

# 2018 California Higher Education Collaborative Conference

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SONOMA STATE UNIVERSITY

OCTOBER 1-3, 2018

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# Creating a Road Map to Campus Hazard Mitigation & Recovery

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# Agenda

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Disaster Strikes, now what?

Getting the Whole Picture

Recovery

- Disaster Recovery: Build your toolkit
- What to do BEFORE Disaster Strikes
- What to do DURING the Disaster
- AFTER the disaster is over, now what??
- Disaster Cost Reimbursement Process

Mitigation

- Why conduct mitigation planning
- How mitigation planning works
- Realized benefits of mitigation planning
- Types of mitigation measures

Funding Sources and Opportunities

Closing Thoughts and Questions



# Potential Hazards



Earthquake  
Flood  
Wildfire  
Subsidence  
Landslide  
Hazardous Materials Incidents



Sea Level Rise  
Tsunami  
Urban Structure Fires  
Extreme Temperatures  
Public Health Outbreaks  
Civil and Terror Acts

# Disaster Strikes, Now What???

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Alert and Notifications-

- who needs to know, what do they need to know, when do they need to know it

Activating your Campus Emergency Plan and Emergency Operations Center

Making sure you have the “situational awareness” of the incident impacting you

Evacuations (Voluntary and Mandatory)

Cancelling Classes

Closing Campus

Working with first responders

Mutual aid/assistance – what do we need, when do we need it, how do we get it

# Getting the *Whole* Disaster Cycle Picture

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Are YOU ready to tackle dealing with disasters, from planning and training, to responding to the specifics of the disaster, recovering from the incident and “getting your campus back to normal operations, to mitigating those things that may lessen the impact of the NEXT disaster.



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# Disaster Recovery



# Disaster Recovery; Why Do We Need It

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Getting your campus “back to normal” after a disaster

Getting classes and student services back up and running quickly

Impacts of a major incident on your campus

- Campus facilities – smoke, water, debris
- Instructional services
- Student Housing
- Impact on faculty, staff, and students
- Financial impact (expenses and loss of revenue)
- Administrative services (financial aid, admissions, counseling)
- Reputational impact

So what can you do???



# Disaster Recovery; BEFORE Disaster Hits

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Know the State and Federal disaster response & recovery process and regulations

- State Emergency Plan, Stafford Act, SEMS, NIMS, FEMA Public Assistance Processes and Forms

Have an Emergency Operations Plan

- Who does what & How will we respond

Documentation of Facilities and Equipment

- Take pictures of facilities and equipment
- Store all building plans and specifications in a safe place

Review Purchasing policies & procedures (everyday needs & emergencies)

- Purchase and vendor agreements
- Contractors/Services Provider List

Transportation and Evacuation considerations

Campus Closure Considerations (partial or full)



# Disaster Recovery; BEFORE Disaster Hits (Cont.)

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Conduct a risk assessment/hazard analysis

Build your team and network; test & train these teams and networks

- EOC team
- Building & Floor Marshals
- Mutual Aid/Assistance Agreements

Develop your Business Continuity Plan / Continuity of Operations Plan

- Plans for each Department on how they will recover
- Test your plans

Succession planning and any Delegation of Authorities

Get to know & develop partnerships with your City, County, and community partners

- American Red Cross, Access Services, County Health Department, Hospitals

# Disaster Recovery; Disaster Struck Now What?

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## Activate Campus Emergency Operations Center

- Put your emergency plan into action, conduct situational assessment, develop action plan

## Document, document, document

- Staff time, equipment usage, supplies purchased, contractors cost
- Actions taken during disaster & Timeline of events

## Communicate with your City and County partners; status and damages

## Communicate with the Chancellor's Office

- What is the situation
- What support do you need

## Mutual Assistance

- UPD (CRU)
- Emergency Managers
- Counseling & Psychological Services (CAPS)

# Disaster Recovery; Disaster Struck Now What?

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Disaster Declaration Proclamations

Media Relations:

- What's the message you want communicated
- How messages are communicated (Print & Digital media, website, FAQ's, press releases)

Consult your Business Continuity Plan – what to do next (prioritize)

Contact Alliant Insurance Services; Robert Frey or Daniel Howell

Engage Specialty services as needed for the incident:

- Restoration Services (Belfor)
- Structural Engineers
- Industrial Hygienists

# Disaster Recovery; AFTER the Response

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Assess impacts on campus community

- Post disaster issues, counseling needs

Assess damages to property, facilities, & equipment

- Initial Damage Estimates/Preliminary Damage Estimates

Review documentation for completeness & accuracy

Keep in contact with your local City & County

- Damages
- If a Gubernatorial or Presidential Declaration of Emergency; Next Step – Applicants Briefing

Applicants Briefing – GO!

