain Census Tracts and a categorization of damage level, some of which correlated with Demographics such as SVI.

U.S. Department of Homeland Security  
Washington, DC 20472

 **FEMA**

October 18, 2022

MEMORANDUM FOR: Gracia Szczech  
Regional Administrator  
FEMA Region IV

ATTENTION: Thomas J. McCool  
Federal Coordinating Officer  
FEMA-4673-DR-FL

FROM: Melissa K. Forbes  
Assistant Administrator  
Recovery Directorate 

SUBJECT: FEMA-4673-DR-FL Hurricane Ian Rapid Debris Removal and Demolition Processes

This memorandum is in response to the October 13, 2022, request from the Federal Coordinating Officer (FCO) for FEMA-4673-DR-FL for the approval of a rapid debris removal and demolition process that requires several policy waivers under the Public Assistance (PA) Program. This tiered process provides a streamlined approach to certain debris and demolition requirements to accelerate clean-up efforts in the most heavily impacted areas. The three-tiered approach delineates categories for damaged and debris-laden properties where the aftermath of the storm has deposited debris widely on public, commercial, and private residential property. The tiers are referenced as: 1) catastrophically damaged, 2) extensively damaged, and 3) moderately damaged areas. FEMA will utilize geospatial data and other damage assessment tools to identify areas within the designated counties benefiting from rapid debris and demolition approvals. FEMA will determine these areas with input from the Recipient. Pursuant to the FCO's request and for the efficient recovery in heavily impacted areas in Florida, I am approving waivers as specified below.

FEMA has determined debris removal on private property (PPDR) is in the public interest. Nothing in this memorandum shall be construed to constitute a waiver of compliance with applicable federal and state, local, territorial, and tribal (SLTT) government laws, ordinances, regulations, and executive orders. Additional information regarding the current policies relevant to debris and demolition and the waivers provided through this memorandum may be found below.

Regarding the applicants' responsibility to obtain rights of entry (ROE) for any of the commercial property and privately-owned residential property debris or demolition issues, the applicant must still have either properly executed ROEs or documentation that establishes the legal authority to enter private or commercial property and execute any of the actions described in this memo.

www.fema.gov

# Example - Commercial & Mobile Home Park Approvals



110 Pier E  
Naples FL 34112  
United States

Oct 18, 2022 at 2:51:43 PM

# Community Disaster Resilience Zones

- The Community Disaster Resilience Zones Act was signed into law by President Joe Biden on December 20, 2022.
- The Act amends the Robert T. Stafford Disaster Relief and Emergency Assistance Act and requires FEMA to utilize a natural hazard risk assessment index to identify census tracts which are most at risk from the effects of natural hazards and climate change.



# Low- and Moderate-Income (LMI) Households

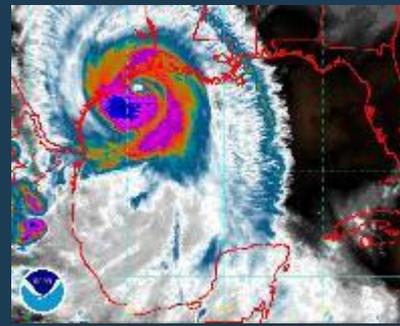
- LMI communities are particularly vulnerable to extreme weather and other natural disasters.
- Because the members of these communities typically have relatively fewer resources, they are also the slowest to recover.
- More financial help is often needed to fully rehabilitate homes and make them resilient against future natural disasters, to cover additional living expenses, and to make up for lost income due to work interruptions.

# Low- and Moderate-Income (LMI) Households

1. Make it a priority to teach recipients ways to avoid duplication of benefits.
2. Provide households with tips and tools to manage disaster assistance funds.
3. Consider the creative strategies employed by other grantees to help moderate the financial impact of disasters for LMI households.

# Opportunity Zones

- Opportunity Zones are an economic development tool that allows people to invest in distressed areas in the United States.
- Their purpose is to spur economic growth and job creation in low-income communities while providing tax benefits to investors.
- Taxpayers can invest in these zones through Qualified Opportunity Funds.
- Go to the IRS website at:  
<https://www.irs.gov/credits-deductions/businesses/opportunity-zones>

