

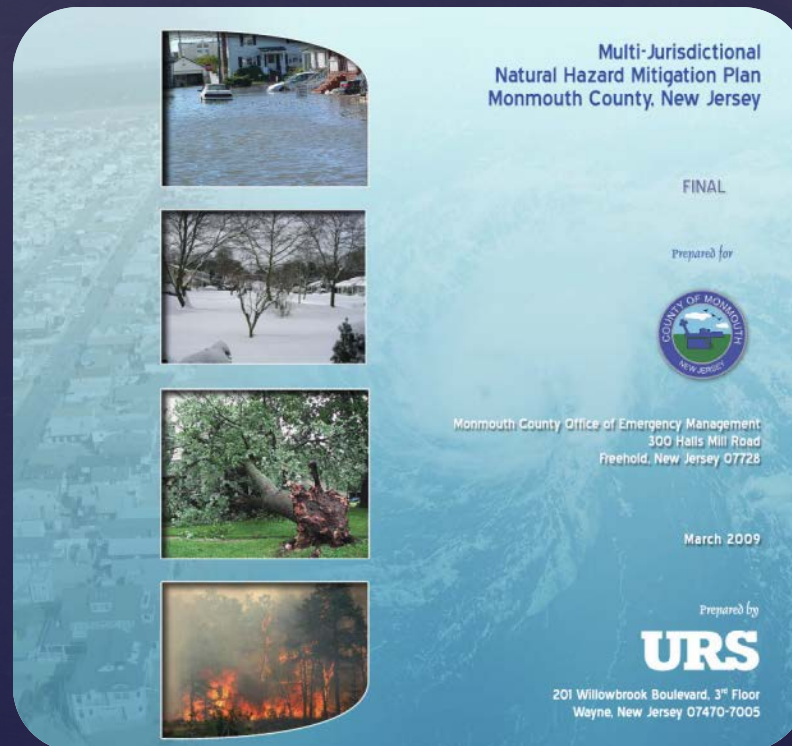


Monmouth County Multi-Jurisdictional Hazard Mitigation Plan Update

Core Planning Group Meeting #5 *February 27, 2014*

2:00 pm / 7:00 pm

Monmouth County Communications Center, Neptune





Today's Agenda

Welcome and Opening Remarks

Mitigation Strategy Overview and Goals for Today's Session

Mitigation Strategy: Linking Problems With Solutions

Priority Risk Indices, Hazard Rankings, and Key Risk Findings

Documenting Your Projects Using Worksheet #7

Reminder About Outreach

Questions and Closing Remarks

Adjourn



Today's Mitigation Strategy Working Session

We are here to:

- Have interactive discussions
- Build on FEMA's Mitigation Strategy Workshop (April 2013)
- Help you
 - understand latest regulatory requirements
 - develop an updated mitigation strategy



Today's Mitigation Strategy Working Session

Goal:

- For each community
- to develop a robust mitigation strategy
- that addresses its highest hazards and key risks
- Only then will we be able to achieve safer, more disaster-resistant and resilient communities



What is a mitigation strategy?

The mitigation strategy is:

- Your community's hazard mitigation actions/projects
- The heart of the mitigation plan
- A roadmap for reducing the risk to your community from natural hazards



Who prepares the mitigation strategy?

Your mitigation strategy is developed by:

- Your community's Jurisdictional Assessment Team
(the people you listed on Worksheet # 1)
- With input from the public and key stakeholders



Why update the mitigation strategy?

Updates are done to:

- Keep the plan current
 - Deleting completed projects
 - Adding new projects
 - Improving upon the overall approach to risk reduction
 - based on new information on potential risks
 - to bridge gaps in the prior approach



...Wait...we had gaps in the prior approach?

Yes. Some of the solutions ultimately selected by many communities didn't align well with the problems that were discussed throughout the plan.

