City of Miramar, FL Floodplain Management Plan

Public Meeting #1

July 17, 2025

Agenda & Introductions

Agenda

Introductions

Community Rating System (CRS) Overview

Why Plan?

CRS Activity 510 Floodplain Management Planning (FMP)

- FMP Requirements & Planning Process
- Stakeholder Coordination
- Public Outreach
- Risk Assessment

Next Steps

Introductions

- Welcome!
- Opening Remarks

City of Miramar, FL Project Leads

Nixon Lebrun, Floodplain Administrator/
Building and Planning Department

WSP Planning Consultants & Contact Info

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Planner: Abby Moore – abigail.moore@wsp.com

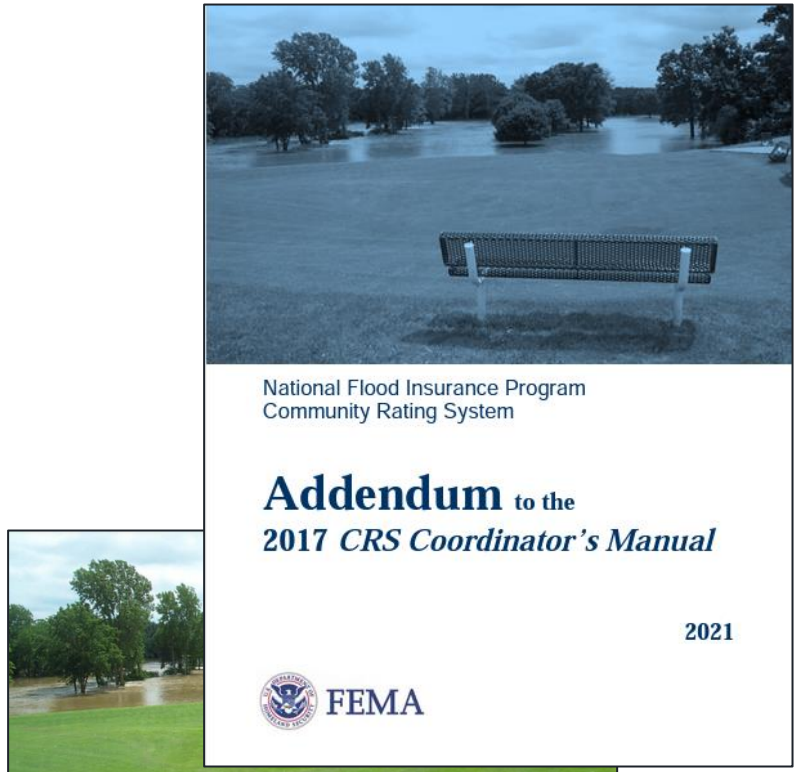
Community Rating System (CRS) Overview

Community Rating System

- FEMA NFIP Voluntary Program
- Point-based system with 10 classes
- 5% premium discount for every 500 points earned
- Encourages higher standards than the NFIP minimum

Table 110-1. CRS classes, credit points, and premium discounts.

