



COLLIER COUNTY FLOODPLAIN MANAGEMENT PLAN

**FLOODPLAIN MANAGEMENT PLAN
WORKING GROUP – MEETING #3**

September 16, 2026





Introductions

Floodplain Management Plan Working Group

Name	Government Agency Division & Agency
Kenneth Bills	N/A - Civilian BCC District Representative
Stanley Chrzanowski	N/A - Civilian BCC District Representative
Amy Ernst	N/A - Civilian BCC District Representative
Lisa Koehler	N/A - Civilian BCC District Representative
William Miller	N/A - Civilian BCC District Representative
Linda Orlich	N/A - Civilian BCC District Representative
Paul Shea	N/A - Civilian BCC District Representative
Dennis Vasey	N/A - Civilian BCC District Representative
Terry Smallwood	City of Everglades Building Department
Malek Hall	City of Marco Island Building Department
Robert Dorta	City of Naples Building Department
Amy Howard	Collier County Emergency Management, County Manager Operations Dept.
Eric Johnson	Collier County Planning, Growth Management Dept.
Matthew McLean	Public Utilities Engineering
Francisco Pena Guerra	SFWMD
Peter Hayden	Stormwater/Transportation Engineering, Transportation Mgmt Services Dept.
Joshua Starrett	Collier County Emergency Management, County Manager Operations Dept.
Kari Hodgson	Solid Hazardous Waste, Public Utilities Dept.
Kent Feng	SFWMD
Andrew Miller	Coastal Zone Management, Transportation Management Services Dept.

WSP Consulting Team & Contact Info

David Stroud, CFM – david.stroud@wsp.com

Abby Moore, AICP, CFM – abigail.moore@wsp.com

Ranger Ruffins, CFM – ranger.ruffins@wsp.com

Collier County Leads

Christopher Mason – Community Planning & Resiliency Division Director

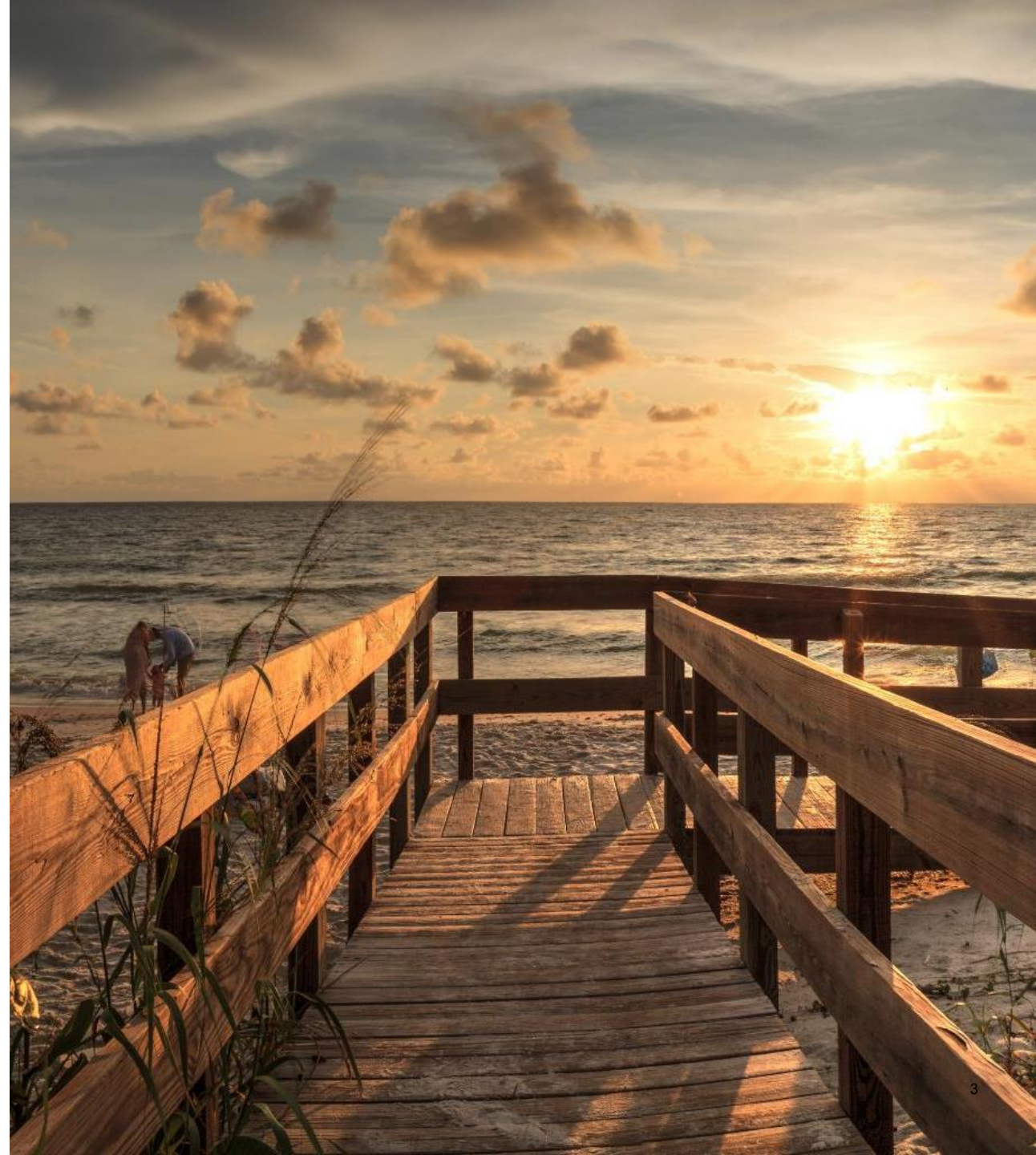
Tonia Selmeski – Community Planning & Resiliency Planner III