- Coastal community subject to flooding, surge, high winds, erosion with actions focused on driving in winter weather conditions
- Communities with high wildfire risk and no corresponding actions



Mitigation Strategy: Linking Problems With Solutions

Today's workshop is designed to help you make better connections between **Problems** (Key Risk Findings) and **Solutions** (the projects that make up your Mitigation Strategies).

Keep In Mind: At the April 2013 Workshops, FEMA suggested focusing on fewer but better, more developed mitigation actions.



Mitigation Strategy: Linking Problems With Solutions

Problems:

- Highest Hazards
- Key Risk Findings

Solutions:

- Actions and projects that make up your Mitigation Strategy



Mitigation Strategy: Linking Problems With Solutions

Mitigation Strategy – Four Basic Steps

1. Identify Highest Hazards
2. Understand Key Risks
3. Develop Projects to Solve the Problems *
4. Complete One Worksheet # 7 for Each Project
 - *Assess the Risk*
 - *Describe the Action*
 - *Evaluate the Action (benefits, costs, etc.)*
 - *Implementation Information (priority, responsible party, etc.)*
 - *Reporting on Progress (if carryover from last version of the plan)*

* Developed by each JAT, with input from the public and other stakeholders.



Mitigation Strategy: Linking Problems With Solutions

Step 1 – Problems – Identify Highest Hazards

- County-wide, there are 16 hazards included in the plan
 - The subset of applicable hazards and the degree of risk posed by applicable hazards varies from one community to the next
- Therefore: we need a way to rank the hazards
- Hazard Rankings through Priority Risk Indices (PRIs)



Mitigation Strategy: Linking Problems With Solutions

Step 1 – Problems – Identify Highest Hazards

- PRI = Sum of the weighted scores of five factors

PRI = Probability(30%) + Impact(30%) + Extent(20%) + WarningTime(10%) + Duration(10%)

- Hazard Rankings based on PRIs
 - PRI 0.0-2.3 = Low
 - PRI 2.4-2.9 = Medium
 - PRI 3.0-4.0 = High



Mitigation Strategy: Linking Problems With Solutions

Table 3a.22 Summary of PRI Results for Loch Arbour, Village of												
Hazard	Category/Degree of Risk											
	Probability	PROBABILITY INDEX VALUE	Impact	IMPACT INDEX VALUE	Spatial Extent	SPATIAL INDEX VALUE	Warning Time	WARNING INDEX VALUE	Duration	DURATION INDEX VALUE	PRI Score	Hazard Ranking
Atmospheric Hazards												
Extreme Temperatures	Highly Likely	4	Minor	1	Large	4	More than 24 hours	1	Less than one week	3	2.7	M
Extreme Wind	Highly Likely	4	Limited	2	Large	4	More than 24 hours	1	Less than 24 hours	2	2.9	M
Hurricane & Tropical Storm	Likely	3	Catastrophic	4	Large	4	More than 24 hours	1	Less than one week	3	3.3	H
Lightning	Highly Likely	4	Minor	1	Negligible	1	Less than 6 hours	4	Less than 6 hours	1	2.2	L
Nor'easter	Highly Likely	4	Limited	2	Large	4	More than 24 hours	1	Less than one week	3	3.0	H
Tornado	Likely	3	Catastrophic	4	Negligible	1	Less than 6 hours	4	Less than 6 hours	1	2.8	M
Winter Storm	Highly Likely	4	Minor	1	Large	4	More than 24 hours	1	Less than one week	3	2.7	M
Hydrologic Hazards												
Coastal Erosion	Likely	3	Catastrophic	4	Negligible	1	More than 24 hours	1	Less than one week	3	2.7	M
Dam Failure	0	#N/A	Catastrophic	4	Negligible	1	Less than 6 hours	4	Less than 6 hours	1	#N/A	#N/A
Drought	Possible	2	Minor	1	Large	4	More than 24 hours	1	More than one week	4	2.2	L
Flood	Likely	3	Critical	3	Moderate	3	6 to 12 hours	3	Less than one week	3	3.0	H
Storm Surge	Likely	3	Catastrophic	4	Large	4	More than 24 hours	1	Less than one week	3	3.3	H
Wave Action	Likely	3	Catastrophic	4	Negligible	1	More than 24 hours	1	Less than one week	3	2.7	M
Geologic Hazards												
Earthquake	Unlikely	1	Minor	1	Large	4	Less than 6 hours	4	Less than 6 hours	1	1.9	L
Landslide	0	#N/A	Catastrophic	4	Negligible	1	Less than 6 hours	4	Less than 6 hours	1	#N/A	#N/A
Other Natural Hazards												
Wildfire	Unlikely	1	Minor	1	Negligible	1	Less than 6 hours	4	Less than one week	3	1.5	L