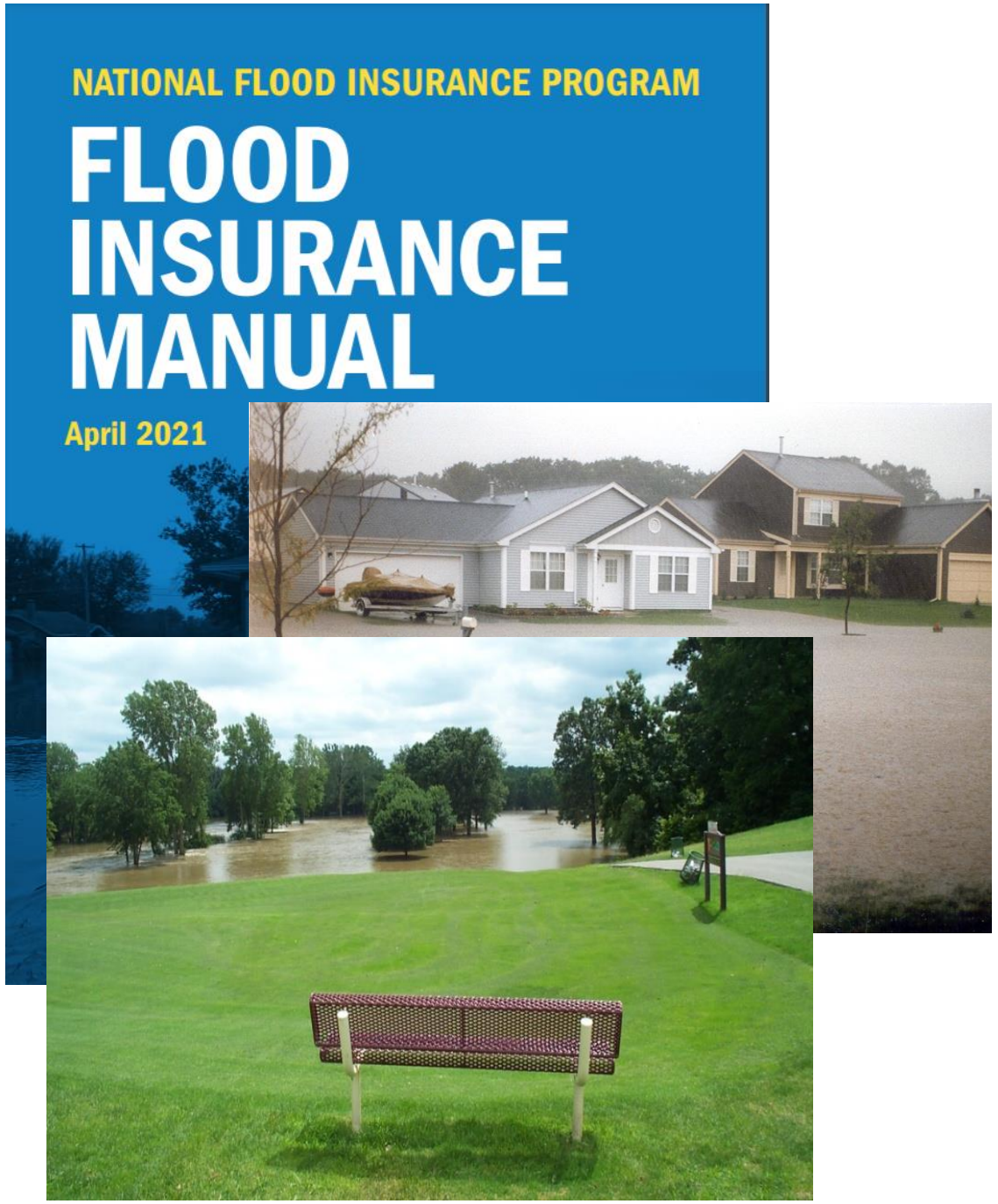
CRS Class	Credit Points (cT)	Premium Reduction	
		In SFHA	Outside SFHA
1	4,500+	45%	10%
2	4,000–4,499	40%	10%
3	3,500–3,999	35%	10%
4	3,000–3,499	30%	10%
5	2,500–2,999	25%	10%
6	2,000–2,499	20%	10%
7	1,500–1,999	15%	5%
8	1,000–1,499	10%	5%
9	500–999	5%	5%
10	0–499	0	0



Community Rating System

Goals of the Program:

1. Reduce flood damage to insurable property
2. Strengthen and support the insurance aspects of the NFIP
3. Encourage a comprehensive approach to floodplain management



Insurance Data

Community:	MIRAMAR, CITY OF	**State:**	FLORIDA
County:	BROWARD COUNTY	**CID:**	120048

Program:	Regular	**Emergency Entry:**	10/18/1973	**Regular Entry:**	12/01/1977
Status:	PARTICIPATING			**Status Effective:**	12/01/1977
Current Map:	07/31/2024	**Study Underway:**	YES	**Level of Regs:**	D
FIRM Status:	REVISED			**Initial FIRM:**	12/01/1977
FHBM Status:	SUPERCEDED BY FIRM			**Initial FHBM:**	01/18/1974

Probation Status:			
Probation Effective:		**Probation Ended:**	
Suspension Effective:		**Reinstated Effective:**	
Withdrawal Effective:		**Reinstated Effective:**	

CRS Class / Discount:	08 / 10%		
Effective Date:	10/01/2022		
CAV Date:	07/08/2019	**Workshop Date:**	03/17/2025
CAC Date:	06/14/2024	**GTA Date:**	03/19/2025
		Community Website:	http://www.miramarfl.gov

☐ **Tribal Community**

☑ **Community Violations Tracker**

☐ **ICC Claims**

☐ **HMGP Projects**

☐ **FMA Projects**

Policies in Force:	2,497
Insurance in Force:	$801,891,000.00
No. of Paid Losses:	1,777
Total Losses Paid:	$3,653,009.44
Sub. Damage Claims Since 1978:	7
Data Sharing Agreement Type:	
Data Sharing Agreement Date:	