Howard Critchfield - Engineering Manager – Community Planning & Resiliency



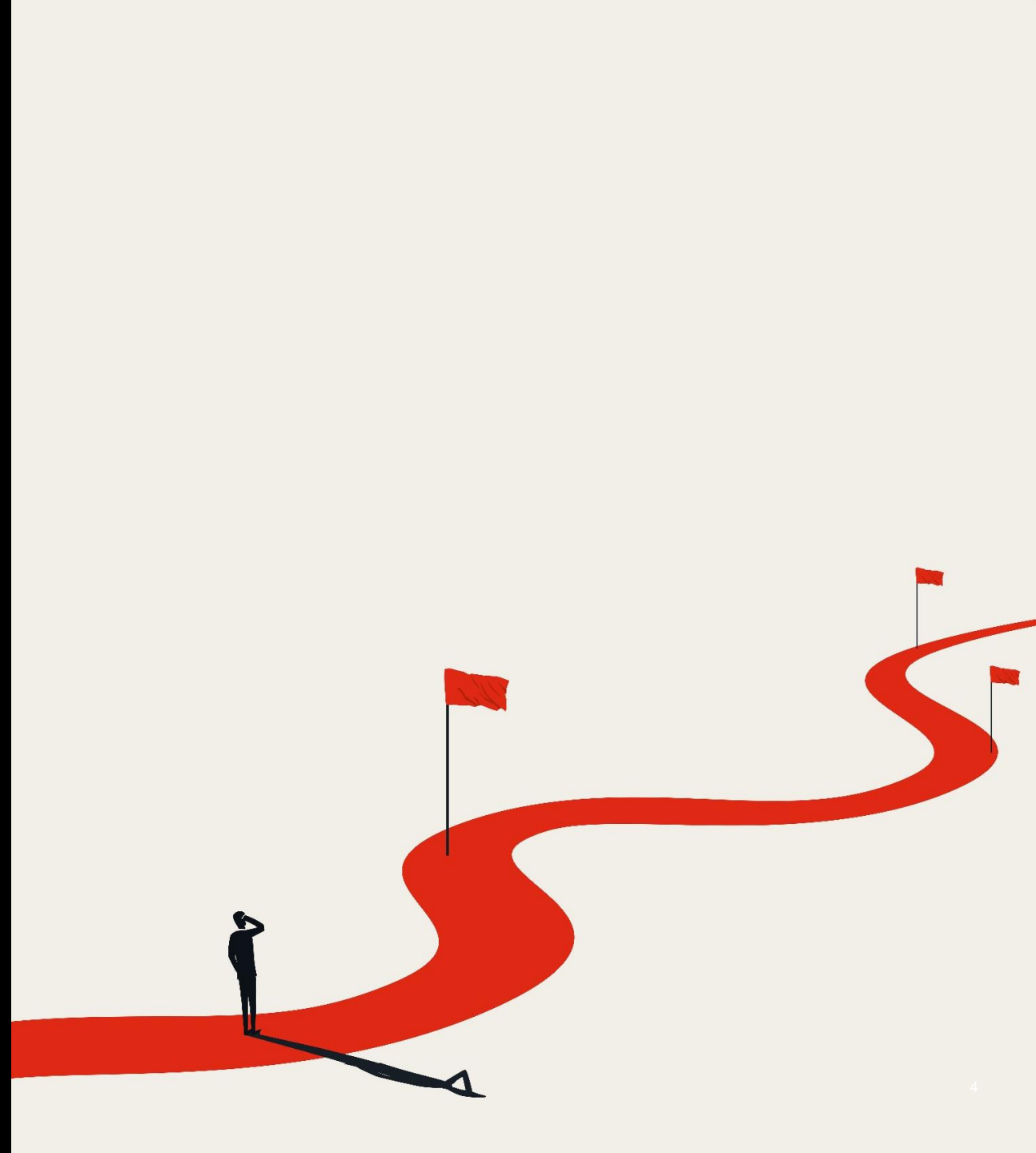
Agenda

- Floodplain Management Plan
 - Planning Process Update
 - Capability Assessment
 - Goals and Objectives
 - Mitigation Strategies
- Next Steps
- *The Watershed is the Infrastructure: A countywide platform for coastal resiliency, Dennis P. Vasey*





