

Mitigation Strategy Workshop Notes



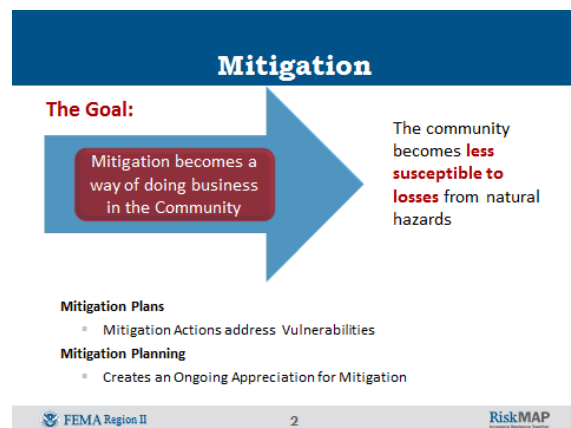
A Workshop for Updating your Mitigation Strategy

Welcome!

FEMA Region II has prepared this workshop to present the key points or essential information needed for each town and village to update their mitigation strategy, which is the section in the hazard mitigation plan where goals are set, actions are listed, and a sketch plan for implementing the actions is specified.

Any workshop, including this one, can only cover the essential points in brief. A more thorough explanation is available in FEMA's publication, *Local Mitigation Planning Handbook*. You are encouraged to review the *Handbook*.

The *Handbook* can be found online at <http://www.fema.gov/media-library/assets/documents/31598?id=7209>



The Mitigation Strategy section of the hazard mitigation plan is the heart of a mitigation plan, but there is a larger goal that FEMA hopes to accomplish. FEMA's overarching goal for mitigation is: "*Mitigation becomes a way of doing business in the community*" and as a result, "*The community becomes less susceptible to losses from natural hazards.*"

Mitigation Plans – include specific mitigation actions to address specific vulnerabilities.

Mitigation Planning (when done correctly) – creates an ongoing appreciation for mitigation. "Ongoing" is a long time. Over the long haul there will be hundreds of decisions made by a town or village where it would be appropriate to include a consideration of mitigation in the decision process.

Purpose of Workshop

▪ Begin development of a Mitigation Strategy

Goals/Actions/Action Plan

- Ensures the Selection of the Best Mitigation Actions
- Builds Support for and facilitates Implementation of Actions

▪ Reinforce an Ongoing Appreciation for Mitigation

- An Appreciation Shared by All in Local Government
- Decisions made daily consider mitigation

The purpose of today's workshop is to:

- Begin or continue on the process of developing a Mitigation Strategy, comprised of Goals, Actions, and Action Plans.
 - Developing a Mitigation Strategy involves a systematic process for identifying or refining proposed mitigation actions. This systematic process ensures the selection of the best mitigation action for the problem (specific vulnerability) at hand, and builds support for and facilitates implementation.
- Emphasize the importance of government officials in each town and village having an ongoing appreciation for mitigation. This should be an appreciation shared by all key village and town employees. When they have this appreciation, daily decisions for years to come will consider mitigation.

NY Rising Community Reconstruction (NYRCR) Plans

NYRCR Plan vs. Hazard Mitigation Plan

▪ Similar

- Both focus on vulnerabilities to natural hazards
 - NYRCR Plans – also includes the need for economic development

▪ Different

- Planning communities differ (NYRCR targets hardest hit communities)
- NYRCR Plans are citizen led; Hazard Mit Plans are government led
- Grant Eligibility: NYRCR (HUD Grants); Haz Mit Plans (FEMA Grants)

NY Rising is the State's branding of all NYS storm recovery programs.

NY Rising Community Reconstruction (NYCRC) Program is the program for communities especially hard hit by recent storms. These communities are preparing NYRCR plans, which are very similar to Hazard Mitigation Plans. There are also differences, but in the end, there are opportunities for the two planning efforts to support the other.

Similar:

- Both plans look to mitigate vulnerabilities to natural hazards. NYRCR Plans also look for opportunities for economic development. Each requires a similar, although not identical, planning process.

For example, the NYRCR process requires communities to meet their public engagement targets, where FEMA requirements are that the public and stakeholders must be invited to participate. Thus the outreach done for the Hazard Mitigation Plan may not meet the requirements for the NYRCR Plan, but the public input received for the NYRCR Plan would certainly be applicable to the Hazard Mitigation Plan.

Different:

- The NYRCR Plans are led by citizens. The jurisdictions that complete FEMA Hazard Mitigation Plans (local governments) are **not** completing NYRCR Plans—because the NYRCR committees are grassroots bodies composed of citizens who represent their communities, not the elected governments in whatever jurisdictions the NYRCR community resides.
- The planning communities for NYRCR Plans are limited to the communities hardest hit by recent storms. They include some villages and hamlets, and a few upstate counties. The Hazard Mitigation Plan will hopefully involve all local jurisdictions and are typically county led multi-jurisdictional plans that include all the towns and villages in the county.
- NYRCR Plans are necessary for HUD grants. The Hazard Mitigation Plans are necessary for FEMA mitigation grants.