2,497 policies in force

$801m in coverage

$3.65m in paid claims

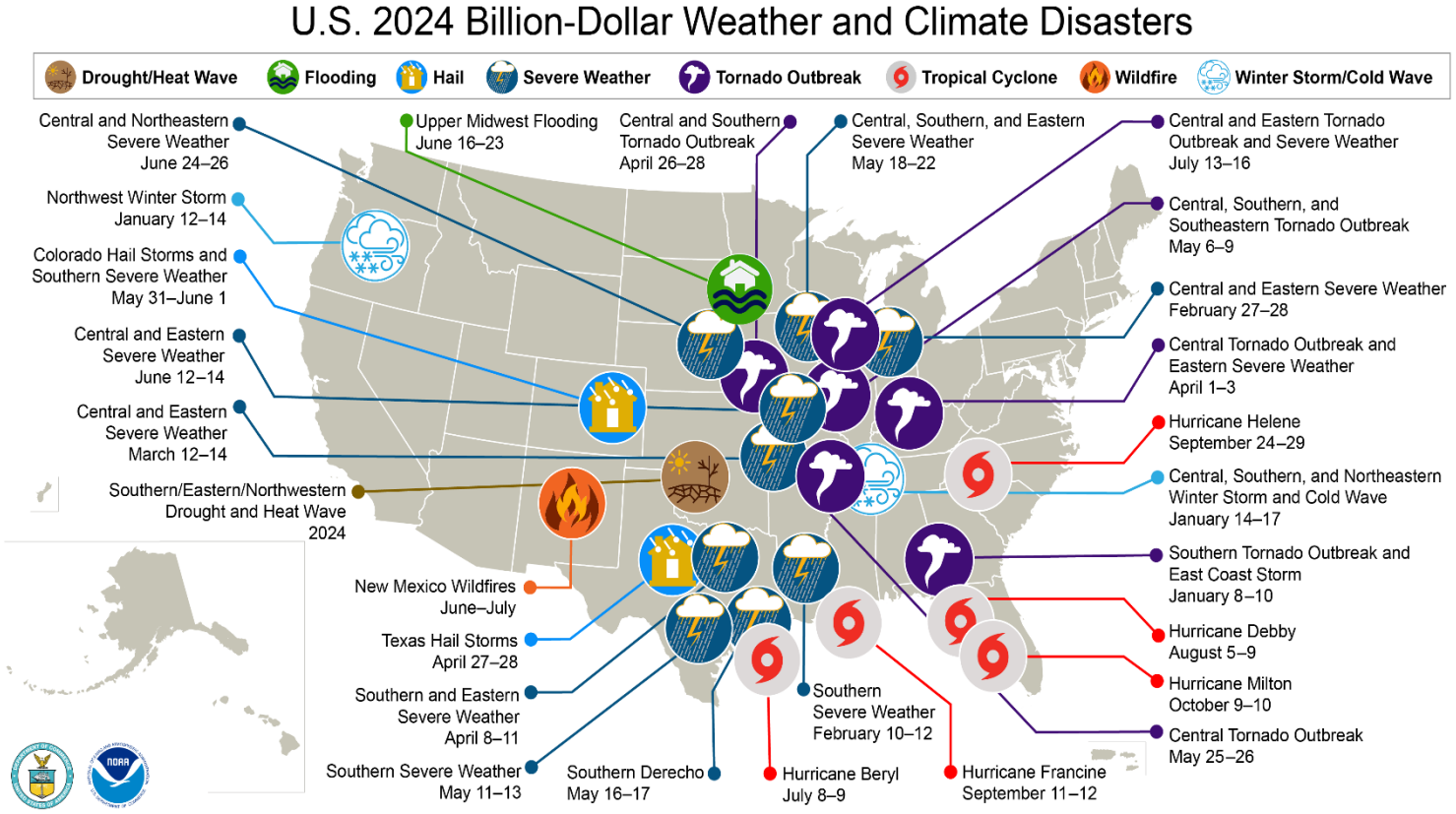
7 substantial damage claims

Why Plan?

Trends in Disasters

Trends resulting in increased costs for disaster response and recovery:

- Population and community growth = greater exposure to risk
  - More people living in hazardous areas
  - More buildings and infrastructure
- Hazards events occurring with more frequency and/or intensity



*This map denotes the approximate location for each of the **27 separate billion-dollar weather and climate disasters that impacted the United States in 2024.***

In 2024 there were 27 weather/climate disaster events in the U.S. with losses exceeding $1 billion each

Six of these disasters have been flood-related hazards.