PLANNING PROCESS UPDATE



Project Overview



Get Organized

Convene a committee, involve the public, and coordinate

Assess Risks

Identify hazards and evaluate the problems

Develop a Mitigation Strategy

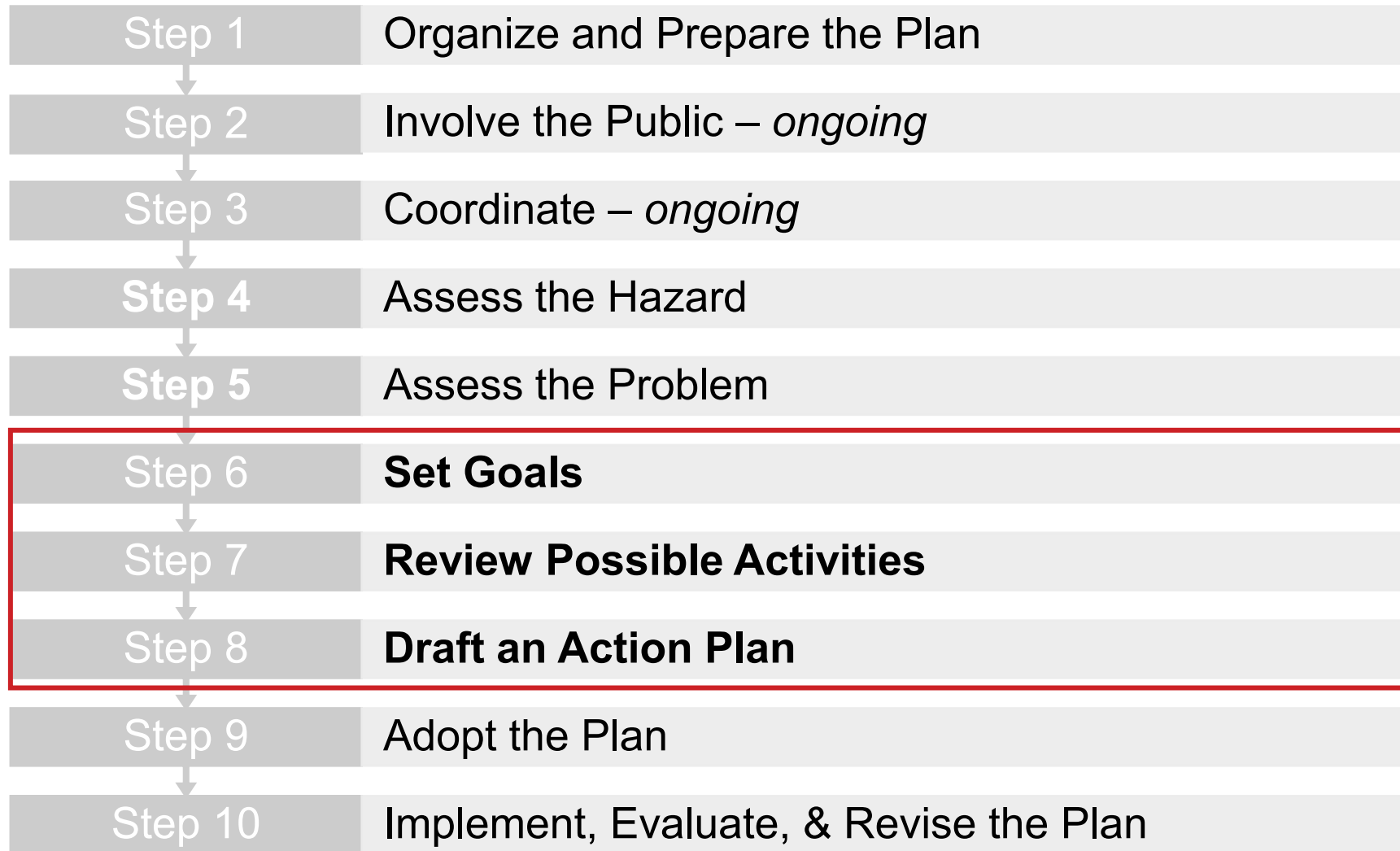
Set goals, review actions, and draft an action plan

Plan Maintenance

Implement, evaluate, and revise the plan



Planning Process





CAPABILITY ASSESSMENT





Capability Assessment

What is Capability?

- Measures local resources and tools available to support or implement mitigation projects
- Identifies gaps, conflicts, and opportunities in existing local plans, policies, programs, etc.
- Identifies mitigation measures already in place or underway

Capability Indicators:

- Planning & Regulatory – plans, programs, policies
- Administrative & Technical – staff, training, expertise
- Fiscal – bonds, fees, CIP, grants



Capability Updates

Planning & Regulatory Capability:

- e.g. plans, policies, and programs that guide development in the city.

Regulatory Tool (ordinances, codes, plans)	Y/N	Comments
Comprehensive Plan	Y	The Growth Management Plan; adopted in 1997, elements amended in 2024
Zoning Ordinance	Y	Ordinance 2004-41, as amended, adopted the Land Development Code of Collier County, FL.
Subdivision Ordinance	Y	Part of Land Development Code; Chapter 4
Floodplain Ordinance	Y	Part of the Code of Ordinances; Chapter 62
Stormwater Ordinance	Y	Part of Land Development Code; Chapter 6
Building Code	Y	Florida Building Code effective on Dec. 31, 2023. New code 9 th edition effective December 31, 2026
BCEGS Rating	Y	Collier County: 4/3
Erosion or Sediment Control Program	Y	Addressed with the NPDES Construction General Permit (CGP) requirements
Stormwater Management Program	Y	NPDES Permit #FLR04E037
Site Plan Review Requirements	Y	Part of Land Development Code
Capital Improvement Plan	Y	Capital Improvement Element of Comprehensive Plan
Economic Development Plan	Y	Economic Element of Comprehensive Plan
Local Emergency Operations Plan	Y	Last updated in 2025
Flood Insurance Study or Other Engineering Study for Streams	Y	FEMA 2024 FIS Report
Other special plans (i.e. Repetitive Loss Plan)	Y	Repetitive Loss Area Analysis, 2024
Elevation Certificates	Y	