Hazard Mitigation Plan NYRCR Plan

Bottom Line:

- The thinking that goes into either plan should be consistent
 - Look for opportunities to for one plan to feed the other.
 - Do not unnecessarily repeat the analysis. In most cases it will be useful for both plans.

The bottom line is this: Planning at its essence is the thinking done to achieve goals and solve problems. There should be consistency between the plans and the thinking done in both cases should apply to each plan.

- Look for opportunities to have each planning effort feed into the other.
- Do not unnecessarily repeat planning steps just because there are two plans. In most cases the analysis done for one plan will be useful for the other.

Mitigation Strategy Framework

The heart of a Hazard Mitigation Plan

Goals

- What long-term outcomes do you want to achieve?

Actions

- What specific actions will local governments, community organizations, and others take to reduce their risk to hazards?

Action Plan

- How will the actions be prioritized and implemented?



The heart of the Mitigation Plan is its Mitigation Strategy, which are goals, actions, and an action plan. This is the subject of today's workshop.

Mitigation goals represent visions for reducing or avoiding losses from the identified hazards.

- For example – *Protect vital communication and transportation infrastructure, which if damaged by a natural hazard could cause widespread hardship.*

Mitigation actions are specific projects or activities that help achieve goals.

- For example – *Elevate County Route 12 from Chapman Street to Maple Road to ensure this evacuation route remains open during flood events.*

In a multi-jurisdictional plan, each jurisdiction must have mitigation actions specific to its vulnerabilities.

The **action plan** describes how mitigation actions will be implemented, including how they will be prioritized, administered, and incorporated into the community's existing planning mechanisms.

Goals

▪ Goals represent a global vision for all Jurisdictions

- they guide mitigation activities and priorities

Examples of Goals:

- Minimize new development in hazard prone areas.
- Protect vital communication and transportation infrastructure, which if damaged by a natural hazard could cause widespread hardship.
- Promote mitigation measures as an integral part of government operations.
- Promote mitigation measures that enable communities to stay socially and economically intact following a natural hazard.

▪ There are no right or wrong goals.

A Hazard mitigation plan must have a set of common goals for all the participating jurisdictions. While there are no wrong goals, goals should help guide the selection of mitigation actions. If a goal simply states that a given hazard will be mitigated, there is not much value being added by the goal.

The examples in this slide are shown to demonstrate the desired structure for a Goal Statement. It is up to local jurisdictions to decide what their goals should be.

Updating Your Mitigation Strategy

Summarize Risk Assessment

- 1st: Identify Problems / Vulnerabilities

Mitigation Actions

- 2nd: Brainstorm Potential Actions
- 3rd: Evaluate Potential Actions
- 4th: Select the Best Action

Action Plan

- 5th: Prepare for Implementation

Once goals are established or confirmed, these are the steps that will lead to the best mitigation actions and an action plan that prepares the actions for implementation. Following these steps ensures no preferable mitigation action is overlooked because it was not thought of immediately. In other words, the systematic process guards against “top of the head decisions” dominating the decision process.

Jurisdictional Team

▪ A Functionally Diverse Team Is Critical

- **Elected Officials** – mindful of whole community
- **Emergency Managers** – know of past disasters and problems
- **Local Planners** – aware of trends and land use policies
- **Public Works Staff** – experts on infrastructure and problems
- **Floodplain Administrator / Code Official** – know ordinances
- **GIS Specialist** – can help with analysis and understanding by producing maps



Planning in its purest sense is thinking. It is critical that within each town and village a functionally diverse team be involved in gathering and analyzing information, weighing alternatives, and making informed decisions. This slide goes over the types of people that should be on the team and why.

The lead person for the village or town will choose how to involve members of their jurisdiction’s team. It may involve one-on-one discussions with various team members or meetings of the entire team; probably both. Brainstorming for example, almost always is done as a group, where identifying current problems could be done through one-on-one discussions. The point is that a diverse team improves decision-making and will build support for the decisions made. Potential members of the team at the very least must be invited to participate and the extending of this invitation must be documented in the plan. FEMA has a handout that can be completed to document the invitation and hopefully the participation of a diverse team.

Action Worksheet

- One worksheet for each problem
- Links each problem with mitigation actions considered and selected
 - Documents the consideration of a comprehensive range of actions.
 - Builds support for the action selected.
- Provides prompts for an Action Plan.
 - Facilitates Implementation



Action Worksheet

FEMA Region II strongly recommends an Action Worksheet be prepared to each problem addressed with a specific action.

