



# FEMA

## Risk MAP Program

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# Agenda

- **Risk MAP Vision and Alignment**
- **Program Goals and Measures**
- **Risk MAP Partners**
- **Multi-Year Strategy & Value Added by Risk MAP**
- **Project Component Details**
- **Risk MAP Products and Strategies**

# FEMA's Mission Statement



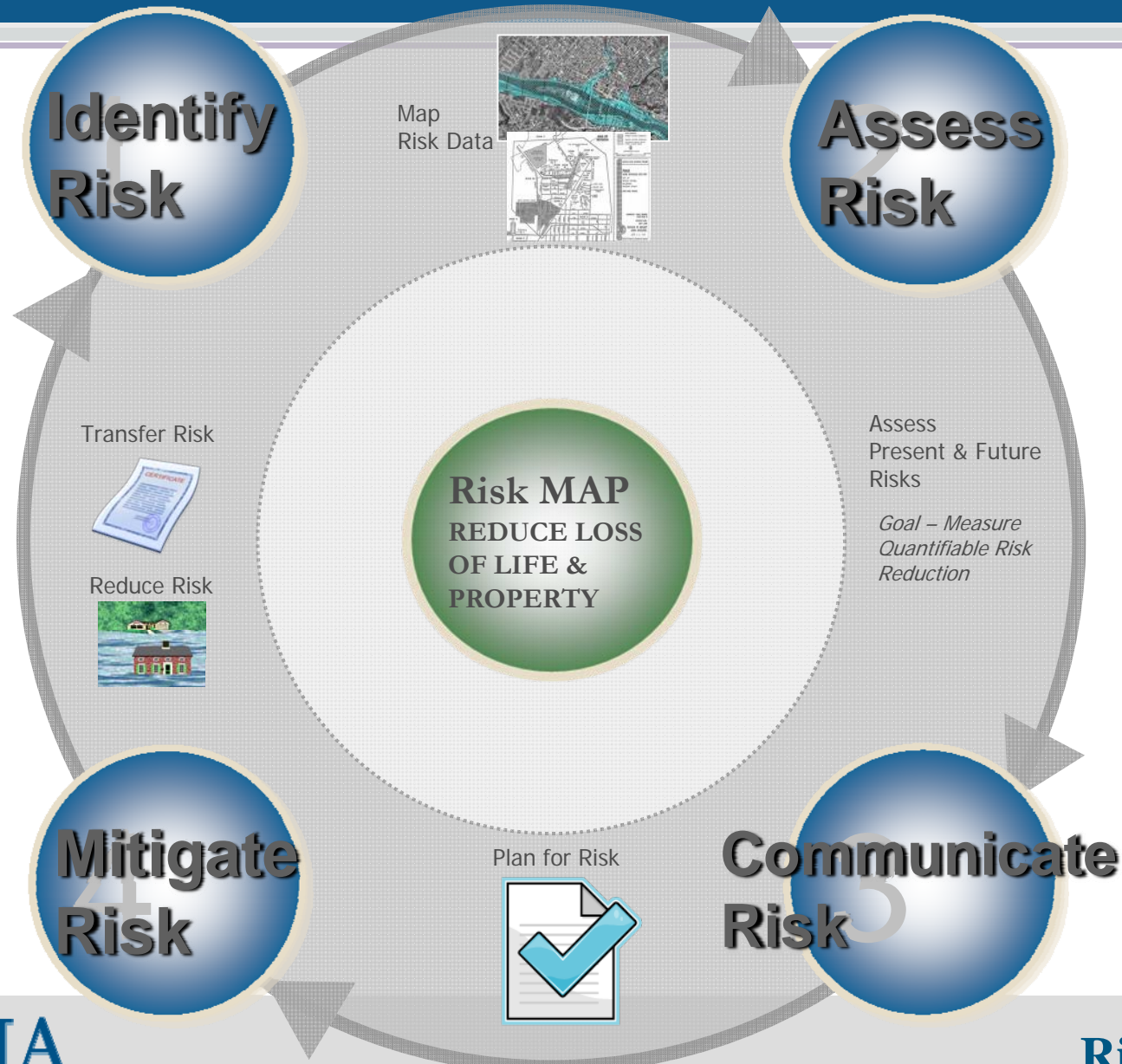
# FEMA

***Support our citizens and first responders to ensure that as a nation we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards.***