Local Assistance Centers / Disaster Recovery Centers



# Disaster Recovery; The Reimbursement Process

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## Types of Claims

### Individual Assistance

- Reimbursement assistance for people – your campus community members impacted by the disaster

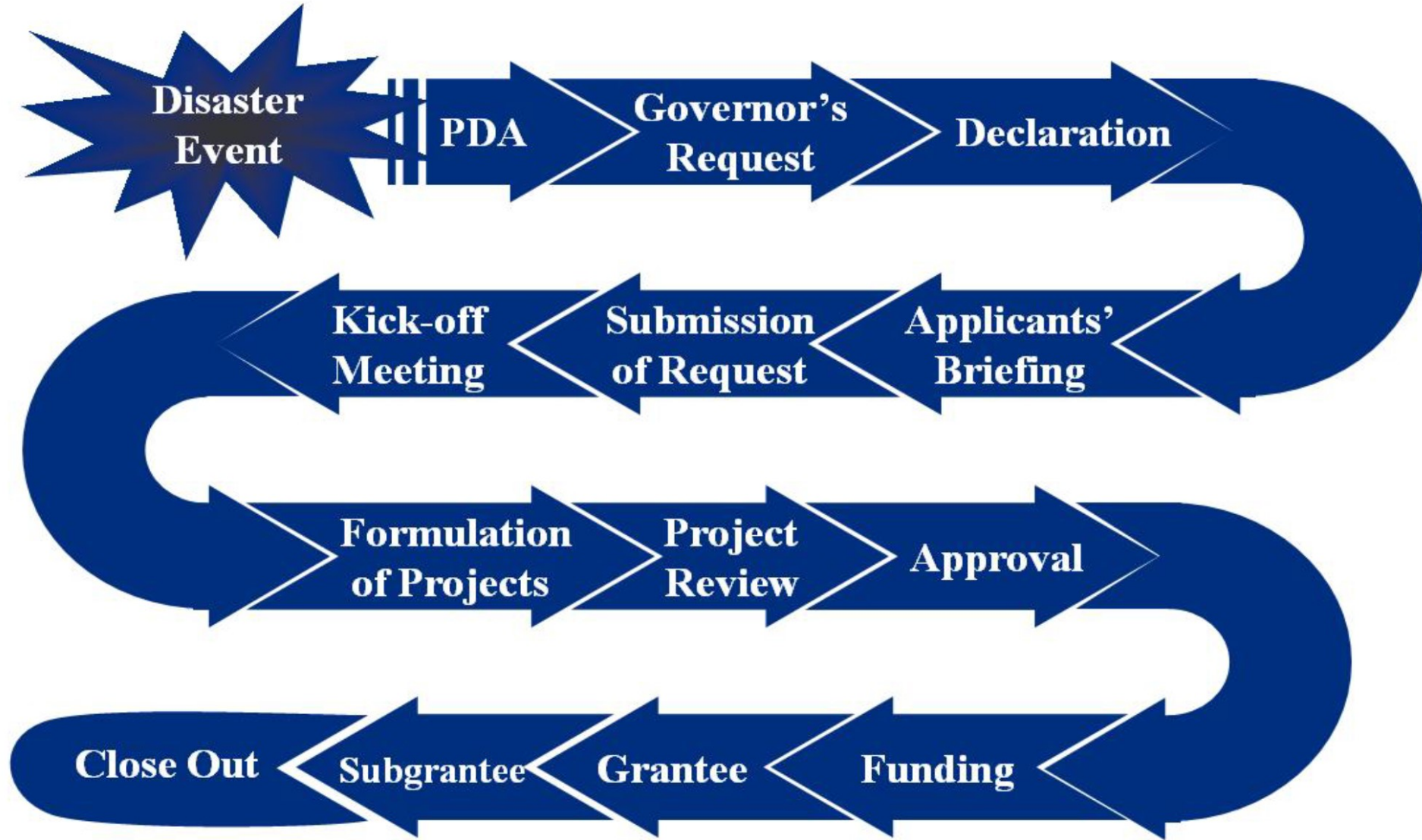
### Public Assistance

- Reimbursement assistance for damages to public property or facilities
- Eligible Costs for Reimbursement
  - Emergency Protective Measures
  - Debris Removal
  - Roads, bridges
  - Facilities

Take a deep breath ... you will get through the process!