These worksheets link each mitigation action with the problem it mitigates and it documents the consideration of a range of actions prior to selecting the best action. Consideration of a range of actions is a federal requirement. The action sheet when completed also represents an action plan for each action. In other words, by completing the worksheet several federal requirements will be met. Finally, the last section of the Worksheet can be used later to insert a status report.

The worksheet is an MSWord document. It can accommodate any amount of information desired by the jurisdiction as the blank cells will expand as text is added.

Special Note:

The next page includes a blank Action Worksheet. It should be copied and saved as a blank worksheet. Later use the blank worksheet (one worksheet per action intended for implementation) to capture the required information associated with this action.

Action Worksheet	
Name of Jurisdiction: Name of Haz. Mit. Plan:	
Risk / Vulnerability	
Problem being Mitigated:	
Potential Actions/Projects (not being Implemented at this time)	
Actions/Projects Considered with Summary Evaluation of Each:	
Action or Project Intended for Implementation	
Action/Project Number: Name of Action or Project:	
Action or Project Description:	
Summary of Evaluation¹ Benefits (losses avoided) Estimated Cost Other Factors Considered	
Plan for Implementation	
Responsible Organization:	
Action/Project Priority:	
Timeline for Completion:	
Potential Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Date of Status Report: Report of Progress: Evaluation of Effectiveness:	

¹ Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

Updating Your Mitigation Strategy – Step 1

Summarize Risk Assessment

- 1st: Identify Problems / Vulnerabilities

Mitigation Actions

2nd: Brainstorm Potential Actions

3rd: Evaluate Potential Actions

4th: Select the Best Action

Action Plan

5th: Prepare for Implementation

Step 1 is identifying current problems.

Updating Your Mitigation Strategy – Step 1

Identify Problems / Vulnerabilities

- Review Actions from Previous Plan
- Consider Public / Stakeholder Input
- Review Risk Assessment
- Assess Capabilities – What can be improved?
- Develop Problem Statement

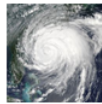


There are at least four ways to go about identifying problems / vulnerabilities. After considering these sources, as explained in the next few slides, develop a problem statement.

Past Actions Summarize Status

Review Status of Past Actions **Actions from Previous Plan**

- **Summarize Status**
 - Include Status Report in Updated Plan (required)
- **Have Past Problems been Mitigated?**
 - Should uncompleted projects be continued? (required)
 - If not, why not?



It may be that some jurisdictions were not part of the original plan multi-jurisdictional plan that is now being updated. But for those that were, the mitigation actions in the original plan were intended to address a problem. It makes sense to review the progress made with past mitigation actions to determine if the problem has been mitigated. It could be that the mitigation action was not implemented for various reasons. If that is the case, is there still a problem?

Federal planning requirements require updates of previous plans to summarize the status of the mitigation actions listed in the previous plan.

Public / Stakeholder Input

What are Current Concerns?

- **What is being done to capture the views of the public?**
 - Document outreach process (required)
- **Stakeholder Concerns**
 - Concerns of Officials in the Jurisdiction
 - Concerns of Others in the Jurisdiction - Colleges, Businesses, Utilities, etc.
- **Offer NYC/ Suffolk County a chance to comment**
 - Problems can be regional
 - Solutions may need to be regional or coordinated



What problems have been cited by the public?

What problems have been cited by stakeholders, who include other officials in the jurisdiction as well as outside stakeholders, like colleges, businesses, and utilities may be able to contribute.

Finally, because problems and/or solutions can be regional, NYC and Suffolk County can help as well.

Review Risk Assessment

Vulnerabilities for each hazard of concern

- **What risks were cited in previous Risk Assessment?**
 - Did recent disasters validate specific concerns?
- **Update the previous Risk Assessment**
 - Use updated information and data to assess risk.
 - Consider cases where damage happens repeatedly.
 - Don't overlook hazards that occur less frequently.
 - Consider and address risks to critical facilities.



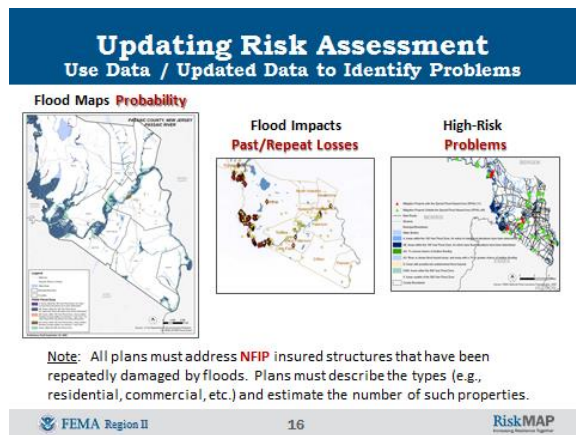
Probably the best place to start when updating your Risk Assessment is with a review of the previous Risk Assessment. What from this assessment remains valid and what may no longer be valid? Did recent disasters validate specific concerns?

Always update of the previous Risk Assessment as needed to gain a current and more precise view of risks and vulnerabilities.

