

Have a Mitigation Plan? Then Time for Mitigation Projects!



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STORMWATER MANAGEMENT COMMISSION

Christine M. Gaynes, CFM

IAFSM 2009 Annual Conference – March 12, 2009 – Champaign, Illinois

Have a Mitigation Plan? Then Time for Mitigation Projects!

- ✓ What's Important to Have in Your Plan
- ✓ To Inform You About Grant Opportunities
- ✓ Why Pursue a Mitigation Grant – What's the Benefit to the Community
- ✓ How to Pursue a Mitigation Grant
- ✓ Important Considerations - Things to Watch Out For

Have a Mitigation Plan? Then Time for Mitigation Projects!

Natural Hazard

Flood – Earthquake – Severe Summer Storms –
Severe Winter Storms – Tornado – Wind – Drought –
Dam Failure

Mitigation

Hazard mitigation is defined as any sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event.”

Source: Federal Emergency Management Agency

Have a Mitigation Plan?

Have a Mitigation Plan? Then Time for Mitigation Projects!

Yes!!

- ✓ You've followed the FEMA planning steps.
- ✓ You know your hazards.
- ✓ You've identified what mitigation you already do.
- ✓ You've identified what mitigation you should do.
- ✓ Many recommendations and an action plan.
- ✓ The plan is adopted and is being maintained.

Have a Mitigation Plan?

No, Not Yet...

- ✓ Follow the recommended FEMA planning steps.
- ✓ Determine your hazards.
- ✓ Identify what mitigation you already do.
- ✓ Identify what mitigation you should do.
- ✓ Develop recommendations while being mindful of mitigation projects.
- ✓ Adopt and maintain the plan.

Have a Mitigation Plan?

Mitigation Planning

- Follow the recommended planning process.
- Review the FEMA “How To” planning guides.
- Review the “Crosswalk.”
- Think about CRS.

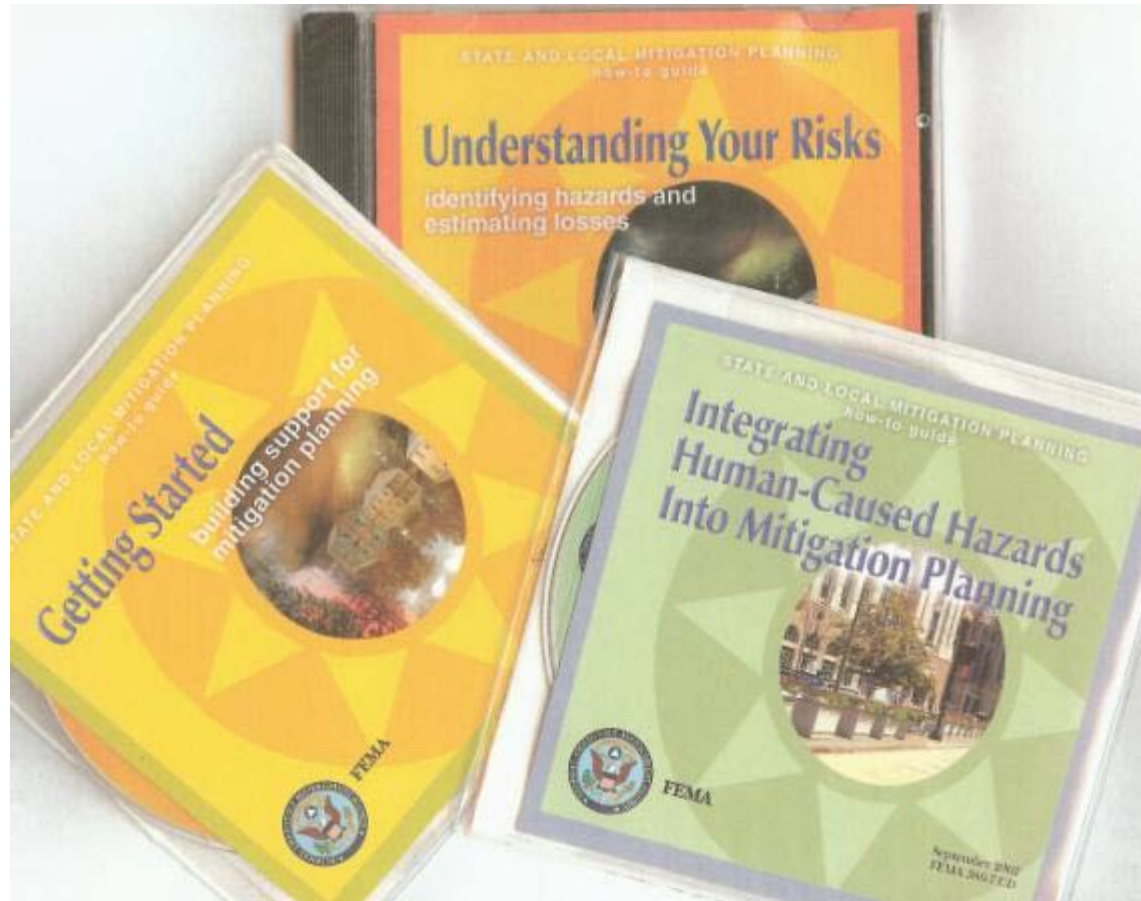
Have a Mitigation Plan?