# The Public Assistance Process



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# Hazard Mitigation





# Why conduct mitigation planning

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Hazard Mitigation: Any measures undertaken to reduce the risks posed by natural and/or human-caused hazards on a place and its population

## Mitigation planning

- Focuses on vulnerabilities and ways to reduce them
- Identifies real, actionable mitigation actions and projects
- Helps campus communities prepare for disasters by reducing personal risk and potential loss

Projects reduce physical vulnerabilities through structural and non-structural mitigation

- Structural measures include dams, flood levies, ocean wave barriers, earthquake-resistant construction, and evacuation shelters
- Non-structural measures include building codes, land-use planning laws and their enforcement, research and assessment, information resources, and public awareness programs



# Why conduct mitigation planning

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Enabling legislation: The Disaster Mitigation Act of 2000 (P.L. 106-390), as amended

- DMA2K amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988
- Implemented requirement for States, Local Governments, and other parties seeking mitigation funding to develop, implement and maintain a hazard mitigation plan in order to receive mitigation funding

Codified by FEMA in 44 CFR, Part 201

- Planning guidance is periodically revised

Disaster Resistant University guidance issued August 2003

# How mitigation planning works

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Mitigation Plans reduce a university's risk and exposure to disasters, which is different from an Emergency Operations Plan that guides a university's response to disasters

Plans generally include the following elements:

- University/Campus Profile, which includes geography, topography, land use, and demographics
- Hazard Identification, developed from historic accounts and known regional vulnerabilities
- Vulnerability assessment to determine how much of the campus (or its population) can be affected by a specific hazard
- Risk Assessment, calculating estimated impacts and potential losses of life and property
- Mitigation Strategy that identifies goals, objectives, actions, and projects
- Plan Maintenance to track progress of actions and projects

# Realized benefits of mitigation planning

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State and Federal review and approval for funding eligibility

- Certain pre- and post- disaster grants require an approved HMP
  - Pre-Disaster: PDM, FMA, SRL, RFC
  - Post-Disaster: HMGP, certain PA categories

Identification, prioritization, and tracking of mitigation activities

\$1 in mitigation saves \$4 in recovery

1955-2005, mitigation measures prevented 220 deaths and 4,700 injuries

For every eligible \$1 spent locally on FEMA-funded grant projects, the feds pay \$3-\$9

# Types of mitigation measures

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Projects that limit hazard impacts, such as levees, dams, or safe rooms

Projects that move assets out of harm's way, like acquisition or elevation of buildings, or burying utilities

Construction practices such as the hardening or retrofitting of University facilities

Projects that protect assets and populations through redundant measures including generators or solar power, potable water containers, and offsite data servers

And training and educational programs for University officials and students



# Examples of mitigation measures

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## Acquisition

- Most cost-effective mitigation measure
- Permanently removes vulnerable property from the floodplain
- The structure is demolished or relocated and the land is dedicated as open space in perpetuity
- Requires willing sellers and communities

# Examples of mitigation measures

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## Elevation

- Raising a structure above the Base Flood Elevation
- Building size, structural integrity, and type of foundation must be considered
- The structure is demolished or relocated and the land is dedicated as open space in perpetuity
- Different types of elevation techniques can be used depending on the structure



# Examples of mitigation measures

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## Drainage Improvements

- Creating detention/retention ponds and reservoirs
- Building floodwalls and diversions
- Constructing storm sewers and increasing culvert capacity
- *Maintenance is not an eligible project*