** Please refer to your handouts for your community's specific results*



Key Risk Findings

** Please refer to your handouts for your community's specific results*



Mitigation Strategy: Linking Problems With Solutions

Step 3 – Solutions: Develop Projects to Solve the Problems

- Updated Mitigation Strategies = Solutions to the Problems (actions and projects addressing the Highest Hazards and Key Risks)
 - OLD projects that are carrying forward (Worksheet 5)
...*and*...
 - NEW projects you have identified



Mitigation Strategy: Linking Problems With Solutions

Step 3 – Solutions: Develop Projects to Solve the Problems

What is Mitigation?

Mitigation is any sustained action taken to reduce long-term risk to life and property from a hazard event



Mitigation
elevated home by the river



Mitigation
property acquisition



Preparedness & Response
purchase of a police
command vehicle



Mitigation Strategy: Linking Problems With Solutions

Step 3 – Solutions: Develop Projects to Solve the Problems

DISCUSSION: Which Actions are Mitigation?

- Examine the actions in your latest plan
- Determine which actions are mitigation
 - *Not preparedness or response*
 - *Not maintenance activities*
 - *Not stand-alone studies*
 - *Submitted plan should list mitigation actions together*
- Q&A

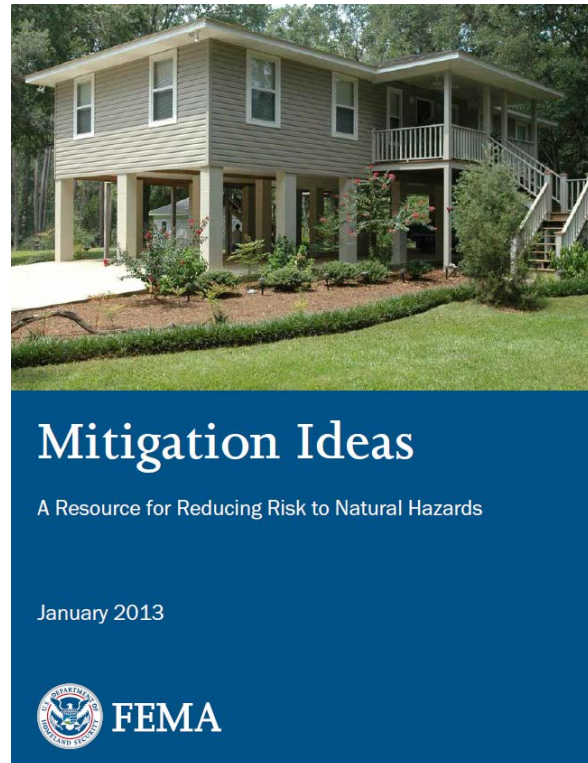




Mitigation Strategy: Linking Problems With Solutions

Step 3 – Solutions: Develop Projects to Solve the Problems

- Excellent resource:
FEMA's *Mitigation Ideas*





Mitigation Strategy: Linking Problems With Solutions

Step 3 – Solutions: Develop Projects to Solve the Problems

- You must have a range of different *categories* of actions and projects to reduce the *impacts* of hazards in your community
 - Planning and Regulatory Solutions
 - Structure and Infrastructure Projects
 - Natural Systems Protection
 - Education and Awareness Programs
- Emphasis is required on new and existing buildings and infrastructure