Ten Step Planning Process

1. Organize
2. Involve the Public
3. Coordinate
4. Assess the hazard
5. Evaluate the problem
6. Set goals
7. Mitigation strategies
8. Draft action plan
9. Adopt the plan
10. Implement, evaluate



Review the FEMA “How To” Guides



Review the “Crosswalk”

LOCAL HAZARD MITIGATION PLAN REVIEW CROSSWALK

Jurisdiction:

LOCAL MITIGATION PLAN REVIEW SUMMARY

The plan cannot be approved if the plan has not been formally adopted.

Each requirement includes separate elements. All elements of the requirement must be rated “Satisfactory” in order for the requirement to be fulfilled and receive a score of “Satisfactory.” Elements of each requirement are listed on the following pages of the Plan Review Crosswalk. A “Needs Improvement” score on elements shaded in gray (recommended but not required) will not preclude the plan from passing. Reviewer’s comments must be provided for requirements receiving a “Needs Improvement” score.

SCORING SYSTEM

Please check one of the following for each requirement.

N – Needs Improvement: The plan does not meet the minimum for the requirement.

Reviewer’s comments must be provided.

S – Satisfactory: The plan meets the minimum for the requirement. Reviewer’s comments are encouraged, but not required.

Prerequisite(s) (Check Applicable Box)

Adoption by the Local Governing Body:
§201.6(c)(3) and §78.5(f)

OR

Multi-Jurisdictional Plan Adoption: §201.6(c)(5)
and and §78.5(f) AND

Multi-Jurisdictional Planning Participation:
§201.6(a)(3) and and §78.5(a)

Planning Process

Continuation of the Planning Process

STAFFORD		FMA	
NOT MET	MET	NOT MET	MET
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Mitigation Strategy

Local Hazard Mitigation Goals: §201.6(c)
§78.5(c)

Identification and Analysis of Mitigation A:
§201.6(c)(3)(i) and §78.5(d)

Implementation of Mitigation Actions:
§201.6(c)(3)(ii) and §78.5(d) and (e)

Multi-Jurisdictional Mitigation Actions:
§201.6(c)(3)(iv) and FEMA 200

Plan Maintenance Process

Monitoring, Evaluating, and Updating the
§201.6(c)(4)(i) and §78.5(e)

Incorporation into Existing Planning Mech
§201.6(c)(4)(ii)

Continued Public Involvement: §201.6(c)

Additional State Requirements*

Insert State Requirement

Insert State Requirement

Insert State Requirement

Mitigation Planning

- Follow the recommended planning process.
- Review the FEMA “How To” planning guides.
- Review the “Crosswalk.”
- Think about CRS.



Have a Mitigation Plan?



Who Has a Mitigation Plan?

- Local jurisdictions with a DMA2k approved plan.. (16% of State)
- Local jurisdictions that are developing DMA2k plans
- Local jurisdiction ineligible for PDM planning funds because they don't participate in the NFIP.



Time for Mitigation Projects!

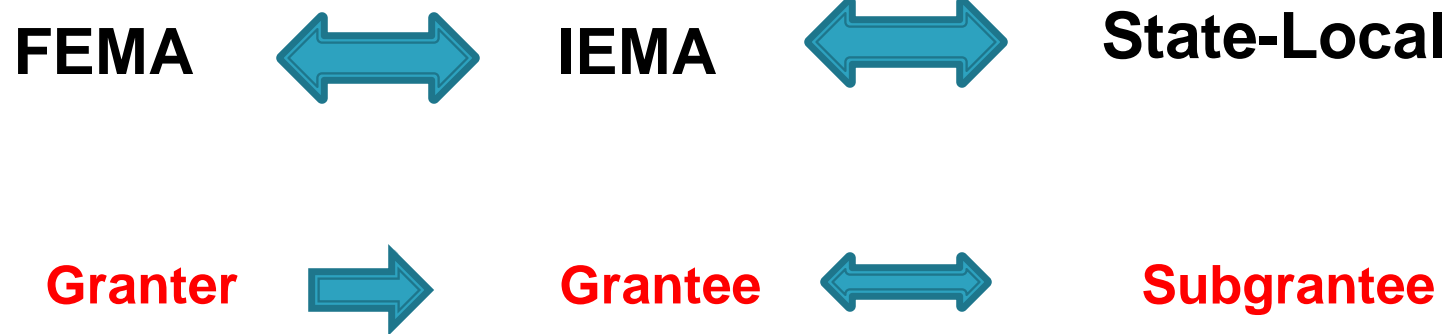
- Mitigation Grants
 - Grant Fund Sources
 - Cost-Share & Other Requirements
 - Benefit-Cost Analysis
 - Grant Applications (eGrants)
 - Selecting a Project to Implement
 - Lake County SMC Projects
- 

In the Mitigation Plan We've Said....