One strong indicator or a problem is when damage repeatedly occurs at the same location. Give these areas due consideration.

Take care not to overlook hazards that occur less frequently, but nevertheless present a risk. For example, New York State has not had a significant earthquake in recent memory, yet seismologists indicate an elevated risk for earthquakes in some regions of the State. Significant earthquakes, especially in locations with older un-reinforced masonry structures, can present a sizeable risk. Even moderate earthquakes can cause damage which can be averted with low-cost mitigation actions.

Are their critical facilities that should be mitigated? NYS requires as part of the analysis of critical facilities, the identification of mitigation strategies and projects for any critical facility that has ever sustained flooding, regardless of whether it is in a 100-year floodplain. Critical facilities should be protected to a 500-year flood event.



This slide provides a visual (example) to reinforce the importance of using the data in the Risk Assessment to identify specific problems. Flood Maps indicate the probability of a flood in an area. For example, there is at least a 1% annual probability of a flood in a 100-year floodplain. Next the Risk Assessment should have identified some flood impacts or past losses. Review NFIP data on Repetitive Loss properties and Severe Repetitive Loss Properties. This will point to high risk or problem areas.

NFIP (National Flood Insurance Program) is emphasized by FEMA because flooding is the biggest and most expensive natural hazards in the country. Flooding is also a major problem in New York State.

Assess Capabilities

What can be improved?

Planning Mechanisms – governance structures used manage land use development and community decision-making.

- **Plans** – Land use plan
- **Policies** – Review of building applications
- **Ordinances** – Zoning Code
- **Programs** - **NFIP**
- **Studies** – Flood studies
- **Staffing / Equipment**
 - Skills / Abilities
 - Number of Staff / Equipment
- **Financial Resources**

Capabilities Worksheet

Handout for later use

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In addition to the hazard by hazard analysis of the Risk Assessment and input from the public / stakeholders, plans must describe and **assess local capabilities**. Capabilities are existing authorities, policies, programs, and resources, which are sometimes called “planning mechanisms.”

This slide includes a generic list of capabilities that local communities might have. For example:

- Plans, like Land Use Plans, or Comprehensive Plans, or Master Plans – whatever plans you have, use the formal name of the plan when describing it.
- Policies, like those that indicate who is to be conclude in the review of building applications. Give the official name for the policy and describe how it works relative to mitigating hazards.
- Ordinances – For example, the zoning code.
- Programs – again the National Flood Insurance Program will be among the programs cited for most communities in New York State.


- Studies – give the name of studies that have been completed or are underway
- Staffing / Equipment – skills/abilities and the number of staff and equipment.
- Financial Resources – this could be the annual budget, taxing authority, etc.

The description of local capabilities provides a foundation for mitigation planning. It can describe what measures are already in place to manage risk and it allows small jurisdictions with limited resources and capabilities to distinguish themselves from larger and more capable communities. Since each jurisdiction is unique, the capabilities are unique and should be separately described by each jurisdiction. A generic list of capabilities is not appropriate. Each jurisdiction should name and describe their authorities, police, etc.

Local Capabilities

Assess Capabilities
plans, policies, programs, etc.

- Any gaps or problems?
- For example, problems such as:
 - Inconsistent enforcement of ordinances
 - Outreach misses non-English speaking citizens
 - Major gaps in information
 - Out of date Plans



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RiskMAP

Once having described the community's capabilities, these capabilities should be assessed to determine if there are gaps or deficiencies. These might be articulated as problem statements.

For example, problems such as:


- *Inconsistent enforcement of ordinances* - This is the problem. The root cause of the problem should be determined before brainstorming possible solutions. In this case, perhaps the procedures are unclear, or staff has not been trained, or there is not enough staff to perform the enforcement.
- *Outreach misses non-English speaking citizens* - The root cause could be the method by which educational media is delivered, or the need to produce written material in a second language.
- *Major gap in information* - For example, maybe it is unknown whether critical facilities have reinforced masonry. A structural study might be called for to fill in the gaps.
- *Out of date Plan* - could also be a problem.

Local Capability NFIP Program & Administration



Each jurisdiction might describe:

- Floodplain Administrator: name / contact info.
- Floodplain requirements
- Floodplain enforcement and monitoring procedures
- Status of floodplain mapping and studies
- Outreach efforts to promote insurance
- Other assistance provided




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RiskMAP

Local administration of the National Flood Insurance Program (NFIP) is an important capability. It is a federal requirement that for jurisdictions that participate in National Flood Insurance Program, this program and its administration must be described in the plan. Each jurisdiction will have its own write-up because each jurisdiction is unique in how it administers the program.

