

HAZARD MITIGATION

Yahara Lake Level Advisory Group
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What is Mitigation?

- Mitigation is any action taken to eliminate or reduce the long-term risk to human life and property from natural and technological hazards



For every dollar spent on mitigation, \$4 is saved in future damages.

(Per the National Institute of Building Sciences -2005)



Flood Mitigation Examples



- Structural (dams, retention ponds, levees)
- Land-use management
- Acquisition/demolition
- Relocation
- Elevation
- Insurance

UNIFIED HAZARD MITIGATION ASSISTANCE PROGRAM

- Hazard Mitigation Grant Program
- Pre-Disaster Mitigation Program
- Flood Mitigation Assistance Program (flood hazard only)
- Repetitive Flood Claims Program (flood hazard only)
- Severe Repetitive Loss Program (flood hazard only)

Hazard Mitigation Grant Program

- Federal Disaster Declaration
- Available statewide
- All hazards
- 15% (20% with Enhanced Plan) of the total federal funds allocated for Public and Individual Assistance Programs for each disaster
- 75% federal; 12.5% State; 12.5% local match
- State, local, tribal and eligible PNP
- Plan Requirement

Flood Mitigation Assistance Program

- Annual allocation (approx. \$250,000)
- 75% federal; 25% local match
- State, local and tribal governments
- # of flood insurance policies and repetitive loss properties in the state
- Flood Mitigation only
- Mitigation to NFIP insured structures
- Plan Requirement

Pre-Disaster Mitigation Program

- Annual, national competition
- 75% federal/25% local
- State, local and tribal governments
- All hazards
- Projects capped at \$3 million federal share
- Funding varies from year to year
- Program reauthorized through 9/30/13
- Plan Requirement

Repetitive Flood Claims Program

- Mitigation to NFIP insured structures
- State, local and tribal governments
- At least one paid flood insurance claim
- Flood Mitigation Only
- 100% funding
- Inability to manage subgrant or lack of 25% match
- National Competition
- No hazard mitigation plan required

Severe Repetitive Loss Program

- Mitigation to NFIP insured structures
- Flood mitigation only
- 90% federal/ 10% local match
- State, tribal and local governments
- At least 4 NFIP claim payments over \$5,000 each, and cumulative exceeds \$20,000; or 2 payments exceeds the value of the structure
- No SRL properties in Dane County

ELIGIBLE PROJECTS

- Either on public or private property
- Acquisition/Demolition of structures
- Relocate structures
- Elevation of structures
- Retrofit Structures
- Community Shelters
- Residential Safe Rooms
- Development of standards
- Structural hazard control, i.e., debris basins, floodwalls
- Development/updates of All Hazards Mitigation Plans

REQUIREMENTS

- Participating in the NFIP and in good standing
- Cost-Beneficial
- Environmentally Sound
- Considered other alternatives
- Best alternative
- Solve the problem
- Plan requirement (except RFC)

Mitigation Program Priorities

- Acquisition and demolition
 - Substantially Damaged Properties
 - Severe Repetitive Loss and Repetitive Loss Properties
- Relocation
- Elevation
- Floodproofing
- Other



Repetitive Loss Properties

- Dane County – 5 properties
- Village of Black Earth – 1 property
- City of Madison – 1 property
- Village of Mazomanie – 1 property
- City of Monona – 2 properties
- Village of Oregon – 3 properties all mitigated

Acquisition and Demolition

- Voluntary Program
- Based on FMV appraisal
- Deed Restrictions
- Open space use only
- Costs include:
Acquisition, appraisals,
title searches, title
insurance, closing costs,
legal costs, surveys,
demolition and site
restoration.



Relocation

- Voluntary
- FMV for land
- Deed Restrictions
- Open Space Use only
- Costs include:
 - Cost to purchase the land
 - Appraisal, Title search/insurance, closing, legal, survey
 - Costs to move the structure to new site outside of SFHA and site preparations
 - Site restoration at acquisition site

Floodproofing

- Voluntary
- Acknowledgement:
 - Maintain flood insurance
 - Register flood insurance requirement with deed
- State and local NFIP standards
 - Fill in basement
 - BFE plus 2 feet
 - Dryland access



Floodproofing Eligible Costs

- Design fees
- Permits and inspection
- Construction costs
- Any code requirements not associated with the floodproofing is the responsibility of the property owner along with any other improvements

Cost Effective

- Biggest Hurdle!
- Benefit-Cost Analysis
 - Direct benefits must outweigh the cost
 - FEMA BCA software
 - Based on total project cost
 - Credible documentation
- Damages to buildings and contents
- Displacement costs
- Emergency Response Costs
- Loss of function for infrastructure or public building
- Injuries/deaths

Rule of Thumb

- For acquisition/relocation/elevation:
 - If there is no flooding on the first floor, or if the FFE is above the BFE, the project most likely will not be cost-effective
 - Finished basements will increase benefits

Structural Solutions

- Two documented events with known frequency; or
- Three documented events with unknown frequency
- Documented damages and costs of those that will benefit from the project

The Reality – Yahara Watershed

- Acquisition will be difficult
 - BCA requirement
 - Citizen buy-in
- Elevation
 - BCA requirements – possibly?
 - More citizen buy-in
- Structural Solutions
 - BCA will be difficult
 - Permanent/long-term solution
 - Citizen buy-in may be high
 - Environmental Issues and Concerns

Other Funding Opportunities

- Community Development Block Grants
 - Entitlement Community
- DNR Municipal Flood Control Program
- USDA/Natural Conservation Conservation Service Programs

Questions?