Capability Updates

Administrative & Technical Capability:

- e.g. staff, training and expertise

Resource	Y/N	Responsible Department
Planner/Engineer with knowledge of land development/land management practices	Y	Growth Management Division - Planning and Zoning Dept. Staff
Engineer/Professional trained in construction practices related to buildings and/or infrastructure	Y	Growth Management Division - Operations & Regulatory Management Staff
Planner/Engineer/Scientist with an understanding of natural hazards	Y	Growth Management Division -Department of Natural Resources Staff
Personnel skilled in GIS	Y	Information Technology - GIS Services; Planning and Zoning Dept.
Full time building official	Y	Growth Management Division - Operations & Regulatory Management (Building Official)
Floodplain Manager	Y	Growth Management Division – Development Review – Floodplain Management Section (Floodplain Coordinator)
Emergency Manager	Y	Bureau of Emergency Services - Emergency Management Dept.
Grant writer	Y	Grants Coordinator
GIS data – Hazard areas	Y	Growth Management Division - Planning and Zoning Dept.
GIS data – Critical facilities	Y	Growth Management Division – Operations and Regulatory Management
GIS data – Land use	Y	Growth Management Division - Operations and Regulatory Management
GIS data – Building footprints	Y	Growth Management Division - Operations and Regulatory Management
GIS data – Links to Assessor’s data	Y	Growth Management Division - Operations and Regulatory Management
Warning Systems/Services	Y	<i>Alert Collier</i> Notification System, Radio & TV PSAs, Electronic Message Service



Capability Updates

Fiscal Capability:

- e.g. bonds, fees, CIP, grants.

Resource	Accessible/Eligible to Use (Y/N)	Comments
Community Development Block Grants	Y	Annual funding through U.S. Department of Housing and Urban Development
Capital improvements project funding	Y	
Authority to levy taxes for specific purposes	Y	
Fees for water, sewer, gas or electric services	Y	Collier County provides utilities
Impact fees for new development	Y	Residential and commercial impact fee rates updated May 2026
Incur debt through general obligation bonds	Y	
Incur debt through special tax bonds	Y	
Incur debt through private activity bonds	Y	
Withhold spending in hazard prone areas	N	
South Florida Water Management District Cooperative Funding Program	Y	



GOALS AND OBJECTIVES



Goals and Objectives

Goal 1 – Reduce vulnerability and exposure to flood hazards in order to protect the health, safety and welfare of residents and guests.

Objective 1.1: Maintain a database of flood problems and hazards.

Objective 1.2: Maintain a database of repetitive loss claim history and mitigation activities.

Objective 1.3: Review the Growth Management Plan, Land Development Code, and Ordinances for compatibility with these goals and objectives, and revise where appropriate and financially feasible.

Objective 1.4: Develop more comprehensive evacuation plans.

Objective 1.5: Review the adequacy of emergency procedures for flood events and coastal storm surge through training and exercises.

Objective 1.6: Update FEMA designated flood zones based on the best available technical data and analysis.

Objective 1.7: Enforce the minimum code requirements of the National Flood Insurance Program as adopted by the Board of County Commissioners.

Objective 1.8: Conduct site investigations, research exposure and hazard data, and evaluate proposed modifications to repair and mitigate stormwater management problems.

Objective 1.9: Develop projects to reduce deficiencies within the stormwater management system as part of the Annual Update and Inventory Report (AUIR) and budget development process.



Goals and Objectives – Suggested Changes

Goal 1 – Reduce vulnerability and exposure to flood hazards in order to protect the health, safety and welfare of residents and visitors.

Objective 1.1: Identify and prioritize mitigation projects to reduce flood damage

Objective 1.2: Reduce damage to development through flood resilient strategies and measures

Objective 1.3: Preserve open space areas, especially sensitive natural areas



Goals and Objectives

Goal 2 – Encourage property owners, through education and outreach measures, to protect their homes and businesses from flood damage.