“...if we have the resources.”

Mitigation Grants



Time for Mitigation Projects!

Grant Programs:


- ▶ Pre-Disaster Mitigation (PDM)
- ▶ Hazard Mitigation Grant Program (HMGP)
- ▶ Flood Mitigation Assistance (FMA)
- ▶ Severe Repetitive Loss (SRL)



Pre-Disaster Mitigation Program PDM

- Nationwide competitive annual grant
- Projects compete based on benefit/cost ratio
- Application period opens in the fall
- Grant announcements in the spring
- All natural hazards

Hazard Mitigation Grant Program HMGP

- Funding to State after disaster declaration
 - Project selected by IEMA
 - Can be used in locations other than the disaster-declared counties
 - Application at anytime
 - All natural hazards
- 

Flood Mitigation Assistance FMA

- For flood mitigation
- Annual funds provided to IEMA
- Relatively small program

Severe Repetitive Loss SRL

- For flood mitigation
- For individual *insured* structures
- A number of unique requirements

Mitigation Grants

Additional Planning Efforts

- Repetitive Loss Area Investigation
- Critical Facility Evaluations
- Mitigation Alternatives

Projects

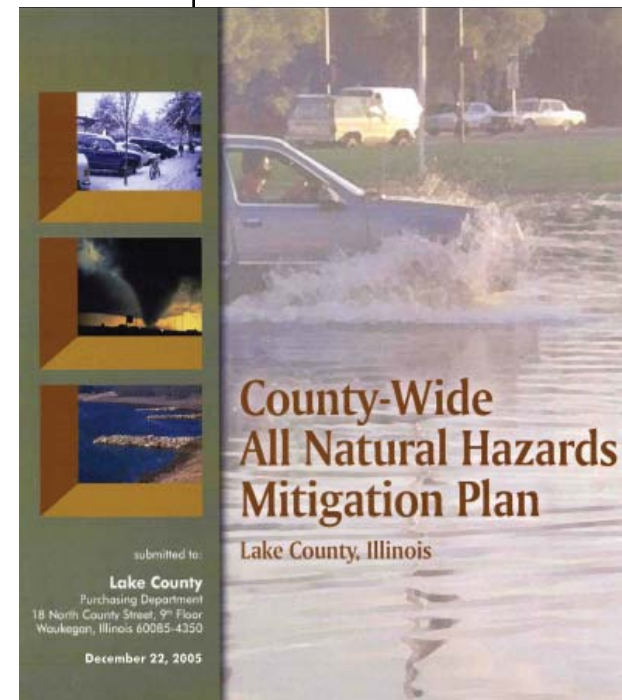
- Acquisitions
- Elevations & Floodproofing
- Drainage Improvements

Natural Hazards Mitigation Plan

Kane County, Illinois



Committee



Grant Application Requirements

- Additional planning effort or mitigation project must be included in your mitigation plan*
- Cost-Share
- Benefit-Cost Analysis
- Scope of Work
- eGrant Application