Trends in Disasters

Costliest Disasters **across the United States** since 1980

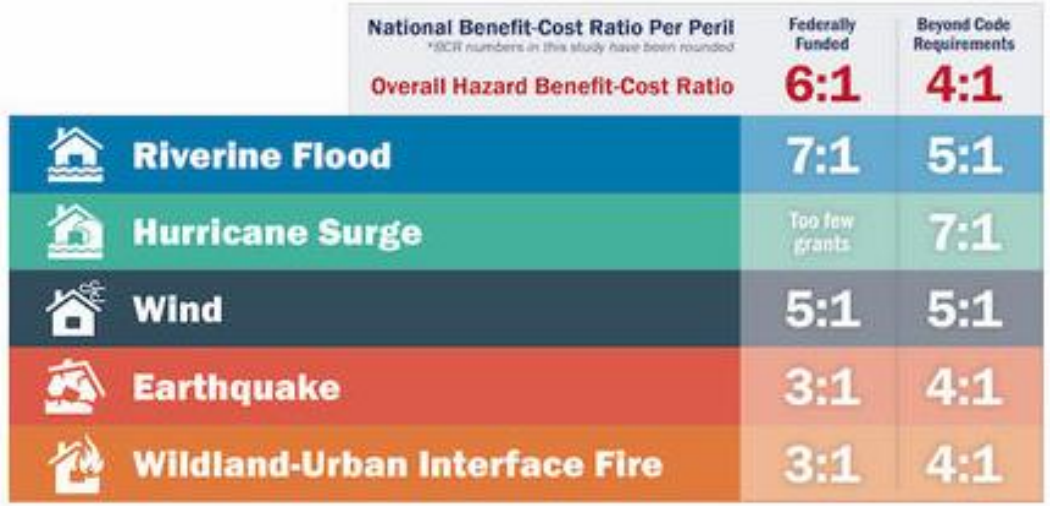
Disaster	Total Estimated Cost*	Deaths
Hurricane Katrina (2005)	**$201.3B**	**1,833**
Hurricane Harvey (2017)	$160.0B	89
Hurricane Ian (2022)	**$119.6B**	**152**
Hurricane Maria (2017)	$115.2B	2,981
Hurricane Sandy (2012)	$88.5B	159
Hurricane Ida (2021)	$84.6B	96
Hurricane Helene (2024)	**$78.7**	**219**
Hurricane Irma (2017)	**$64.0B**	**97**
Hurricane Andrew (1992)	**$60.5B**	**61**
U.S. Drought/Heatwave (1988)	$54.6B	454
Midwest Flooding (1993)	$46.3B	48

Events in bold included impacts in Florida

CPI adjusted to 2024 dollars; reflects total cost and deaths across entire impacted area;
Source: https://www.ncei.noaa.gov/access/billions/events

Why Hazard Mitigation is a Priority

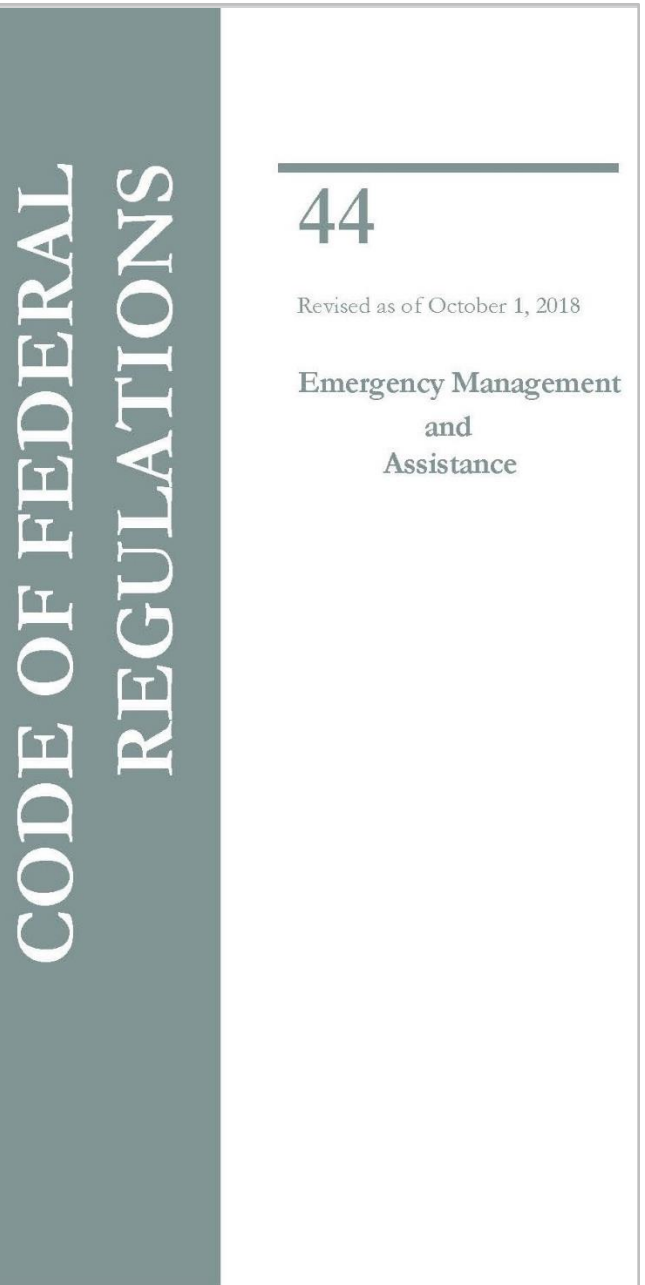
1. The **spiraling costs of response and recovery**; the cost of doing nothing is too much
2. Many **events are predictable and repetitive**; we know what to expect
3. Loss reduction activities can be **effective, cost-beneficial, and environmentally sound**
4. There are **legal and moral responsibilities** to prevent future disasters
5. There are **funds available** to help