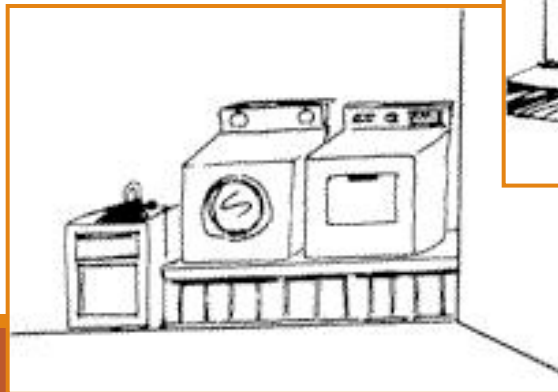
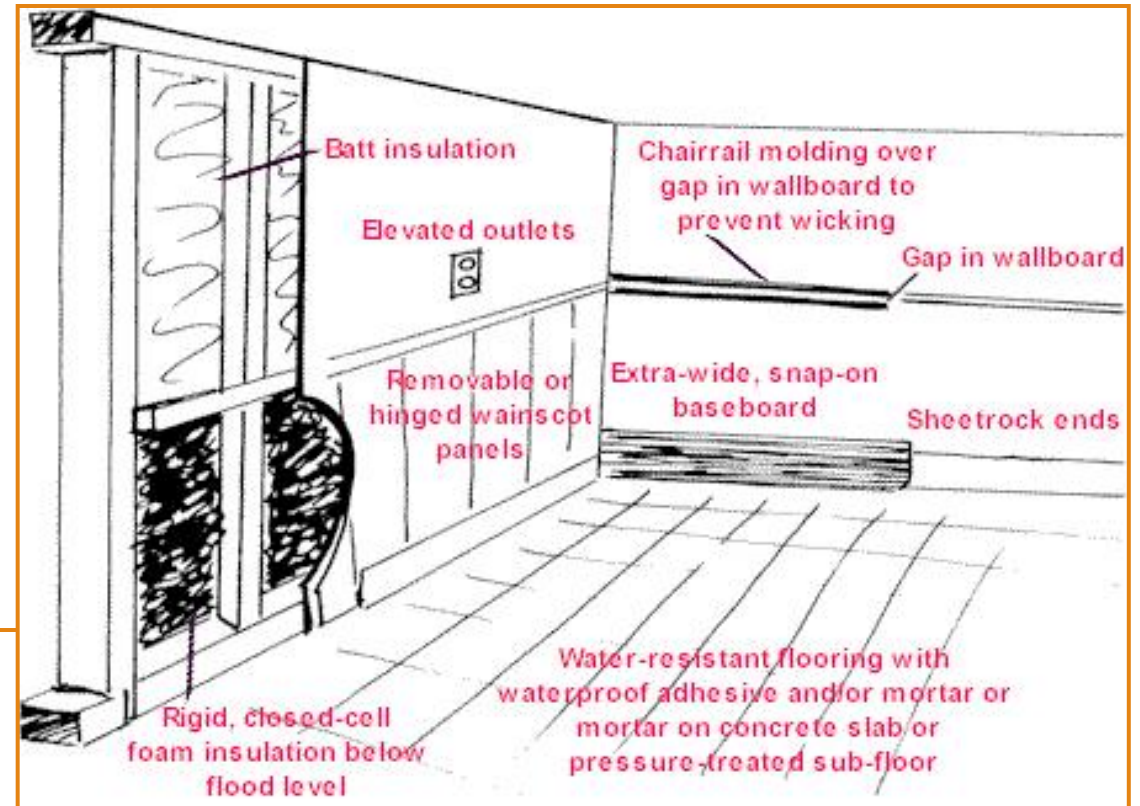