Cost share

75% FEMA



25% state
or local

*“\$3 of our [IEMA/FEMA] dollars
to \$1 of your dollars”*

Cost share

75% FEMA

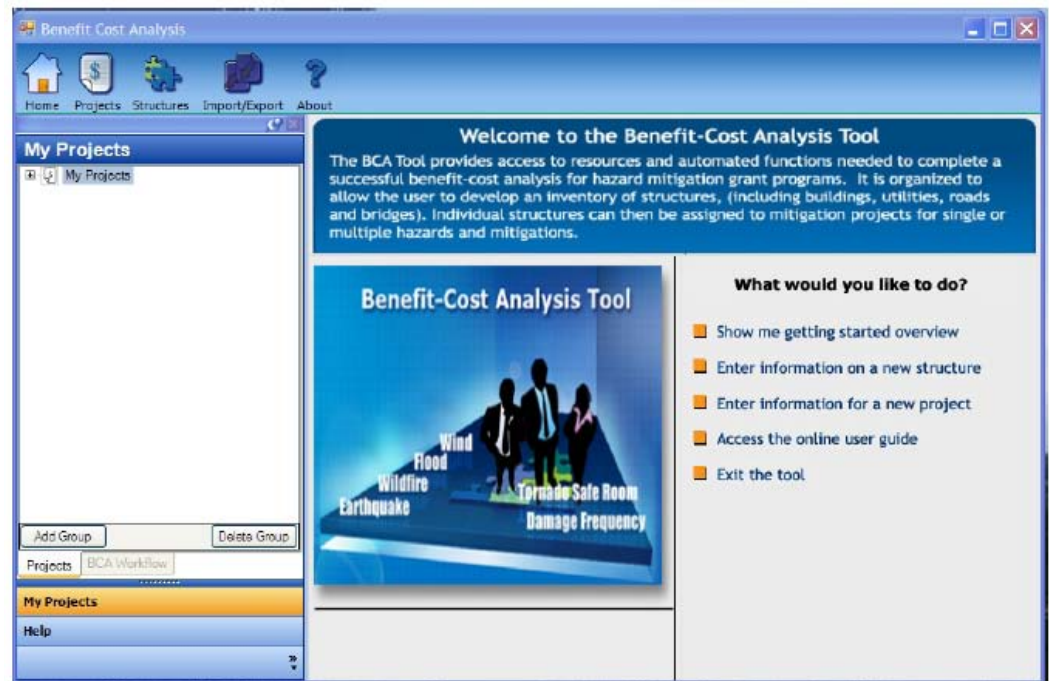


25% state
or local

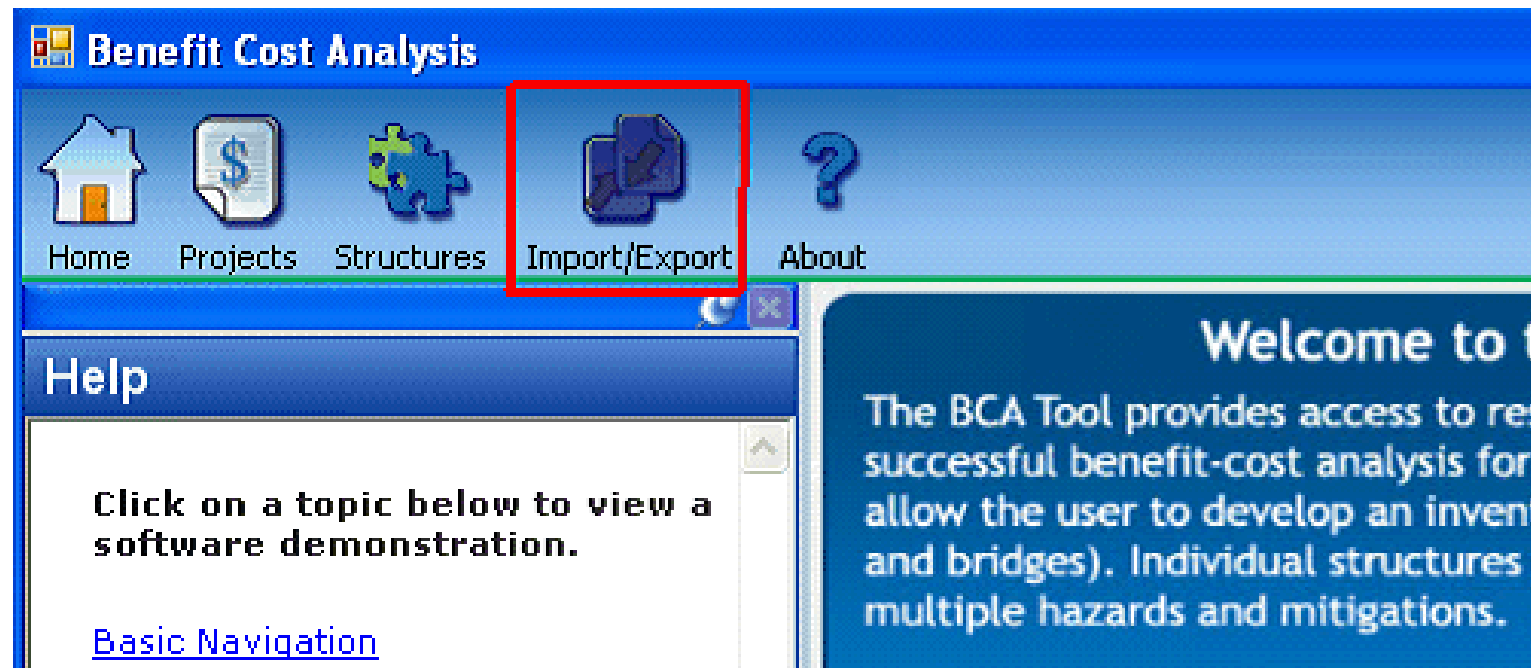
- ▶ Of 25% state/local share:
 - 12.5% in-kind services
 - 12.5% cash match
- ▶ State matching sources: IDNR and others

Benefit–Cost Analysis

- Benefit–Cost Ratio Must Be 1.0 or Greater
- ALL Project Costs Must Be Included
- FEMA Software



Benefit–Cost Analysis Tool



PROJECT: Maple Avenue Residences, STRUCTURE: 2415 House
MITIGATION TYPE: Flood

FULL FLOOD - QUESTIONNAIRE

What is the source of your flood data? _____

- ☐ Flood Insurance Study (FIS) ☒ Both 
- ☐ Hydrology & Hydraulics (H&H) study ☐ I have no flood data

Is the project located in a Special Flood Hazard Area (SFHA) FEMA-delineated flood plain?