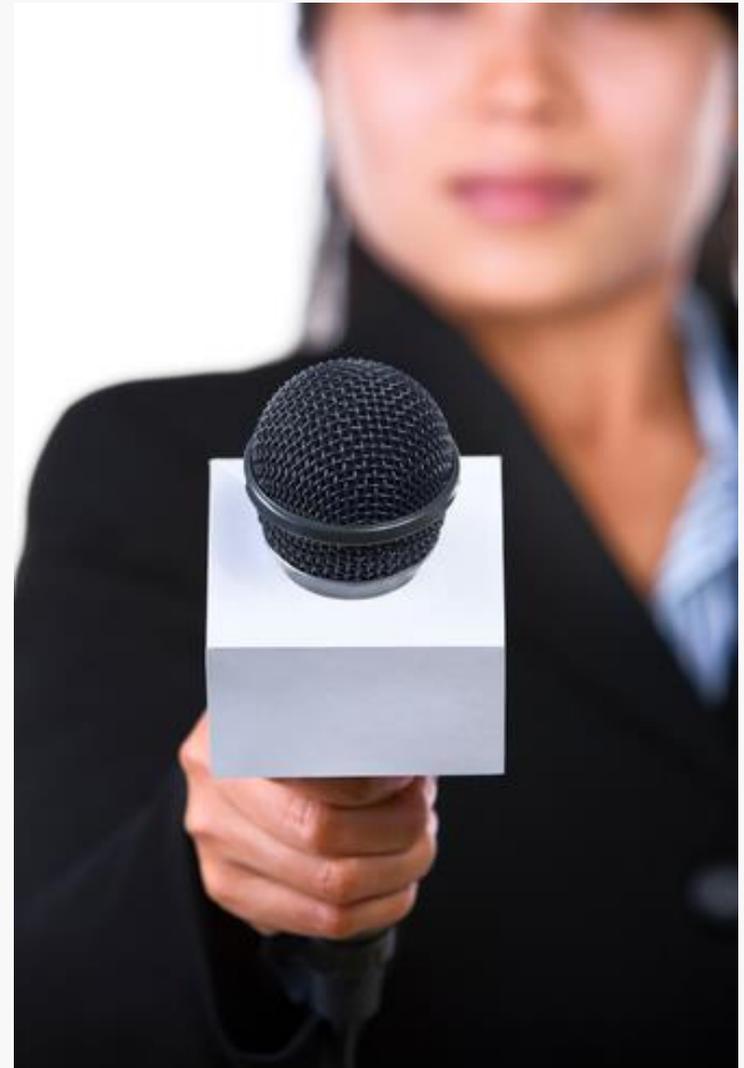


# Part 4: Public Information Tools to Enhance The Message.



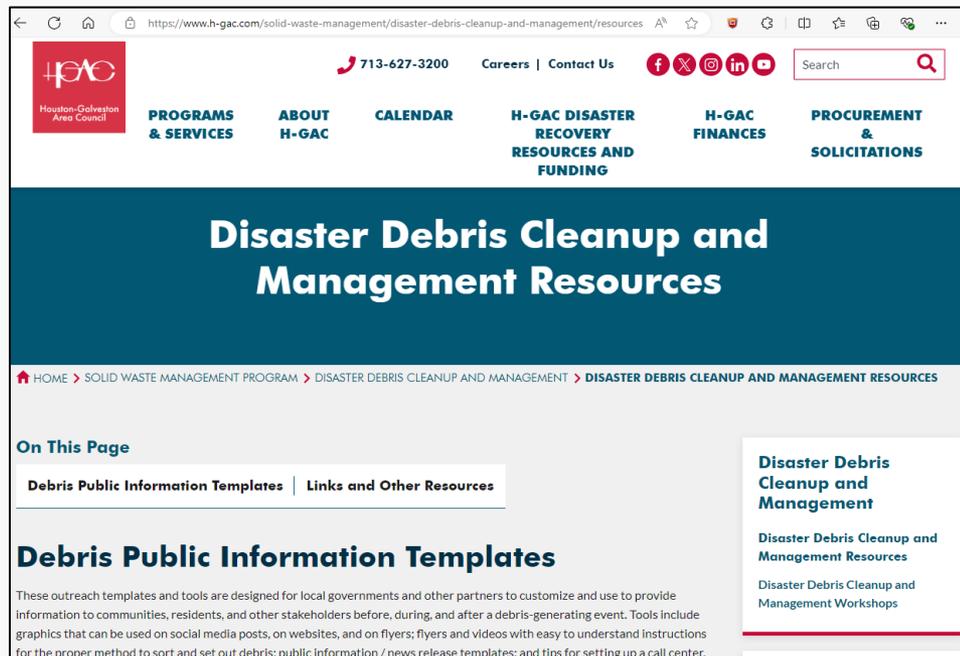
# Public Information

- Communicate that we have a plan.
- Provide instructions to residents on debris separation.
- Provide realistic updates on the status of debris operations.
- Monitor social media. Rumor control.
- Collaborate in messaging.
- Establish a number for residents to call for information.



# H-GAC Public Information Tools

- H-GAC has developed several public information tools to aid jurisdictions in communicating instructions regarding disaster debris management.
- They can be found at <https://www.h-gac.com/solid-waste-management/disaster-debris-cleanup-and-management/resources>.



# H-GAC Public Information Tools

- Included are
  - Message templates by phase of the response.
  - Guidance for establishment of a call center.
  - Graphics to help communicate the message regarding separation of debris for collection and other helpful messages.
  - Messages are available in English, Spanish, Vietnamese, and Chinese (Mandarin).
  - Messages are also available in different formats to accommodate websites and social media sites.

