Making the Case for Mitigation Using FEMA’s New Tools

Concurrent Session B6
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Defining the Need

Why do we need the Mitigation Action Tools?
Communities have Data and Tools to Reduce Risk
Communities Know that Mitigation Reduces Risk

MITIGATION WORKS!

Image: Rosanna Arias/FEMA
But… Communities Do Not Take Action. It’s Science!

Optimism Bias: hazardous events are more likely to strike others

Projection Bias: bias toward what is experienced and felt in the present

Representative Heuristic Errors: mental shortcuts we use in making decisions

Charity Hazard Hypothesis: disincentive for people to protect themselves

Availability Bias: over- or underestimating the likelihood of an event

Status Quo Bias: preference for inaction

Projection Bias: bias toward what is experienced and felt in the present

Charity Hazard Hypothesis: disincentive for people to protect themselves

Status Quo Bias: preference for inaction

Hyperbolic Discounting: disproportionately valuing immediate results
Advancing Action Requires Behavior Change
Keys to Advancing Mitigation Action
Introducing the CERC Mitigation Action Tools
Enter the CERC Mitigation Action Tools
Purpose of the CERC Mitigation Action Tools

- **INCREASE AWARENESS**
- **ASSESS CURRENT AND DESIRED CAPACITY**
- **DEVELOP CHAMPIONS, DEFINE ROLES, AND ESTABLISH STEPS**
The Community Risk Profile
What is a Community Risk Profile?

- A visualization tool that illustrates:
  - The economic value of community assets at risk of flooding, now and in the future; and
  - How risk can be reduced through investing in mitigation.

Establish current and future risk scenarios

Calculate potential losses for risk scenarios

Estimate reductions in risk from taking action
Establishing Risk Scenarios

- **Risk Baseline:**
  - Regulatory FIRM
  - Current Risk (if available)

- **Future Flood Risk:**
  - Future Conditions 2050
  - Future Conditions 2100

Image: FEMA Region III (Pittsburgh, PA)
Assessing Risk Exposure Reduction

- Focuses on how communities can buy down their risk through investments in flood mitigation activities.
- A hybrid approach is proposed using the best available Benefit-Cost Ratio data from:
  - Multi-Hazard Mitigation Council Report for process or non-structural efforts; and
  - FEMA project data for structural mitigation projects.

Image: Patsy Lynch/FEMA

FEMA

RiskMAP
Increasing Resilience Together
Communicating the Results

Investing in Mitigation Action Leads to a More Resilient Watershed

Creating resilient communities that are able to survive and recover from hazards requires investment.

The Growing Cost of Your Flood Risk

If you do nothing, your community’s flood risk will increased by x% by 2100.

Mitigation Actions Reduce Risk

You cannot prevent flooding, but communities can buy down the risk of damage through mitigation investments.

Moving Towards Resilience

Opportunities for Mitigation Action with the analysis at the watershed level.

Hazard Mitigation Plans – Developing a plan for your community enables you to take action to reduce loss of life and property. This activity can buy down your risk by x%.

Warning Systems – Alerting citizens to impending hazardous conditions so they may take immediate actions to protect themselves and their property buys down the community’s risk by x%.

Acquisition – Purchasing at-risk structures and underlying land allows your community to restore or preserve the floodplain and lowers buys down your risk by x%.

Elevation – Raising at-risk structures or building new structures in the floodplain area above the base flood elevation buys down the risk by x%.

Relocation – Moving at-risk structures out of the floodplain and converting it to open space can buy down your risk by x%.

Floodproofing – Installing a building specific system to prevent water from entering or damaging nonresidential structures and buys down your risk by x%.

FEMA
Community Action Readiness Assessment

Community Action Readiness Assessment
Concept Paper

FEMA

RiskMAP
Increasing Resilience Together
What is a Community Action Readiness Assessment?

- An internal assessment tool to gauge readiness
- A community engagement tool
- A capacity-building tool
Developing a Community Action Readiness Assessment

- Uses five major factors to evaluate a community’s inclination to implement mitigation projects:
  - Concern/Risk Awareness
  - Motivation
  - Action
  - Engagement
  - Capabilities
Community Action Readiness Assessment Outputs

**FACTOR #5: capability**

**What is our current state of capability?**
- current staffing level
- current risk level
- existing tools
- assessment

**Where do we hope to be in the future?**
- desired staffing level
- future risk level
- desired tools
- assessment

**What is needed to increase capability?**
- future staff needed
- future technical tools needed
- future communication tools needed
- funding required

**KEY**
- Risk level
- Communication & media plan
- 1 full time FTE Studies
- Risk assessments

**SCALE OF 1-8**

1. CONCERN
2. RISK AWARENESS
3. CAPABILITY
4. ACTION
5. MOTIVATION
6. COMMUNITY ENGAGEMENT
7. FUTURE STATE
8. CURRENT STATE

**What is this tool?**

[Space for contact info, if needed]

**RiskMAP**
Increasing Resilience Together
The Resiliency Action Process
What is a Resiliency Action Process?

▸ A process and a tool:
  • Increase local capacity
  • Improve responsiveness to stakeholders
  • Increase action outcomes and maintain momentum

▸ Hazard Mitigation Plans offer the “what” and the “why” – RAPs provide the ‘how’

▸ Bridge the gap between awareness and action
The Mitigation Action Challenge

- Communities are unique.
- Many communities know what they should do, but they do not know how to do it.
- Local voices and champions are often diffuse.
- Maintaining momentum is hard.
Addressing the Challenge

▸ **Communities are unique**
  - Connecting mitigation to broader community goals/values
  - Set local-level goals

▸ **Communities do not always know how to take action**
  - Implementation strategy, action steps, resources
  - Providing technical assistance

▸ **Local champions are diffuse**
  - Establishment of Resiliency Team
  - Partnership development and capacity building

▸ **Maintaining momentum is hard**
  - Improve responsiveness to Risk MAP stakeholders
  - Celebrate wins
Resiliency Action Process Development Phases

- Phase I: Identify and Cultivate Local Mitigation Champion(s)
- Phase II: Vision and Priorities
- Phase III: Identify Community Assets and Capacity Gaps
- Phase IV: Develop Draft and Final RAP
- Phase V: Ongoing Support and Technical Assistance
Putting it All Together
Infusing the Products in the Risk MAP Lifecycle
Action TAKES

TIME

INVESTMENT

CHAMPIONS
Interested in Learning More?

Contact Resilience Action Partners for more details.
Questions can be directed to:

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