- ☒ Yes ☐ No ☐ Unknown

Is the source of flooding a river? _____

- ☒ Yes ☐ No

Does the combined data provided by your FIS and HH study delineate the flood elevations and discharges for four different frequencies for the project area?

- ☒ Yes ☐ No

Do you have the First Floor Elevation (FFE)? _____

- ☒ Yes ☐ No

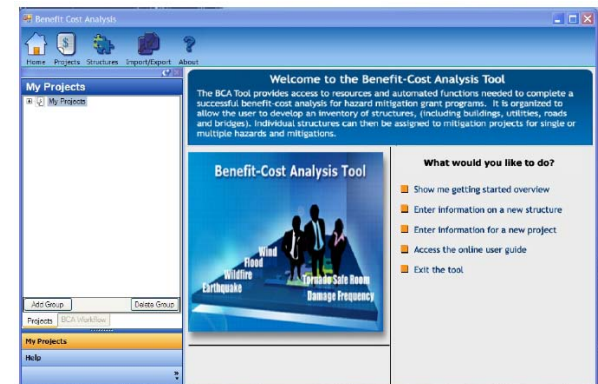
BCA Data

- FIS Data
- First Floor Elevation
- Replacement Costs
- Market Values

Property		Structure										100-year
Address	Lot Number	Type	Year of Trailer	Age (years)	Condition (Good, Average, Fair, Poor)	M&S Depreciation (%)	Length	Width	Sq. Feet	Ground (LAG)	First Floor Elevation	BFE 100-year
			Page 1		Pg. 1		Page 2	Page 2		Survey	Survey	Above
955 East State Street	A	Trailer	1965	44	Good	58	48	20	960.0	829.5	832	836.5
955 East State Street	B	Trailer	1970	39	Good	58	60	14	840.0	829.5	832.4	836.5
955 East State Street	D	Trailer	1993	16	Good	29	70	14	980.0	829.9	833.5	836.5
955 East State Street	E	Trailer	1984	25	Good	45	66	14	924.0	829.8	833.8	836.5
955 East State Street	F	Trailer	1990	19	Good	35	70	14	980.0	830	833.3	836.5
955 East State Street	G	Trailer	1968	41	Fair	61	56	12	672.0	829.6	833	836.5
955 East State Street	H	Trailer	1967	42	Fair	61	60	12	720.0	829.5	833.2	836.5
955 East State Street	I	Trailer	1966	43	Fair	61	60	12	720.0	829.4	833	836.5
955 East State Street	J	Trailer	1988	21	Average	45	66	14	924.0	829.9	832.8	836.5
955 East State Street	K	Trailer	1980	29	Average	58	50	10	500.0	829.8	832.9	836.5
955 East State Street	M	Trailer	1992	17	Average	40	68	14	952.0	829.8	832.7	836.5
955 East State Street	N	Trailer	1991	18	Average	40	70	14	980.0	829.6	833.2	836.5

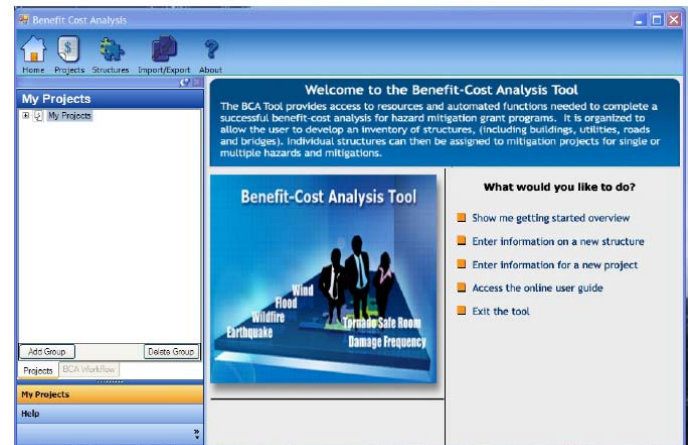
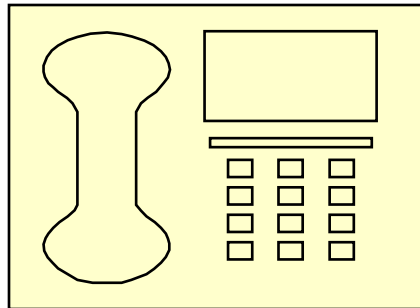
To Get Started on the Benefit–Cost Analysis

- Build a spreadsheet
- Test properties on the Benefit–Cost Analysis Tool
- Old 2 Foot Rule



Benefit–Cost Analysis

- Download the FEMA Benefit–Cost Analysis Tool (FEMA website)
- E–Mail or call the HelpDesk!