Mitigation Strategy: Linking Problems With Solutions

Step 4 – Solutions: Document Your Projects on Worksheet # 7

- One Worksheet 7 for each project on your list

Action Worksheet	
Your plan name	<i>Monmouth County Multi-jurisdictional Hazard Mitigation</i>
Your community name	
Community action number	
Assessing the Risk	
Hazard(s) addressed	
Risk finding	
Describing the Action	
Action category	
Action type	
Action description	
Existing, future &/or NA	
Evaluating the Action	
Losses avoided (i.e., benefits)	
Cost estimate	
Cost effectiveness (i.e., benefit/cost)	
Technical	
Political	
Legal	
Environmental	
Social	
Administrative capability	
Local champion	
Other community objectives	
Implementing the Action	
Priority	
Local planning mechanism	
Responsible party	
Potential funding sources	
Time line	
Reporting on Progress	
Action progress status	

* Handout from FEMA's April 2013 Workshop



Mitigation Strategy: Linking Problems With Solutions

**** EXCEL SUBMITTALS ONLY ****

Action Worksheet	
Your plan name	<i>Monmouth County Multi-jurisdictional Hazard Mitigation</i>
Your community name	
Community action number	
Assessing the Risk	
Hazard(s) addressed	
Risk finding	
Describing the Action	
Action category	
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Social	
Administrative capability	
Local champion	
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Priority	
Local planning mechanism	
Responsible party	
Potential funding sources	
Time line	
Reporting on Progress	
Action progress status	

** Handout from FEMA's April 2013 Workshop*

Worksheet 7

Fields

Described

Action Worksheet	
Your plan name	<i>Monmouth County Multi-Jurisdictional Hazard Mitigation Plan</i>
Your community name	
Community action number	- Number your actions starting with 1 and continuing up through the last action.
Assessing the Risk	
Hazard(s) addressed	- What is the hazard?
Risk finding	- What is the risk (problem) that this action is designed to fix?
Describing the Action	
Action category	- Planning Mechanism, Public Education, Natural Resource Protection, Structural Project
Action type	- General description of the type of action (i.e., acquisition, elevation, drainage improvement, etc)
Action description	- Detailed description of the particulars - the location, and exactly what is being planning
Existing, future &/or NA	- Does the action protect existing development, future development, both, or NA
Evaluating the Action	
Losses avoided (i.e., benefits)	- How effective will the action be at protecting lives and preventing injuries? - How significant will the action be at reducing damage to structures / infrastructure?
Cost estimate	- How much do you estimate it will cost to implement the action?
Cost effectiveness (i.e., benefit/cost)	- Do the losses avoided outweigh the cost of the action? - In other words, will it save your community money in the long term? - Eliminate actions that are not cost effective
Technical	- Is the mitigation action technically feasible? - Eliminate actions that are not.
Political	- Is there overall public support for the mitigation action? - Is there the political will to support it?
Legal	- Does the community have the authority to implement the action?
Environmental	- What are the potential environmental impacts of the action? - Will it comply with environmental regulations?
Social	- Will the proposed action affect one segment of the population? - Will it disrupt established neighborhoods, break up voting districts or cause the relocation of lower income people?
Administrative capability	- Does the community have the personnel and administrative capabilities to implement the action and maintain it or will outside help be necessary?
Local champion	- Is there a strong advocate for the action among local departments and agencies that will support its implementation?
Other community objectives	- Does the action further other community objectives, such as capital improvements, economic development, environmental quality, or open space preservation?
Implementing the Action	
Priority	- High, Medium, or Low
Local planning mechanism	- What local mechanism will be used to implement the action? Codes, plans, etc..
Responsible party	- Insert the position title of the person taking the lead
Potential funding sources	- Potential funding sources can include things like grants, local budget, local staff time, etc
Time line	- What is the targeted completion date for the project?
Reporting on Progress	
Action progress status	- Is this a new action, or has it been carried forward from the last version of the plan? - If it is carried forward, describe status in terms of progress made, what is still to-do, any issues impeding process, targeted completion date.