# Examples of mitigation measures

## Wet Floodproofing

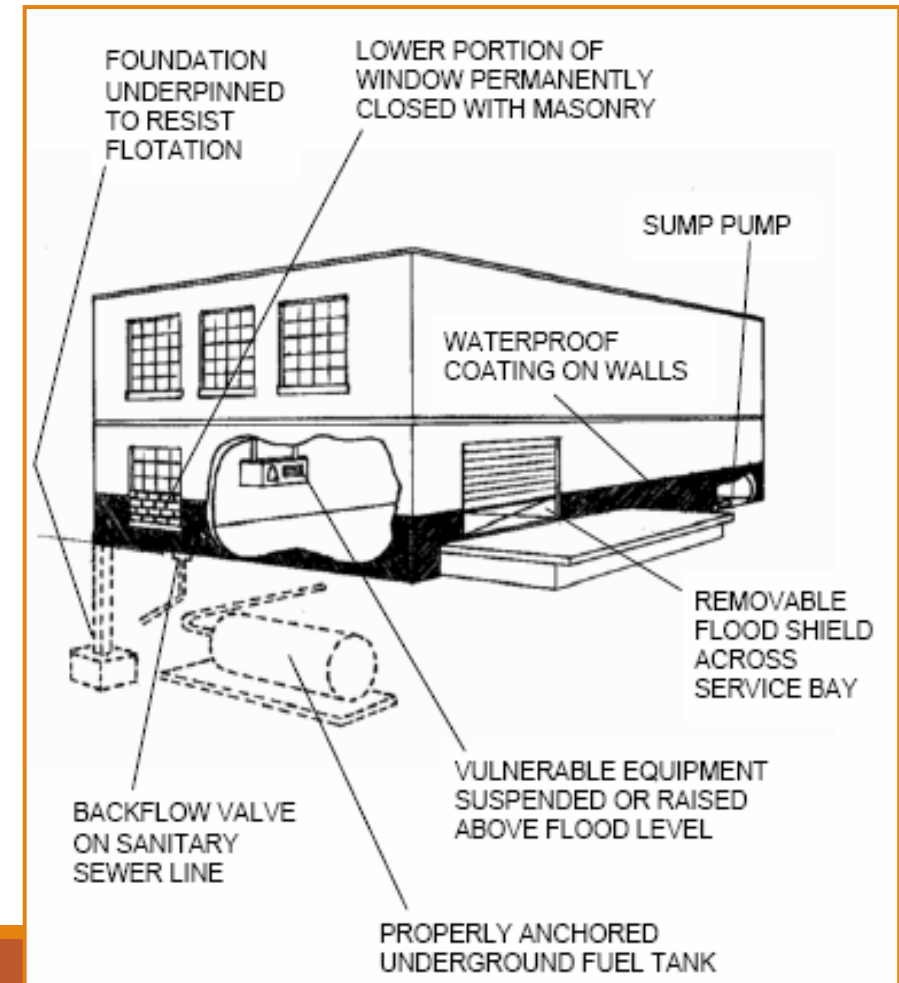
- Modifying uninhabited portions of the structure to allow floodwaters to enter without causing significant damage
- Materials must be water resistant
- Not practical for most slab-on-grade structures with living space near ground level
- Does not reduce damage from high velocity floods
- Only appropriate in limited situations



# Examples of mitigation measures

## Dry Floodproofing

- Making the structure watertight below the level that needs flood protection
- Requires sealing the walls and providing waterproof closures for any openings such as doors
- Effective for low duration flooding with depths under 3 feet
- Not effective for high velocity flooding

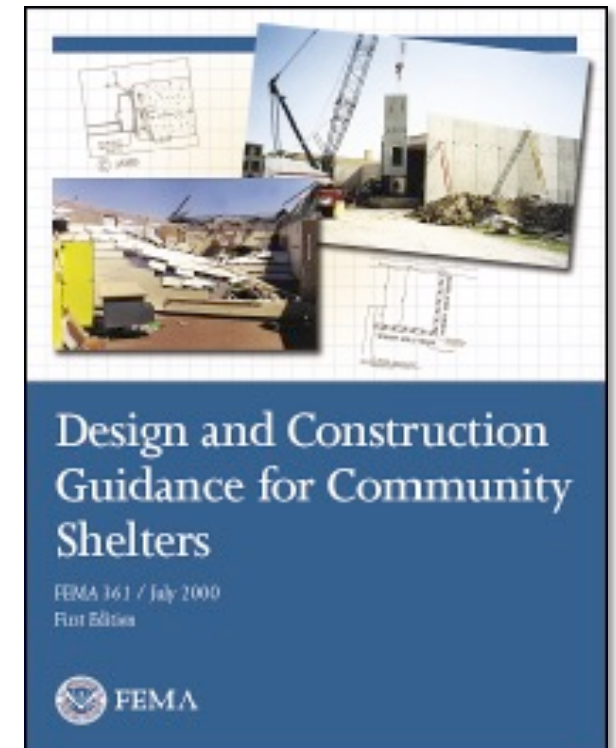


# Examples of mitigation measures

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## Community Shelters

- A structure built to withstand extreme winds and flying debris from tornadoes, hurricanes, and other storms that is accessible to the public
- Guidelines can be found in FEMA 361
- Effective for low duration flooding with depths under 3 feet
- The shelter cannot be used for anything else



# Funding Sources and Opportunities

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## Pre-Disaster Mitigation

- Pre-Disaster Mitigation (PDM) Grant – eligible for wildfire, earthquake, and other hazards
- Flood Mitigation Assistance (FMA)
- Severe Repetitive Loss (SRL)
- Repetitive Flood Claims (RFC)
- Emergency Management Performance Grant (EMPG)
- National Earthquake Hazards Reduction Program
- National Earthquake Technical Assistance Program

## Post-Disaster Mitigation

- Hazard Mitigation Grant Program (HMGP) – eligible for wildfire earthquake, and other hazards
- Certain Public Assistance (PA) categories in conjunction with repair of disaster-damaged public facilities
- Community Development Block Grant (CDBG)

# Questions

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# Thank You!

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