Scope of Work

1. Overview
2. Community Profile
3. Hazard Description
4. Problem Assessment
5. Need for Mitigation
6. Mitigation Goals
7. Mitigation Alternatives
8. Recommended Mitigation Approach
9. Benefit-Cost Analysis
10. Project Funding
11. Project Schedule
12. Project Implementation

eGrants

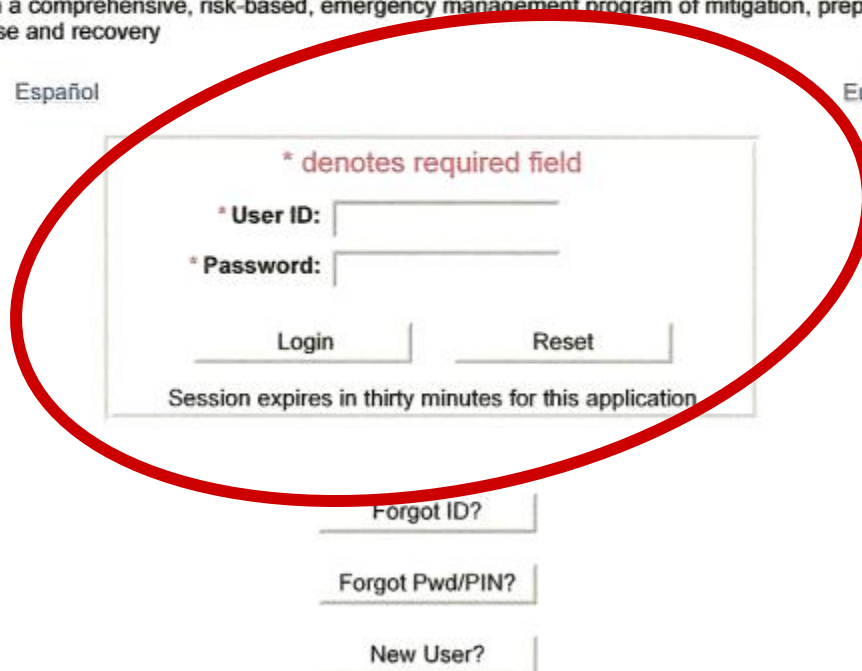
- Need a Login – Contact IEMA
- Review a Blank Application
- Attachments & More Attachments
- Coordinate with IEMA

OUR MISSION

To reduce loss of life and property and protect our nation's critical infrastructure from all types of hazards through a comprehensive, risk-based, emergency management program of mitigation, preparedness, response and recovery

[Español](#)

[English](#)



* denotes required field

* User ID:

* Password:

Session expires in thirty minutes for this application

View Subgrant Application Sections

Application Title: Kane County, Illinois, Repetitive Loss Mitigation Project

Subgrant Applicant: Kane County Environmental Management

FEMA Application Number: PDMC-PJ-05-IL-2007-002

State Application Number: IL-2007-004

Application Year: 2007

Grant Type: Project Application

Address: 719 Batavia Avenue Building A, Geneva, IL 60134-0000

To view an application section, click on the appropriate *View* link below. To print one or more sections, select the checkbox and then click on the *Print* button. When you are finished, click the *Close Window* button below.

Print

Select	Application Section	Action
<input type="checkbox"/>	Applicant Information	View
<input type="checkbox"/>	Contact Information	View
<input type="checkbox"/>	Community Information	View
<input type="checkbox"/>	Mitigation Plan Information	View
<input type="checkbox"/>	Mitigation Activity Information	View
<input type="checkbox"/>	Hazard Information	View
<input type="checkbox"/>	Scope of Work	View
<input type="checkbox"/>	Properties	View
<input type="checkbox"/>	Decision Making Process	View
<input type="checkbox"/>	Cost Estimate	View
<input type="checkbox"/>	Match Sources	View

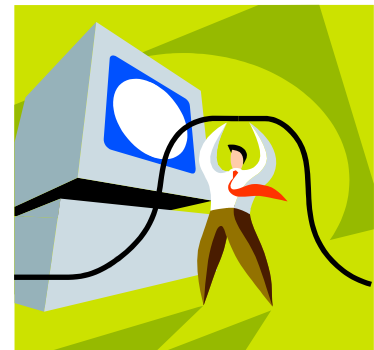
► Benefits of eGrants

- Online tool allows ongoing for updates
- Paperless
- Project team can access application
- Maneuverable



► Challenges of eGrants

- Familiarization time
- Lots of information required
- Lots of attachments



Important Steps for Mitigation Grant Applications:

- ▶ Talk to IEMA
- ▶ Print blank applications and review
- ▶ Benefit–cost analysis
- ▶ Build a scope of work
- ▶ Build the application



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submitted to:

Lake County

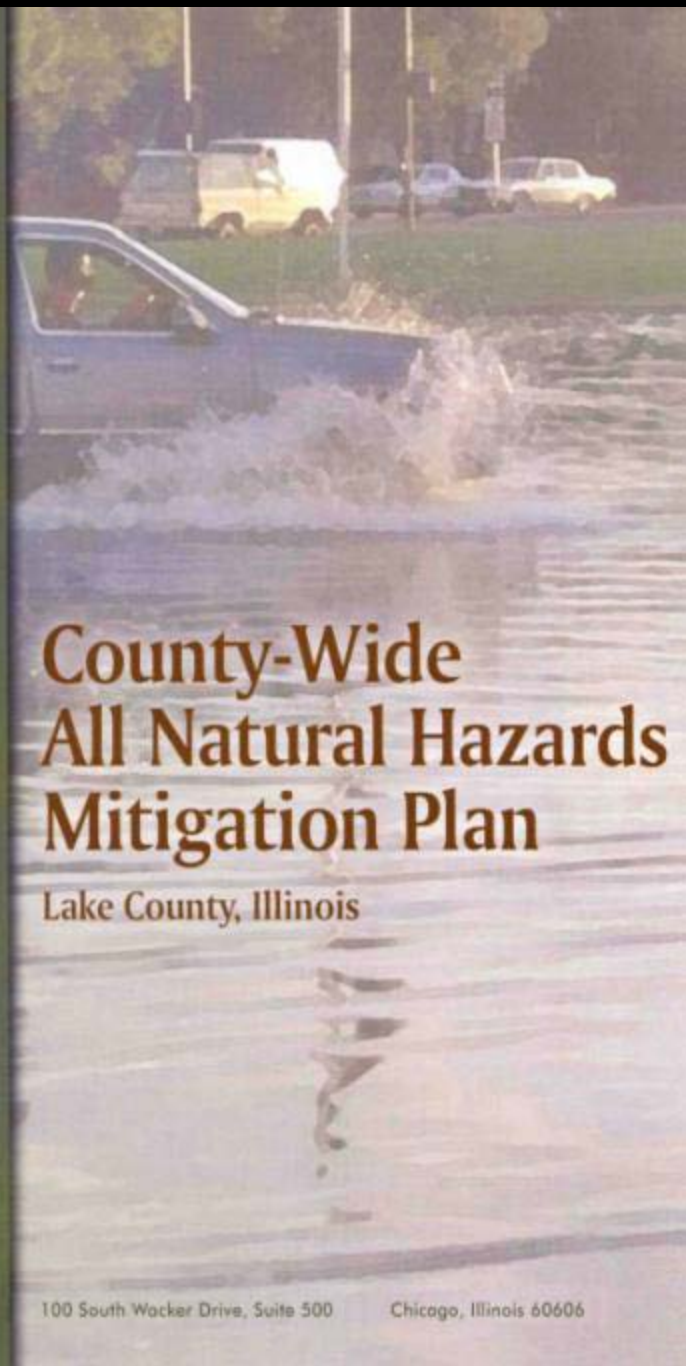
Purchasing Department
18 North County Street, 9th Floor
Waukegan, Illinois 60085-4350

Adopted by

Lake County on 8/1/06

submitted by:

URS



County-Wide All Natural Hazards Mitigation Plan

Lake County, Illinois

100 South Wacker Drive, Suite 500

Chicago, Illinois 60606

Grant Programs:

- ▶ Pre-Disaster Mitigation (PDM)
- ▶ Hazard Mitigation Grant Program (HMGP)
- ▶ Severe Repetitive Loss (SRL)
- ▶ Flood Mitigation Assistance (FMA)



Hazard Mitigation Assistance Program Guidance

**Pre-Disaster Mitigation, Flood Mitigation Assistance,
Repetitive Flood Claims, Severe Repetitive Loss**

June 19, 2008



FEMA

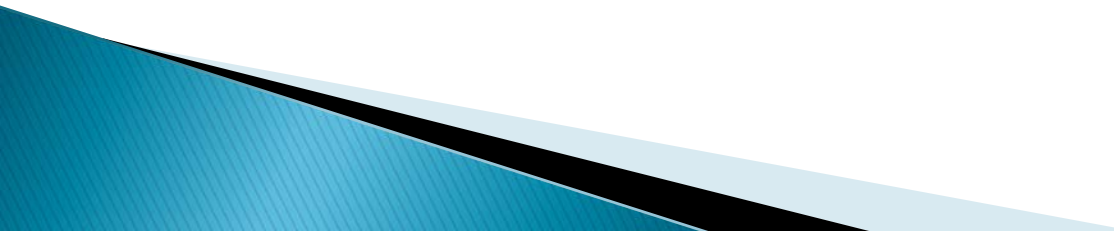
Pre-Disaster Mitigation Program PDM

- Purpose is to provide mitigation funds *prior* to a disaster
- Acquisition and elevation are eligible activities
- Nationally competitive program
- Requires State level approval prior to FEMA
- Project size is limited to \$3 million
- 75%–25% cost-share