For example, the write-up might discuss:

- Name and contact info, for floodplain administrator
- Adoption and enforcement of floodplain requirements, including regulating new construction in floodplain
- Floodplain identification and mapping, including the status of map updates
- Describe the jurisdiction's assistance and monitoring activity
- It is not enough the plan to say "we will continue to comply with NFIP"

Vulnerabilities Summarize as Problem Statements



Problem Statements
Over 100 homes along Ocean Boulevard are at increased risk of storm surge due to the erosion of sand dune from Hurricane Sandy.
The downtown business district is subject to spring flooding from melting snow coupled with spring rains.
The southern border of the Town includes a wooded area that in drought conditions presents a wildfire risk to the nearby Margaret Williams Assisted Living facility.

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RiskMAP

Having determined what the most pressing problems are, they should be summarized as clear and specific problem statements. These problem statements should be used to summarize your updated Risk Assessment and the statements should be included on the Action Worksheet for reference.

This slide provides examples of a few problem statements.

Class Exercise 1 Identify Actual Problems

- Each Jurisdiction should Identify problems in your community
 - Think of each hazard that could impact your community.
 - State the problem, not the solution.
 - Write one problem statement per Action Worksheet. [Try for 3 or more specific problem statements]
- Group Discussion



This slide explains class exercise #1.

Updating Your Mitigation Strategy

Summarize Risk Assessment

1st: Identify Problems / Vulnerabilities

Mitigation Actions

2nd: Brainstorm Potential Actions

3rd: Evaluate Potential Actions

4th: Select the Best Action

Action Plan

5th: Prepare for Implementation

Problem statements are the starting point for deciding on mitigation actions. The process includes brainstorming potential alternative mitigation actions, evaluating these potential actions, and selecting the best action to address the problem. The Action Worksheet is the place to document the actions considered and why they were or were not selected for implementation.

Mitigation Actions - Defined

Mitigation Actions are 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

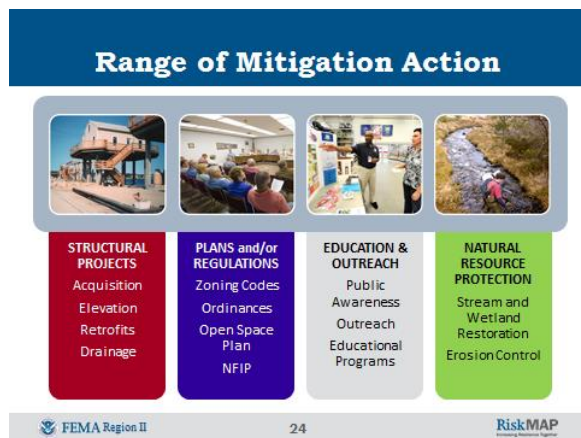
Before brainstorming potential actions, the next few slides explain that mitigation actions (as defined by federal regulations) are different from other emergency management actions, such as emergency

preparedness actions and emergency response actions. The official definition of mitigation actions is provided on the slide. Mitigation actions should be specific actions/projects/activities.

Elevating or acquiring a home for removal is mitigation action. Purchasing equipment to be used to respond to an emergency is not a mitigation action.

Mitigation actions lessen or eliminate the need for preparedness or responses in the future.

When analyzing risk and identifying mitigation actions, the planning team may also identify emergency preparedness and response actions and these may be included in the plan. However, preparedness and response actions may not be a substitute for mitigation actions. Federal mitigation planning requirements call for each jurisdiction in a multi-jurisdictional plan to have mitigation actions specific to their jurisdiction and vulnerabilities.



Federal regulations also require that a comprehensive range of mitigation actions be considered when selecting the mitigation actions to be implemented. To help jurisdictional teams think broadly when brainstorming, it may be helpful to consider four potential categories for actions.

It is possible that for some problems the potential actions brainstormed may all fall under a single category (e.g., education and awareness). This is acceptable so long as potential actions from other categories are considered for other problems. In the end meeting the intent of the federal requirement is the important thing. The intent is to have jurisdictional teams think comprehensively when identifying potential actions.

It is also important that teams consider future development when identifying potential actions. What actions might be taken to improve the resilience of new construction? For example it could involve stronger building codes or land use policies that keep new construction out of harm's way.

Brainstorm Potential Actions

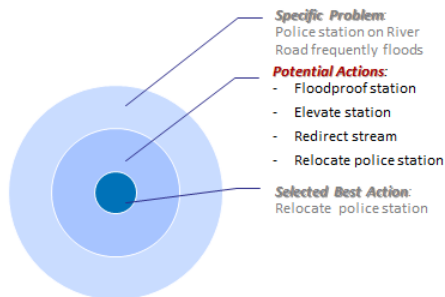
Brainstorm Potential Actions

Gather a *jurisdictional team* to:

- Review the **problem statements** and your **assessment of capabilities**
- Then **brainstorm** potential mitigation actions or projects

The next step is to brainstorm mitigation actions or projects. Gather a jurisdictional team to review the problem statements and assess local capabilities. Then, brainstorm mitigation actions or projects for each problem.