Worksheet 7

Floodproofing

Example

Action Worksheet: <i>Floodproof Structures</i>	
Your plan name	County A Hazard Mitigation Plan
Your community name	Village E
Community action number	Village E#1
Assessing the Risk	
Hazard(s) addressed	Flood
Risk finding	Downtown area averages property damage of about \$100,000 per year and business interruptions of 5 days per year.
Describing the Action	
Action category	Structure/infrastructure projects
Action type	Floodproofing
Action description	Floodproof 10 businesses in the downtown area
Existing, future &/or NA	Addresses existing structures
Evaluating the Action	
Losses avoided (i.e., benefits)	City's cost to repair flooded properties reduced by 90%; approximate saving of \$10,000 per year.
Cost estimate	Floodproofing cost = \$10,000 X 10 = \$100,000
Cost effectiveness (i.e., benefit/cost)	With savings of \$10,000 per year, and a cost of \$100,000, floodproofing pays for itself in 10 years. (In addition, flood insurance premiums may be reduced through an improved CRS rating.)
Technical	Technically feasible. Flooding problem in downtown area solved for the long-term; community's problem of business interruption solved.
Political	<ul style="list-style-type: none"> - More than half the members of the City Council are opposed to buy-outs especially for commercial businesses that are otherwise thriving; it might be easier to get their support for an alternative to buy-outs. - Will help improve CRS rating in the long term (so entire community's flood insurance premium will be reduced).
Legal	No apparent legal issues
Environmental	No adverse environmental effects because project involves minimal structural changes in an built-out area.
Social	Does not adversely affect any particular social group. Helps 2 small minority-owned businesses reduce their flood problem.
Administrative capability	Need at least 3 people to administer (after technical assistance from the State)
Local champion	Possibly from business community
Other community objectives	Supports Village economic development plan
Implementing the Action	
Priority	High
Local planning mechanism	Floodplain Ordinance
Responsible party	Village E (Public Works)
Potential funding sources	Floodproofing cost = \$10,000 X 10 = \$100,000
Time line	HMGP, RFC, SRL and FMA. For 25% local match, in-kind services.
	1 year
Action progress status	New action proposed in 2012

Worksheet 7

Multi-Jur.

Example

Action Worksheet: Countywide Multi-hazard Public Education	
Your plan name	County A Hazard Mitigation Plan
Your community name	County A and Municipalities B-G
Community action number	Countywide # 1
Assessing the Risk	
Hazard(s) addressed	All natural hazards identified in the HMP [Specify]
Risk finding	Public understanding of hazard mitigation and its benefits is limited
Describing the Action	
Action category	Education and outreach
Action type	Public awareness and education program
Action description	<p>1. County A and municipalities B-G: will set up a Countywide Committee to develop an all-hazards public awareness and education program for hazard mitigation, including websites, stakeholder outreach, flyers, meetings, and/or media outreach.</p> <p>2. County: will post a Hazard Mitigation Awareness and Education webpage on its website. Municipalities B-G: provide a direct link to this webpage on their websites.</p> <p>3. The County OEM and County Planning: will conduct outreach to external and internal stakeholders that can provide technical information or assistance in hazard identification, risk assessment and risk communication, such as Northwest Community College and County A GIS Dept.</p> <p>4. The Committee (with the County Planning Dept as lead) will develop flyers to educate citizens about mitigation. The County and the municipalities will disseminate them through local fairs, special events, public meetings, municipal offices, libraries, social media etc.</p> <p>5. Municipality School Superintendents: will add to current awareness campaign for schools.</p>
Existing, future &/or N/A	N/A
Evaluating the Action	
Losses avoided (i.e., benefits)	Public awareness will build support for mitigation, encourage homeowners to create a demand for better construction practices and reduce avoidable injuries and emergencies
Cost estimate	\$12,500
Cost effectiveness (i.e., benefit/cost)	The economic benefits of education-outreach make the benefits of this action outweigh the other minor costs. This is a low-cost action that can be easily implemented.
Technical	Technically feasible. Building public awareness has been proven to reduce risk
Political	No apparent political issues
Legal	Action is legal and educational efforts have been used previously for messages on public safety and welfare issues
Environmental	No adverse environmental effects from outreach efforts
Social	Does not adversely affect any particular social group. Provides education to all social groups
Administrative capability	Administrative costs of collecting and distributing data and coordination effort considered low.
Local champion	Possibly from public school system, library or local community college
Other community objectives	Some of these education activities may be eligible for credit under the Community Rating System and so they could lead to lower flood insurance premiums.
Implementing the Action	
Priority	High
Local planning mechanism	N/A
Responsible party	County and municipal OEMs with assistance from (a) County Planning Dept and GIS; (b) Municipality Planning Depts, Public Information Officers and School Superintendents; and (c) Northwest Community College. See Action description for specifics.
Potential funding sources	Education foundations
Time line	1 year
Reporting on Progress	
Action progress status	County A is applying for 5% HMGP grant for this project after Hurricane Sandy