Hazard Mitigation Grant Program HMGP

- Available due to a Federally Declared Disaster
- Funds available based on amount of disaster aid received by State
- Acquisition and elevation are eligible activities
- Non-competitive program
- Requires State level approval prior to FEMA
- 75%–25% cost-share

Severe Repetitive Loss SRL

- For *insured* structures
 - To reduce risk to the NFIP
 - SRL properties identified by FEMA
 - Up to 90%–10% cost-share
- 

Flood Mitigation Project Eligibility

FEMA Requirements:

- Approved & adopted mitigation plan
- Community in good standing with the NFIP
- Property located in the floodplain or floodway
- Public notice

Flood Mitigation Project Eligibility

Lake County SMC Requirements:

- Flood-Prone Property Survey
 - Flooding History
 - Previous Flood Damage
 - Insurance Claims
- Replacement Cost Questionnaire
 - Structures and Interior Features
 - For B/C Analysis
- All Voluntary Program

Lake County SMC Flood Mitigation Projects

	2008 PDM	2008 HMGP	2008 SRL	2009 PDM
Acquisitions	11	21		6
Elevations	0	4	1	5
Total Properties	11	25	1	11
Participating Municipalities	5	6	1	4

FEMA Grant Application Summary 2008-2009

2008 PDM* Grant		2008 HMGP**	2008 SRL Grant***	2009 PDM* Grant
Federal Contribution	\$1.6 m	\$4.1 m	\$58,500	\$1.8 m
Local Contribution	\$0.5 m	\$1.4 m	\$ 6,500	\$0.6 m
Total Project Cost	\$2.1 m	\$5.5 m	\$65,000	\$2.4 m

* PDM – Pre-Disaster Mitigation Grant

** HMGP – Hazard Mitigation Grant Program

*** SRL – Severe Repetitive Loss Grant

Project Challenges

- Loss of Tax Revenue
- Appraised vs. Assessed Value
- Time for Project Implementation
- Environmental Inspection of Property
- Open Space \neq Dumping Ground
- Long-Term Maintenance



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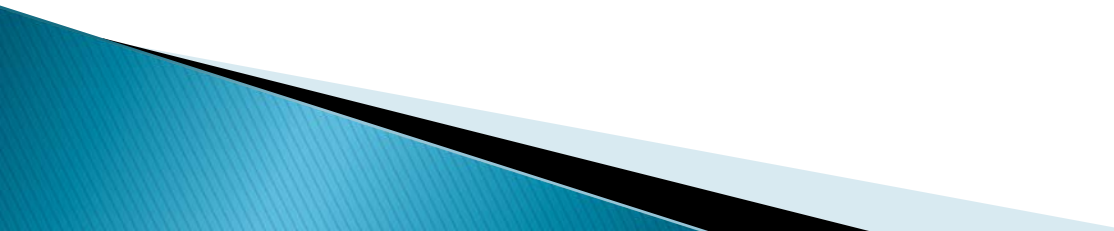
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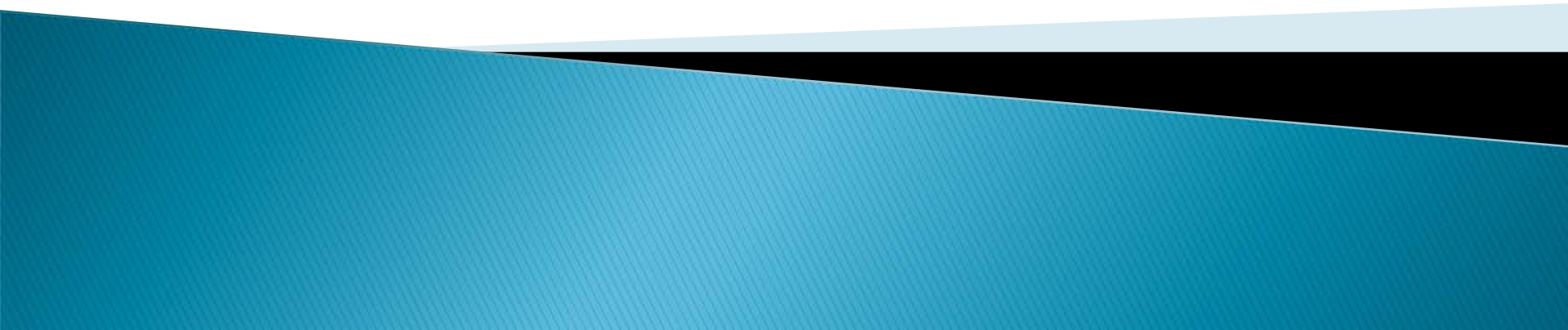


Finding Cost-Share Solutions

- Reduced Budgets
 - Be Resourceful
 - In-Kind Services
- 



Summary

- ✓ Grant Opportunities
 - ✓ [How to Pursue a Mitigation Grant]
 - ✓ Selecting Projects
 - ✓ Things to Consider
 - ✓ Coordinate with IEMA
- 



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