Mitigation Actions to Address Specific Problems



This slide was presented to give a visual image to the process being followed.

- The outer circle covers the universe of potential actions.
- The middle circle are just those mitigation actions considered by the jurisdictional team.
- In the end, after evaluating the actions, the best action will be selected.

The whole process zeros in on what is the best approach to solving a specific problem.

Class Exercise 2 Brainstorm Potential Actions

- Brainstorm a few potential actions
- Consider a range of action types to address one or two problems (from Exercise 1)

- ✓ Structure / Infrastructure projects
- ✓ Plans and/or Regulations
- ✓ Educational & Outreach
- ✓ Natural Resource Protection

- Use Action Worksheets
- Be specific



Exercise #2: Brainstorm some potential actions to address some of the problems identified during the first exercise.

Updating Your Mitigation Strategy

Summarize Risk Assessment

1st: Identify Problems / Vulnerabilities

Mitigation Actions

2nd: Brainstorm Potential Actions

3rd: **Evaluate Potential Actions**

4th: **Select the Best Action**

Action Plan

5th: Prepare for Implementation

Step 3 is to evaluate the potential actions. Step 4 is the result of the evaluation, the selection of the best action or project. These steps are covered together since they are so closely tied to each other.

Evaluate Potential Actions

The Selection Process:

- **Must consider costs and benefits**
 - **Benefit-Cost Review** (rough estimate)
 - **Not a formal Benefit-Cost Analysis (BCA)**
- **Also consider other factors**



The evaluation of potential actions is the process used to select the best action or project for a given problem. The evaluation criteria used are up to the jurisdictional team, except that federal requirements state that benefits versus costs of a mitigation action must be considered. Naturally, many other factors should be used as well.

In considering costs versus benefits, rough estimates may be used. FEMA refers to this as a *Benefit-Cost Review* to distinguish it from a formal *Benefit-Cost Analysis (BCA)*. When applying for grants a formal Benefit-Cost Analysis may be required, but it is not a requirement when preparing a hazard mitigation plan.

As the reasons for not selecting a project become apparent, document this consideration by adding a note on the Action Worksheet next to the potential action. This will complete the required documentation that a range of potential actions was considered.

Benefit-Cost Review

Is it cost effective?

- **Benefits: Losses Avoided**

- Lives saved/ Injuries Avoided
- Structural Damage Avoided
- Business Downtime Avoided
- Additional Costs (e.g., long detours) Avoided



- **Costs:**

- Pre-Construction and Construction Costs
- Ancillary Costs (e.g., permit and review fees)
- Annual Maintenance Costs

Benefits are the savings from losses avoided. For example:

- Lives saved / injuries avoided
- Structural damage avoided
- Business downtime avoided (or any negative impacts from the loss of a function)
- Additional costs avoided, like long detours avoided or emergency management costs avoided

Costs are the total cost for the action or project. For example:

- Pre-Construction Costs and non-construction costs like design costs
- Construction costs
- Ancillary Costs like permit and review fees
- Annualize maintenance costs

Costs are not just the cost to the jurisdiction (e.g. the match for a grant). They are the total cost.

Other Considerations

- Technical Feasibility
- Political Support
- Legal Authority
- Environmental Impacts
- Social – positive or negative
- Willing & Able (local champion & capable)
- Other Community Objectives



In addition to considering the benefits and costs, other factors should be considered.


- **Technical** – is it technically feasible
- **Political** – Will the public support? Is there political will?
 - May want to include an action even if the political will is lacking because political will may change with the next disaster and if the project is in the plan, it may be quickly endorsed and implemented. *Where money was not previously available, it may be made available.*


- **Legal Authority** – Is this action or project something that you have the legal authority to do?
 - If it is up to some other entity to do, then they might be consulted as the plan is being prepared or the action could be to lobby them in some specific way to encourage the action to be taken.
- **Environmental Impacts** – Obvious negative impacts could be a fatal flaw. Even if not obvious, many mitigation actions may require environmental reviews as the project is developed.
- **Social** – Positive impacts are good, like creating a park in a floodplain by removing structures located there. Actions could also be negative, like adversely affecting one segment of the population or disrupting neighborhoods.
- **Willing & Able** – Is there a local champion for the project? Is the jurisdiction or responsible department administratively able to take on this project?
- **Other** – Communities are unique and may want to consider other factors.



Class Exercise 3
Evaluate an Action

Evaluate an action from Exercise 2
(10 minutes)

- **Cost-Benefit Review**
 - Describe and Estimate Losses Avoided
 - Describe Cost Elements and Estimate
- **Other Criteria**
 - Technical Feasibility
 - Political Support
 - Legal Authority
 - Environmental Impacts
 - Social - positive or negative
 - Willing & Able - Champion & Capable






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For exercise 3, look over the actions previously identified (from Exercise 2) and evaluate one of them.