# Risk MAP Lifecycle

## Focus on Better Risk Communication



# Risk MAP (Mapping, Assessment Planning) Vision

Through collaboration with State, Local, and Tribal entities, Risk MAP will deliver quality data that increases public awareness and leads to action that reduces risk to life and property





# Risk MAP Alignment

*The main components of the Risk MAP Solution are the foundation for motivating action to reduce risk*

## Vision

Risk MAP will deliver quality data that increases public awareness and leads to action that reduces risk to life and property

## Multi-Year Plan

### Goal 1: Data Gaps

Address gaps in flood hazard data

### Goal 2: Awareness & Understanding

Measurably increase public's awareness & understanding

### Goal 3: Mitigation Planning

Lead effective engagement in Mitigation Planning

## Risk MAP Program Measures

### Goal 4: Digital Platform

Provide an enhanced digital platform

### Goal 5: Synergize Programs

Align Risk Analysis programs and develop synergies

## Risk MAP Solution

Watershed

Elevation Data Strategy

Levels of Study

Program Measures

Risk Assessment

Mitigation Planning

Risk Communications

National Outreach

# Program Goals and Measures

## Risk MAP Goals

### Goal 1: Data Gaps

Address gaps in flood hazard data

### Goal 2: Awareness & Understanding

Measurable increase of public awareness & understanding

### Goal 3: Mitigation Planning

Lead effective engagement in Mitigation Planning

### Goal 4: Digital Platform

Provide an enhanced digital platform

### Goal 5: Synergize Programs

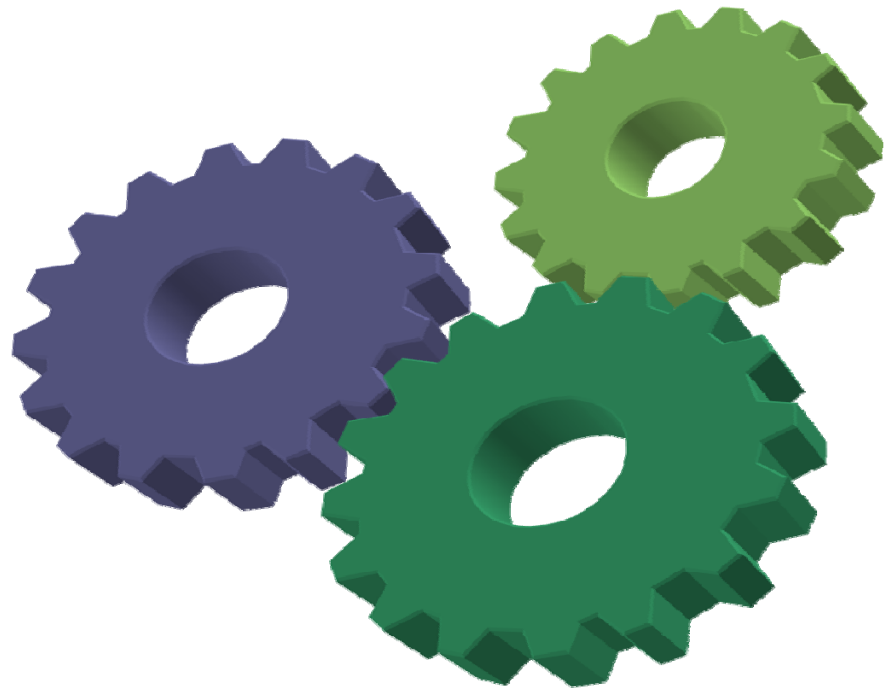
Align Risk Analysis programs and develop synergies

## Risk MAP Measures

- Ensure 80 percent of the Nation's flood hazards are current by 2014 – the flood hazard data are new, have been updated, or deemed still valid through Risk MAP review and update process
- Increase State, local, and Tribal officials' level of understanding of flood risk
- Ensure 80 percent of the U.S. population (excluding territories) is covered by a Local or Tribal hazard mitigation plan that is approved or approvable pending adoption
- Percent of Local hazard mitigation plans approved using quality Risk MAP data or better
- Establish a culture of continuous improvement and executing projects aimed at reducing process cycle time and improving the quality of Risk MAP products and services

# Risk MAP Partners

- **CDS – Customer Data Services**
- **PTS – Production Technical Services**
- **PM – Program Management**
- **CTP – Cooperating Technical Partners**