# Proper Debris Set-Out Methods

## Separating Your Debris

Debris should be placed curbside, without blocking the roadway or storm drains.

**NO PICKUP ZONE**  
Any debris placed from the sidewalk toward your property will not be picked up.

**DEBRIS SEPARATION**  
Separate debris into the six categories shown below.

**DO NOT STACK OR LEAN**  
Placing debris near or on trees, poles, or other structures makes removal difficult. This includes fire hydrants and meters.

**UNSURE WHERE TO PLACE DEBRIS?**  
If you don't have a sidewalk, ditch, or utility line in front of your house, place debris at the edge of your property before the curb.

**Normal Household Trash**  
Normal household trash and bagged debris of any kind will not be picked up with disaster debris. You should continue to follow your normal garbage removal schedule.

**VEGETATIVE DEBRIS**

- Leaves (do not put in bags)
- Logs
- Plants
- Tree branches

**CONSTRUCTION & DEMOLITION DEBRIS**

- Building materials
- Carpet
- Drywall
- Furniture
- Lumber
- Mattresses
- Plumbing

**APPLIANCES & WHITE GOODS**

- Air conditioners
- Dishwashers
- Freezers
- Refrigerators
- Stoves
- Washers, dryers
- Water heaters

**ELECTRONICS**

- Computers
- Radios
- Stereos
- Televisions
- Other devices with a cord

**HOUSEHOLD HAZARDOUS WASTE**

- Cleaning supplies
- Batteries
- Lawn chemicals
- Oils
- Oil-based paints and stains
- Pesticides

**For more information contact your local government.**

# DEBRIS OPERATION TIMELINE

**1** Debris collection after a disaster can often take several weeks – or months – to complete.

**2** A truck may not pick up all your debris in one load.

**3** Several passes by the debris contractor may be needed to collect all the debris generated by the disaster.

**4** Different types of debris may go to different places for recycling or disposal.

*We appreciate your patience!*



## DO BAG GARBAGE

Place household garbage in your trash container to be picked up by your regular trash collection agency and keep it separated from your disaster debris.



## DON'T BAG DEBRIS

The debris contractor cannot identify the contents of bagged items. Unbagged debris can be easily identified for proper disposal or recycling.

**REMEMBER**



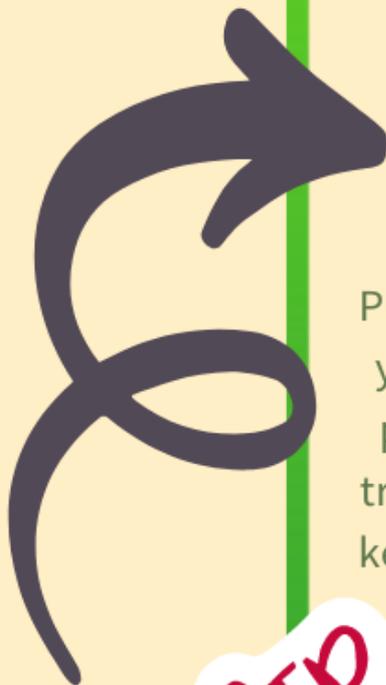


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**REMEMBER**



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# TIPS TO PREVENT INJURIES

while  
cleaning &  
repairing

# AFTER A STORM

- ✓ Wear closed-toe, sturdy shoes
- ✓ Use puncture-resistant gloves
- ✓ Wear safety glasses & a mask
- ✓ Look out for dangerous displaced animals!
- ✓ Never use a generator inside
- ✓ Be aware of downed power lines & gas leaks
- ✓ Wear sunscreen, pants & long-sleeves
- ✓ Hire a pro if you don't know...

# NOW IS THE TIME...

**TO PREVENT PROJECTILES!** Before high winds hit, remove loose items like:

- lawn and pool furniture
- children's toys
- garden tools
- wind chimes and bird feeders

**Group and secure** any potential projectiles that can't be removed from your yard.



## BUT TIME'S RUNNING OUT!



- Need to prune a tree? **Hire a certified tree professional!**
- **Schedule a bulky waste pickup** with your trash collector to collect any smaller dead branches **or place them in your garage.**
- **Never** stack tree trimmings near fire hydrants, storm drains, or utility structures.

# MAKE SURE THAT RAIN...

## DO

- Use rakes, brooms, or shovels to clear blockages.
- Be safe - wear gloves and watch for traffic!

## DON'T

- Never place yard debris near storm drains.
- Don't blow or rake leaves into streets.

Blocked drains can flood roadways, parking lots, and surrounding property.  Keeping drains clear helps prevent standing water during rain events, reducing ponding (and mosquitos!) and flooding of roadways and properties.

# ...GOES DOWN THE DRAIN!

# Questions?



Thank You!