Planning for Mitigation Helps to Break the Disaster Cycle

Mitigation is any **sustained action** taken to **reduce or eliminate long-term risk** to human life and property

FMP Planning Process



Project Overview

Disaster Mitigation Act (DMA) Planning Requirements

What is DMA? Why is it Important?

- Outlines the planning requirements that local governments must follow
- Provides continued eligibility for mitigation funds, pre- and post-disaster funding
- Guides mitigation activities in a coordinated & economical manner
- Integrates into other existing planning mechanisms
- Directs future development and informs wise planning and building
- Reduces losses and makes communities more disaster resistant

Phase 1

Organize Resources

Phase 2

Assess Risks

Phase 3

Develop a Mitigation Strategy

Phase 4

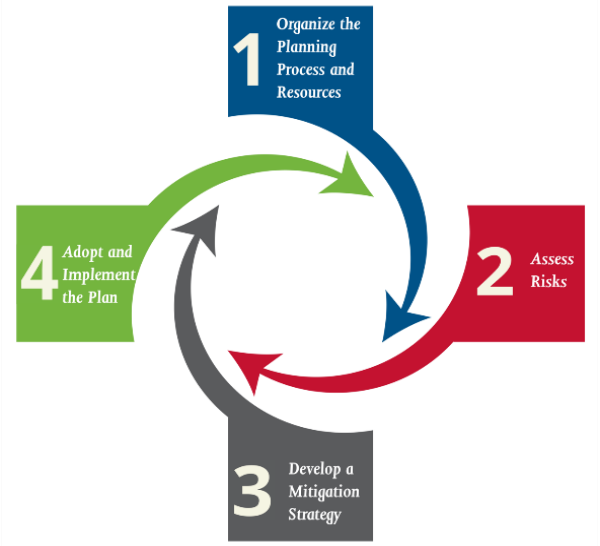
Adopt and Implement

Activity 510 CRS Planning Requirements

CRS Activity 510 Floodplain Management Planning

10-Step planning process aligns with the four phases of DMA

This plan will follow a blended planning process; to meet the requirements of both programs



DMA Process	CRS Process
Phase I – Organize Resources	
§201.6(c)(1)	Step 1. Organize to Prepare the Plan
§201.6(b)(1)	Step 2. Involve the Public
§201.6(b)(2) & (3)	Step 3. Coordinate
Phase II – Risk Assessment	
§201.6(c)(2)(i)	Step 4. Assess the Hazard
§201.6(c)(2)(ii) & (iii)	Step 5. Assess the Problem
Phase III – Mitigation Strategy	
§201.6(c)(3)(i)	Step 6. Set Goals
§201.6(c)(3)(ii)	Step 7. Review Possible Activities
§201.6(c)(3)(iii)	Step 8. Draft an Action Plan
Phase IV – Plan Maintenance	
§201.6(c)(5)	Step 9. Adopt the Plan
§201.6(c)(4)	Step 10. Implement, Evaluate, and Revise the Plan

Activity 510: Floodplain Management Planning

10-Step Planning Process

Phase I: Organize Resources

1. Get organized
2. Plan for public involvement
3. Coordinate with other departments and agencies

Phase II: Risk Assessment

4. Identify the hazard(s)
5. Assess the risks

Phase III: Develop a Mitigation Plan

6. Set planning goals
7. Review mitigation alternatives
8. Draft and action plan

Phase IV: Adoption and Implementation

9. Adopt the plan
10. Implement, evaluate, and revise

Step 1: Get Organized

- Form the Floodplain Management Planning Committee (FMPC)