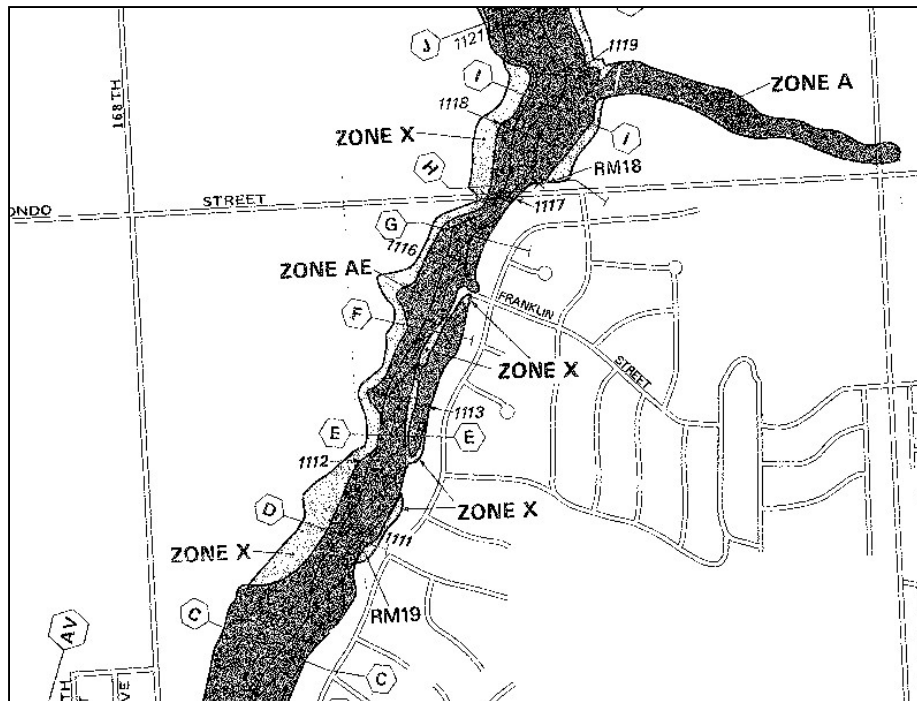
# Value Added in Risk MAP

## Before (Map Mod)

## 2010 and Beyond

<b>Annual Scheduling Approach</b>	Based on Risk	<ul style="list-style-type: none"> <li>• Annualized loss study (Trifecta) Risk x Need x Good Topo + Community contribution</li> </ul>
<b>Elevation Data Acquisition</b>	Best available data	<ul style="list-style-type: none"> <li>• Cost-sharing for new quality elevation data</li> </ul>
<b>Engineering &amp; Mapping</b>	County by county basis (detailed and approximate)	<ul style="list-style-type: none"> <li>• Watershed approach (greater variety catered to community needs)</li> <li>• Meet all coastal and levee commitments</li> <li>• All Model-Based analysis</li> </ul>
<b>Risk Assessment</b>	Credibility of Risk Assessment data at local level unknown	<ul style="list-style-type: none"> <li>• Initiate risk baseline for nation</li> <li>• Create, manage and maintain assessment data</li> </ul>
<b>Mitigation Planning</b>	On a project by project basis	<ul style="list-style-type: none"> <li>• Provide many technical support options on a national level</li> <li>• Expand community interaction</li> <li>• Provide project-level inputs including flood “root-cause” analysis, a “Risk MAP”, refined flood risk assessments</li> </ul>
<b>Risk Communication</b>	Centered on crucial risks	<ul style="list-style-type: none"> <li>• Enhance relationships with officials and other stakeholders about long-term mitigation before problems arise. Everyone is at flood risk</li> </ul>