Objective 2.1: Educate property owners, including repetitive loss properties, on FEMA grant programs and other methods in order to mitigate possible flood damage.

Objective 2.2: Provide the current floodproofing and retrofitting information to property owners.

Objective 2.3: Effectively communicate flood risk to residents, businesses, contractors, realtors and prospective buyers.

Objective 2.4: Enhance community websites to provide comprehensive flood protection and flood preparedness information.

Goal 3 – Reduce the vulnerability of critical facilities and infrastructure from the effects of flood hazards.

Objective 3.1: Ensure protection standards for critical facilities meet Florida Building Code standards as adopted by the Board of County Commissioners.

Objective 3.2: Work with appropriate personnel to prioritize critical and essential facilities in need of protection from potential flood damage.

Objective 3.3: Implement flood mitigation measures or strategies, as necessary, to protect critical facilities.



Goals and Objectives

Goal 4 – Protect natural resources by employing watershed-based approaches that balance environmental, economic and engineering considerations.

Objective 4.1: Maintain and enforce regulations to protect and restore wetlands and ecological functions for long-term environmental, economic and recreational values.

Objective 4.2: Continue beach re-nourishment and dune construction programs for the protection of marine habitat, environmentally sensitive lands and other coastal resources.

Objective 4.3: Pursue water management approaches and techniques that improve water quality and protect public health.

Objective 4.4: Preserve and maintain open space in flood prone areas to reduce flood damage to buildings and to provide recreational benefits.

Objective 4.5: Continue to protect aquifers and environmentally sensitive lands from encroachment of development by requiring buffers and other setbacks mechanisms.

Goal 5 – Minimize the adverse impacts to surrounding areas and watershed functions.

Objective 5.1: Reduce stormwater runoff through adequate stormwater management, flood control, on-site retention and best management practices to mitigate impacts associated with incremental construction and redevelopment projects.

Objective 5.2: Evaluate funding mechanisms to increase stormwater capital improvement programs.

Objective 5.3: Minimize adverse impacts to the floodplain.



MITIGATION STRATEGIES



Mitigation Strategy

What?

- Development, prioritization, and implementation of feasible measures to prevent, prepare for, respond to, and recover from hazard events

Why?

- Reduce vulnerability and mitigate the impact of hazards on communities
- Prioritize actions and allocate resources effectively
- Collaborate with stakeholders, heighten awareness, and build capacity for continued hazard mitigation efforts

Mitigation vs. Maintenance

Mitigation is sustained action to reduce long-term risk & vulnerability

Ongoing maintenance can reduce risk but should not be part of the mitigation strategy

Reduce the impact
of hazards on
**existing
development**
+
Ensure **future
development**
occurs in a way that
minimizes
vulnerability