The important part of planning is the thinking that goes into the decisions made. Keeping this in mind, the purpose of this exercise is to make sure everyone understands how to apply the criteria, and less on a lengthy documentation of the evaluation.

Action Worksheet

Recap:

- **Problems / Vulnerability**
 - Risk Assessment - problem statements
 - Assessment of Capabilities – need to improve
- **Potential Actions**
 - Potential Projects Listed
 - Include a comment under each potential action on why it was not selected.
- **Action Selected**
 - Action # and Name
 - Describe the specific Action
 - Summarize the evaluation of this action
- **Plan for implementation**

Recapping:

- First we described the risks or vulnerabilities as problem statements, doing our best to be specific.
- Next we brainstormed potential actions – On the final version of the Action Worksheet the selected action would be described separate from the potential actions. Under each potential action/project a note should be inserted to explain why this action was not selected.
- The *Action or Project for Implementation* section of the Action Worksheet is where the selected project is added to the worksheet. There will be one worksheet for each action.
 - Assign a number and name to each action - This way in the body of the plan (Action Worksheets will likely be in an appendix.) can succinctly list the actions. In multi-jurisdictional plan it is best to make the jurisdiction's initials part of the action number so the number 1 action, etc. for various jurisdictions do not get confused.
 - Describe the specific mitigation action – Some actions are regulatory or educational actions, while others may be projects.
 - Summarize the evaluation of the mitigation action - The body of the plan will probably describe the generic consideration of benefits and costs. The Action Worksheet should document the specific reason for selecting the action or project.
 - The final section of the Action Worksheet is the Plan for Implementation. This is covered by the next slide.

Step 5 Prepare for Implementation

Action Plan:

- **Responsible Organization (lead organization)**
 - This is an agency or department, not the jurisdiction
- **Action / Project Priority**
 - Involve the Jurisdictional Team
 - Numerical Rank; High/Medium/Low; chronological by start date or completion date. (Optional methods)
- **Timeline for Completion** - Estimate
- **Potential Funding Source** – List multiple, if applicable
 - Estimated cost was given in summary of evaluation
- **ID Local Planning Mechanism to Facilitate Implementation**

An *Action Plan* is the final element of a *Mitigation Strategy*. It prepares the actions for implementation.

- **Responsible Organization** – An agency or department should be selected to take the lead with implementation. Most actions or projects naturally fall within the purview of an agency or department. It is this organization that will periodically provide status reports. The jurisdiction itself should not be assigned the responsibility for implementation because this leaves it unclear who will manage implementation on a day-to-day basis. Only one agency can have the lead. If other agencies are to be involved, they may also be listed so long as it is clear which agency is in the lead.
- **Action/Project Priority** – The jurisdiction’s team is best suited for setting priorities. The criteria used should be documented in the body of the plan. The consideration of benefits versus costs must be a consideration. In addition to other selection criteria used, the team might also consider factors like:
 - How much can a particular agency or department manage?
 - Would it be better overall to do some easy to implement actions first to build support for the entire mitigation plan?
 - The output is a priority designation for each action, which should be listed on the Action Worksheet. This could be:
 - Numerical ranking – list actions in priority order
 - Triage Actions: Tier 1 / Tier 2 / Tier 3 - be careful not to make everything a top priority, because that defeats the purpose of prioritizing.
- **Timeline for Completion** – The project manager from the responsible organization may be in the best position to estimate when the action will be completed. The target completion date should be added to the Action Worksheet. The start date could also be added, as could target dates for significant milestones.
- **Potential Funding Sources** – NYS requires that plans include a list of potential Local, State, and Federal fund sources that apply to the project, as well as public-private partnerships worth pursuing. This should include a brief description of the programs and links to webpages for those opportunities.
 - NYS notes that the lack of an identified funding source or program should not prevent the project’s inclusion in a community’s list of possible mitigation actions.
- **Local Planning Mechanisms** – *are covered by the next slide*

Using Local Planning Mechanisms to Facilitate Implementation

Planning Mechanisms - Governance structures to manage land use development and community decisions-making, such as comprehensive plans, capital improvement plans, and other long-range plans.



Planning Mechanisms are governance structures used by local jurisdictions to manage land use development and community decisions-making, such as comprehensive plans, capital improvement plans, and other long-range plans.

Using Local Planning Mechanisms to Facilitate Implementation

Examples: Actions & Planning Mechanism Used

- **Increase culvert size on River Road** – add this project to the capital improvement plan
- **Acquire severe repetitive loss properties on Meadow Street** – Amend the town Land Use plan to include the vacated land as a town park.
- **Conduct an engineering study to determine the vulnerability of critical facilities to earthquakes** – add consultant funding to the annual town budget

This slide provides some examples of mitigation actions and a “local planning mechanism” that will be used as part of the implementation process.