# Map Mod: Foundation for Risk MAP



# Project View - Risk MAP Builds on Map Mod

Program Planning & Needs Assessment	Scoping	Data Acquisition	Engineering	Flood Mapping & Risk Mapping	Preliminary DFIRM Production	Post-Preliminary DFIRM Production	Sustainability
<ul style="list-style-type: none"> <li>▪ CNMS</li> <li>▪ Risk/Need/Community Contribution algorithm</li> <li>▪ Watershed Prioritization</li> </ul>	<ul style="list-style-type: none"> <li>▪ Enhanced Stakeholder Group</li> <li>▪ Providing initial national risk assessment</li> <li>▪ Risk Communication Plan</li> <li>▪ Communities leading risk communication</li> <li>▪ Changing message to risk awareness</li> </ul>	<ul style="list-style-type: none"> <li>▪ Acquisition of Elevation Data on Watershed basis</li> </ul>	<ul style="list-style-type: none"> <li>▪ Deliver Risk-based products</li> <li>▪ All studies are model-based</li> <li>▪ Multiple Frequency Analysis</li> <li>▪ Additional touch points with community</li> <li>▪ Watershed-based studies</li> </ul>	<ul style="list-style-type: none"> <li>▪ Risk Communication</li> <li>▪ Risk map is delivered</li> <li>▪ Refined Risk Assessment</li> <li>▪ Data for Mitigation Plan</li> <li>▪ Updated FIS</li> <li>▪ Root Cause Analysis</li> </ul>	<ul style="list-style-type: none"> <li>▪ Preliminary Maps available on the web</li> <li>▪ Products customized for communities</li> <li>▪ Enhanced digital tools for flood hazard data review and flood plain management</li> </ul>	<ul style="list-style-type: none"> <li>▪ Risk Communication</li> <li>▪ Expanded Final meeting to include Risk MAP components</li> </ul>	<ul style="list-style-type: none"> <li>▪ Risk Communication</li> <li>▪ Sustainability Meeting</li> </ul>
Risk MAP Project							
<ul style="list-style-type: none"> <li>▪ MHIP</li> <li>▪ Pre-scoping</li> <li>▪ MNUSS</li> <li>▪ Biennial Survey</li> </ul>	<ul style="list-style-type: none"> <li>▪ WISE Scoping Tool</li> <li>▪ Time and Costs Meetings</li> </ul>	<ul style="list-style-type: none"> <li>▪ Use of best available data</li> <li>▪ Limited elevation data acquisition on community basis</li> </ul>	<ul style="list-style-type: none"> <li>▪ County-wide basis</li> <li>▪ Multiple frequency analysis for detailed studies only</li> <li>▪ Some approximate studies</li> <li>▪ Not all studies are model based</li> </ul>	<ul style="list-style-type: none"> <li>▪ GIS-based hazard identification project</li> <li>▪ Flood Insurance Study (FIS)</li> </ul>	<ul style="list-style-type: none"> <li>▪ DFIRMS</li> </ul>	<ul style="list-style-type: none"> <li>▪ Final Meetings</li> <li>▪ BFEs on the web</li> </ul>	<ul style="list-style-type: none"> <li>▪ MIP Database as hazard data repository</li> </ul>
Map Mod Project							

# Highlighted Products

- **Flood map – DFIRM (same as in Map Mod)**
- **Watershed-based Risk Map – Web-based depiction of risk**
  - May include: Depth Grids, Velocity Grids, etc.
- **Average Annualized Loss Study – HAZUS Level 1**
- **Watershed-based Refined Risk Assessment – HAZUS Level 2**
- **Root Cause Analysis**
  - What is or could cause the risk?
- **National Outreach Campaign**
  - Webinars, RSS Feeds, Partnerships, etc.
  - Tools for accessing data and information
- **Provide quality hazard/assessment data to enable communities to determine benefit/cost**



# Strategies

- **Annual Scheduling Approach**
  - 2010 – Trifecta: Risk, Need, Existing Elevation Data
  - Beyond 2010 – Trifecta: Risk, Need, Community Contribution
- **Elevation Data Acquisition**
  - 2010 – Available data, Targeted Acquisition
  - Beyond 2010 – Based on risk and need, Partner for cost-sharing
- **Engineering & Mapping**
  - 2010 and Beyond – Not everyone gets a map, model-based, watershed engineering, panel mapping
- **Risk Assessment**
  - 2010 and Beyond – Level 1 and refined risk assessment at project level
  - Beyond 2010 – Mapping is not necessarily the driver for Risk Assessment
- **Mitigation Planning**
  - 2010 and Beyond - Providing data and technical assistance such as root cause analysis and risk assessment
- **Risk Communication**
  - 2010 and Beyond - Developing highly targeted messages at the program level that can be tailored at the project level.
  - 2010 and Beyond - Use data, tools, and incentives to develop compelling risk communications

## Coordinated Needs Management Strategy

- Organizes, stores, and analyzes flood hazard mapping needs
- Establishes a geospatially enabled effective means for users to enter, monitor, and update their inventory of Needs
- Document where flood studies meet FEMA's current standards
- Data-driven planning and flood map update investment process in a geospatial environment (geodatabase)
- Validation Checklist used as basis for CNMS entry



# FEMA

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