Reminder: Continue Outreach to the Public and Other Stakeholders

- Discuss at regularly scheduled board/ council meetings
- Targeted outreach to key stakeholders in your community
- Post on your community web site and/ or Facebook, etc.
- Publish in a local paper and/ or newsletters
- Distribute the Fact Sheet at local events; notice boards
- See Guidance Memo 1 for more info
- **Document your activities in the Outreach Log**



Using Facebook as a Component of Outreach Efforts

https://www.facebook.com/#!/MonmouthCounty Sheriff's Office

facebook Search for people, places and things Anna Foley Find Friends Home

Create Page

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Monmouth County Sheriff's Office

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Government Organization · Law Enforcement
To protect and serve the citizens of Monmouth County in an effective and efficient manner through the wise use and management of all resources.

About · Suggest an Edit

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Highlights

Monmouth County Sheriff
7 hours ago

Join Monmouth University's ALPHA PHI SIGMA'S and the Monmouth County Sheriff's Office K-9 Unit as we raise money towards the purchase of a bullet proof vest for one of their finest! March 27th Anacon Hall

ALPHA PHI SIGMA'S
2ND ANNUAL PAWS FOR A CAUSE
VEST A K9 FUNDRAISER FEATURING
MONMOUTH COUNTY SHERIFF'S OFFICE
K-9 UNIT!

Recommendations

Write a recommendation...

Likes See All

Monmouth County Park System
Park · Public Places & Attractions · Government Organization Like

Monmouth County Government
Government Organization Like

FEMA Federal Emergency Management Agency
Government Organization Like

Monmouth County Police Academy

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SharePoint Site

<https://ieprojects.urscorp.com/clients/mcnj/SitePages/Home.aspx>

Site Actions ▾ Browse Page Anna Foley, URS ▾

Monmouth County Project ▸ Home
Monmouth County Project

Home

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HAZARD MITIGATION PLAN
Lists
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Useful Links
Discussions
Team Discussion

Recycle Bin
 All Site Content

Welcome to the Monmouth County Hazard Mitigation Plan Update Project Collaboration Site!

This site has been developed for secure exchange of information and data between members of the Monmouth County Multi-Jurisdictional Hazard Mitigation Plan Core Planning Group. Please click on the "Hazard Mitigation Plan" library to the left for more information on the project.

Thank you for visiting. If you have any questions regarding the project or this site, please contact:

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Multi-Jurisdictional Natural Hazard Mitigation Plan
Monmouth County, New Jersey

FINAL

Prepared for

Monmouth County Office of Emergency Management
300 Halls Mill Road
Freehold, New Jersey 07728

March 2009

Prepared by

201 Willowbrook Boulevard, 3rd Floor
Wayne, New Jersey 07470-7005



Questions?



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