- **Increase culvert size on River Road** – add this project to the capital improvement plan
- **Acquire severe repetitive loss properties adjacent to Wondering Creek on Meadow Street** – Amend the town Land Use plan to include the vacated land as a town park.
- **Conduct an engineering study of the vulnerability of critical facilities to earthquakes** – add consultant funding to the annual town budget

The local planning mechanism (e.g. “*add this project to the capital improvement plan*”) would be included on the Action Worksheet on the line designated for this purpose.

Mitigation Actions/Projects and Integration Actions

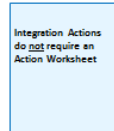
Actions / Projects:

- Address problems
- Captured by the Action Worksheet



Integration Actions: (New Topic)

- These actions incorporate mitigation data, information, goals, and concepts into other planning mechanisms.
 - E.g. Comprehensive or capital improvement plans, when appropriate.



Up to this point in the workshop we have been focused on mitigation actions that address specific problems. These are very important and the Action Worksheet was designed to accommodate these projects.

Integration Actions are another type of important action. These are actions to integrate mitigation data, information, goals, and concepts into existing planning mechanisms. Thus they integrate mitigation with the fabric of governing. For example, when appropriate, mitigation may be integrated with the jurisdiction's comprehensive plan or its capital improvement plan.

Integration Actions do not go on an Action Worksheet because they are fairly simple to implement.

Integration Actions

"Integration increases efficiency and avoids conflicting outcomes."

Existing Plans, Studies, Reports, etc.

- Reviewed at the outset of hazard mitigation planning
 - What information do these plans, studies, and reports contain that should be reflected in the Hazard Mitigation Plan?

Hazard Mitigation Plan

- Review the Hazard Mitigation Plan
 - What information, data, and concepts should be reflected in other planning mechanisms?
 - Identify which plans and programs will receive information and describe how the information will be incorporated.

Integration actions pay dividends for decades. Integration increases efficiency and avoids conflicting outcomes.

At the start of the planning process existing plans, studies and reports should have been reviewed to determine what information they contained should be incorporated into the Hazard Mitigation Plan. Now that the Hazard Mitigation Plan is nearly complete, the reverse consideration should take place. Each jurisdiction should ask *what information in the Hazard Mitigation Plan should be incorporated into other planning mechanisms.*

The integration actions will be unique to each jurisdiction. They should be listed in the plan by jurisdiction, where the planning mechanism that will incorporate the information is named and a brief explanation is given stating how the integration will take place.

Examples are given on the next slide.

Integration Actions

Examples:

- **Village Ordinance 231** – This zoning ordinance will be updated each time Flood Insurance Rate Maps (FIRMS) are updated.
- **Master Plan for XYZ** – The town's Master Plan will be updated to include the mitigation goals from the Hazard Mitigation Plan.
- **Capital Improvement Program** – A mitigation criterion will be added to other criteria used to rate the priority of capital improvements.
- **Highway Superintendent Job Description** – Amend the Superintendent's job description to include hazard mitigation as a measure of performance.



Here are some examples of Integration Actions.

Class Exercise 4 Integration Action

List 2 – 3 Integration Actions

- **Name 2-3 Actual Planning Mechanism**
 - Plans and programs where information will be incorporated from the Hazard Mitigation Plan
- **For each, state what information will be incorporated**
 - After the name, describe what information will be incorporated and how
- **Discussion**



Exercise 4 is to identify Integration Actions. Integration actions are listed in the plan, often in the form of a Table. They are not appropriate for the Action Worksheets since they are simple, but important, actions.

Take Aways

The Goal:

Mitigation is a way of doing business

Functionally Diverse Team



Mitigation Strategy is the heart of the plan:



Problem Statements
Action Worksheets

Capabilities



- Specific Mitigation Actions
- Integration Actions


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In summary, some of the key point we hope you take away from today's workshop are:

- The overarching goal is for Mitigation to become a way of doing business in all jurisdictions.
- Involve a diverse team in making key judgments and decisions for your jurisdiction.
- The Mitigation Strategy is the heart of the Mitigation plan. Other sections of the plan support the decisions reflected in the Mitigation Strategy.
 - Make sure there is a link between the Risk Assessment section in the plan and the Mitigation Strategy.
 - Problem Statements, when used to summarize the Risk Assessment, are a powerful link to the mitigation actions
- Assess Capabilities – Opportunities to strengthen capabilities can be mitigation actions.
 - The NFIP program is very important. Make sure it is well described and working well.
- Finally, write specific mitigation actions and include integration actions in the plan.

Questions?

Thank you for your attention!

Questions?





Mitigation Planning Contacts

New York State: Richard Lord (RLord@dhses.ny.gov)

FEMA Region II: Cathleen.Carlisle@fema.dhs.gov


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Thank you for your attention and commitment to mitigation planning.

This can be confusing. Rely on your consultant and FEMA publications for guidance, and do not hesitate to contact New York State with questions. The State is your primary contact. FEMA is here to support the State and County in any way we can.