Membership on the FMPC is:

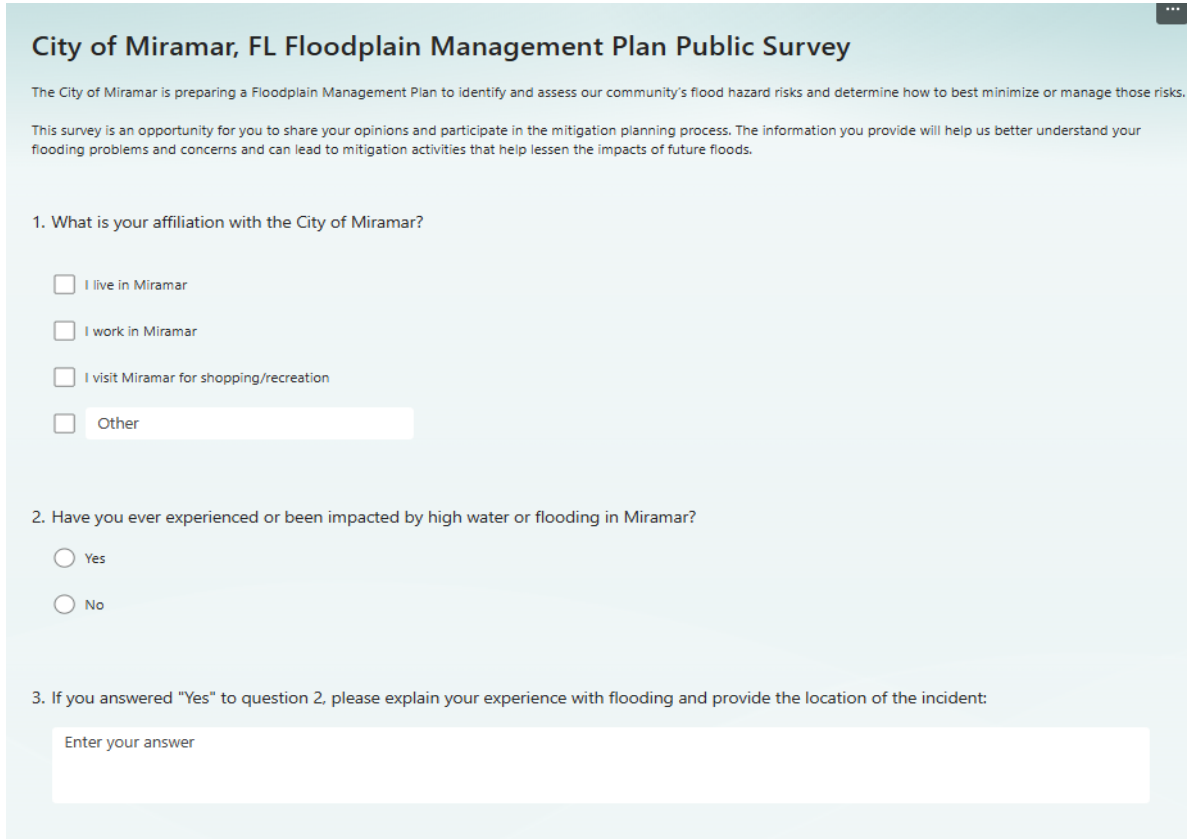
50%	50%
Local staff & officials	Residents & stakeholders

Responsibilities of the FMPC:

- Attend committee meetings
- Provide information on local capability
- Provide mitigation action ideas
- Review and provide feedback on draft documents

Step 2: Plan for Public Involvement

- Public kickoff meeting
- Public meeting to review the draft plan
- Public participation on the FMPC
- Other opportunities to get involved:
  - Website and social media information
  - Public survey
  - Flyers
  - Draft documents for public review



City of Miramar, FL Floodplain Management Plan Public Survey

The City of Miramar is preparing a Floodplain Management Plan to identify and assess our community's flood hazard risks and determine how to best minimize or manage those risks.

This survey is an opportunity for you to share your opinions and participate in the mitigation planning process. The information you provide will help us better understand your flooding problems and concerns and can lead to mitigation activities that help lessen the impacts of future floods.

1. What is your affiliation with the City of Miramar?

- [ ] I live in Miramar
- [ ] I work in Miramar
- [ ] I visit Miramar for shopping/recreation
- [ ] Other

2. Have you ever experienced or been impacted by high water or flooding in Miramar?

- ( ) Yes
- ( ) No

3. If you answered "Yes" to question 2, please explain your experience with flooding and provide the location of the incident:

Enter your answer

Step 3: Coordinate with Stakeholders

- Potential Stakeholders:
  - FEMA Region 4
  - NOAA, NWS, other federal agencies
  - FDEM, FDEP, other state agencies
  - Broward County
  - Neighboring communities
  - Local agencies & Non-profits
  - Businesses
  - Colleges & universities
  - Others?
- Stakeholders will be invited to contribute data and input, review drafts, and attend public meetings

Step 4: Assess the Hazards

Hazard Identification

- *What can happen here?*
- Hazard list will coordinate with the 2023 Florida State Hazard Mitigation Plan and the 2023 Broward County Local Mitigation Strategy

Risk Assessment

- *How does each hazard occur in the planning area?*
- Profiles the hazards: description, location maps, severity, past occurrences, and probability of future occurrence
- Potential future flood conditions based on climate change, development, and other changes
- Areas likely to flood in the future

Potential Hazards for Inclusion in the Plan:

- **Surface Water Flooding**
- **Stormwater Flooding**
- **Levee Failure**
- **Tropical Cyclones**

Step 5: Assess the Problem

Vulnerability Assessment

- *What will be affected or impacted?*
- Property, critical facilities, people, economy, natural resources, cultural and historic resources
- Qualitative and quantitative methodologies for analysis
- GIS datasets will enable spatial analysis of vulnerability

Capability Assessment

- *How can we implement mitigation?*
- Planning & regulatory resources, administrative & technical resources, financial resources, past mitigation efforts, etc.

Step 5: Assess the Problem

Collect updated data on local assets

- Buildings (*building footprints and parcel data provided in GIS*)
- Critical facilities (*provided in GIS*)
- Critical infrastructure
- Drainage hotspots/complaints
- Repetitive loss data
- Economic assets
- Natural resources
- Historic and cultural resources

GIS data enables spatial analysis

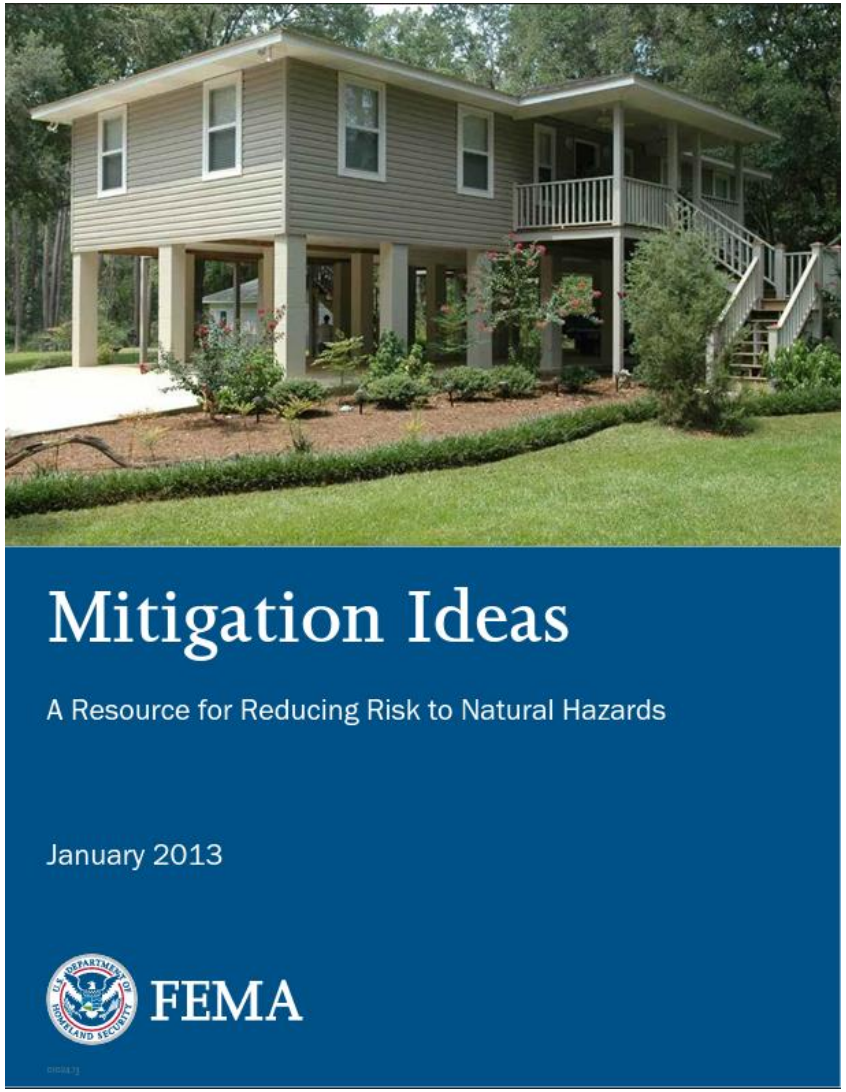
Critical facilities and critical infrastructure will be categorized into **FEMA lifeline** categories

Step 6: Set Goals

- Set Planning Goals
  - Develop goals to guide the identification of mitigation projects
  - Consider public feedback, existing plans, broader City goals, etc.

Step 7: Review Possible Activities

- Will consider action ideas from each of FEMA's mitigation categories:
  - Prevention
  - Property Protection
  - Structural Projects
  - Emergency Services
  - Natural Resource Protection
  - Public Education
- Will include actions the City may pursue grant funding to implement
- Will integrate actions from other existing plans (LMS, Capital Improvement Plan, etc.)



Step 8: Draft an Action Plan

- Develop and prioritize mitigation actions for all identified and evaluated hazards
- Who will be responsible, when will projects be completed, how will projects be funded, etc.

Action Item	Project	Hazards Addressed	Goals Met	Priority	Responsible Department/Agency	Mitigation Category	Funding Source	Timeframe
1	Coordinate with SFWMD on structural flood mitigation and flood-related education and outreach.	Flood: Coastal and Inland, Hurricane & Tropical Storm, Sea Level Rise, Coastal/Canal Bank Erosion	1	High	Village of Palmetto Bay Community & Economic Development, Public Services	Structural Projects, Public Information	Operating budget; additional funds TBD for structural projects	1-2 years
2	Pursue the acquisition and demolition of repetitive loss properties.	All Hazards	2	Low	Village of Palmetto Bay Building Department, Community & Economic Development, Planning & Zoning	Property Protection	HMGP, BRIC, FMA, other federal and state grant funds	5+ years
3	Adopt an increased freeboard requirement.	Flood: Coastal and Inland, Hurricane & Tropical Storm, Sea Level Rise, Flood: Stormwater/Localized, Coastal/Canal Bank Erosion	4	Low	Village of Palmetto Bay Building Department	Prevention	Operating budget	2 years
4	Expand GIS capabilities and resources to increase flood risk awareness and support further mitigation planning.	All Hazards	1, 4	High	Village of Palmetto Bay Planning & Zoning	Prevention	Operating budget	6 months – 1 year
5	Provide targeted and general flood education and outreach to the community in accordance with the Program for Public Information.	All Hazards	1	High	Village of Palmetto Bay Community & Economic Development	Public Information	Operating budget	5+ years
6	Pursue funding to support protection and/or retrofitting of existing septic systems.	All Hazards	2	High	Miami-Dade County w/ Village of Palmetto Bay	Property Protection	Federal, state and local grant funds	2+ years
7	Prohibit the installation of new septic systems within identified high-risk areas.	All Hazards	4	High	Village of Palmetto Bay Building Department, Planning & Zoning	Prevention	Operating budget	1-2 years
8	Coordinate with FDEM and Miami-Dade County to access and distribute more detailed topographic data (2-ft contour intervals) for improved flood risk modeling and planning.	All Hazards	1, 4	Medium	Village of Palmetto Bay Planning & Zoning	Prevention	Operating budget	5+ years
9	Incorporate flood mitigation into future updates of the Comprehensive Plan.	All Hazards	4	High	Village of Palmetto Bay Community & Economic Development	Prevention	Operating budget	1-2 years

Step 9: Adopt the Plan
Step 10: Implement, Evaluate, and Revise

- City of Miramar must adopt the plan by resolution
- Ongoing plan maintenance includes at least annual meetings of the FMPC to review the plan
  - Quarterly meetings are recommended to encourage progress and maximize CRS credit for the plan
- Plan will continue to undergo a full update every five years

Project Schedule

Schedule

Project Schedule

June & July	**Project Kickoff Meetings** Committee & Public Meetings
August	**Meeting 2** Risk Assessment Review
October	**Meeting 3** Capability & Mitigation Strategy
January	**Final Draft Plan Review Meetings** Committee & Public Meetings

Opportunities to Stay Involved

Stay Involved

Respond to the public survey:

- Where/when you've experienced flooding
- How flooding has impacted you
- Ideas for flood mitigation

Check the City's website for:

- Meeting announcements
- Meeting agendas, minutes, and presentations
- Draft documents for review

https://forms.office.com/e/21q3q12ur7

Thank you

wsp.com