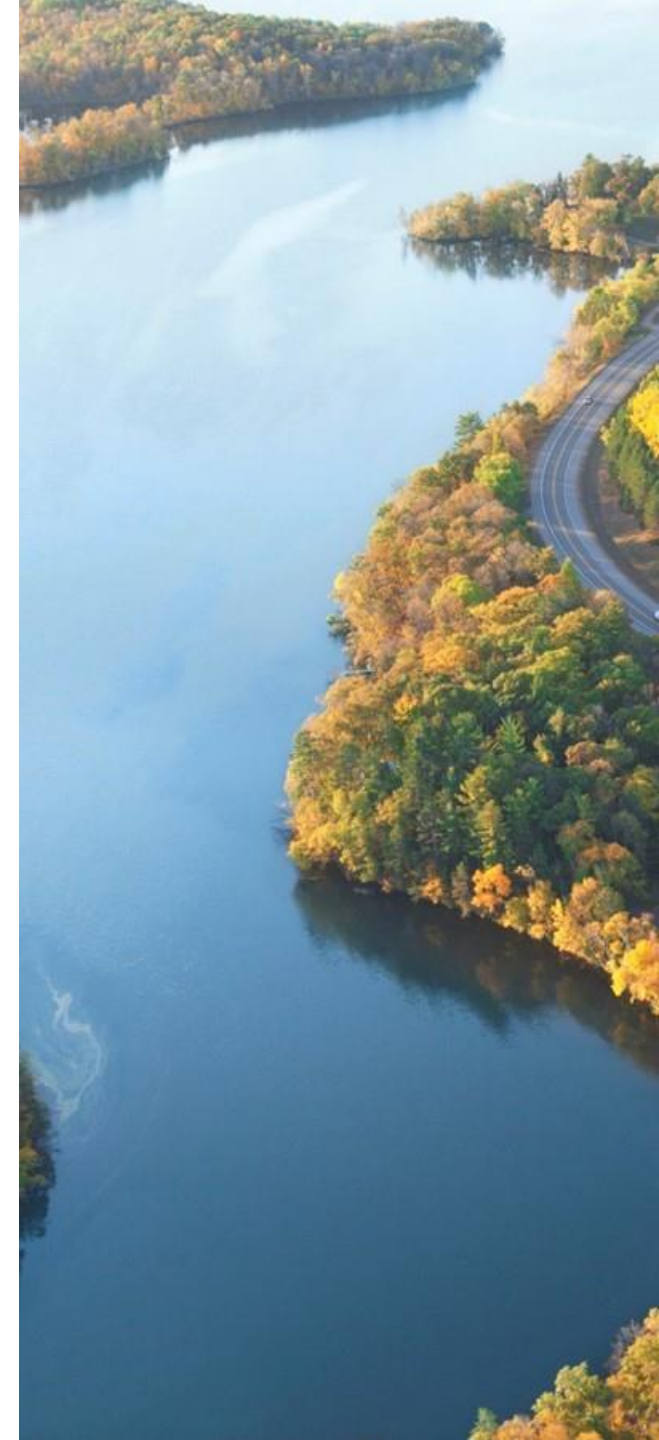


Mitigation Action Requirements

CRS requirement: At least one action for each identified goal. Maximum credit for having projects that cover 5 out of 6 FEMA Mitigation Categories

Mitigation Categories:

1. **Prevention** (land development plans & zoning, construction requirements)
2. **Property Protection** (elevation, floodproofing, backup generators)
3. **Structural Projects** (floodwalls, stormwater improvements, harden critical infrastructure)
4. **Emergency Services** (warning systems, response capacity & capability improvements)
5. **Natural Resource Protection** (wetland restoration, vegetative management, open space preservation)
6. **Public Education** (mailings, websites, social media campaigns, interactive map tools, targeted outreach and engagement)





Review Mitigation Actions – Not Mitigation

ID	Action	Related to Goal	Address Current Development	Address Future Development	Continued Compliance with NFIP	Mitigation Category
Existing Mitigation Actions Carried Forward from 2008 Plan						
1	Annually prepare and schedule FMP progress report by April of each year and recommended FMPC activity to the Collier County Board of County Commissioners (BCC) each year.	1	N	N	Y	Prevention
2	The Flood Damage Prevention Ordinance will be evaluated for amending as needed.	1, 3	Y	Y	Y	Prevention, Property Protection
3	Coordinate roadway stormwater maintenance programs to address stormwater flooding problems.	1, 3, 5	Y	Y	Y	Prevention, Property Protection, Structural Projects
4	Continue support of the Coastal Zone Management program.	4	Y	Y	N	Natural Resource Protection
5	Continue to implement policies requiring BMPs for erosion and sediment controls to comply with NPDES permit requirements.	4, 5	Y	Y	N	Prevention, Natural Resource Protection
6	Continue to annually fulfill all training and reporting requirements to be certified as a “Storm Ready” community.	1, 2	N	N	N	Emergency Services, Public Information and Outreach
7	Continue stormwater management and water quality programs to address BMP opportunities throughout the County. Track progress through the FMPC Action Report.	4, 5	Y	Y	N	Prevention, Natural Resource Protection



Review Mitigation Actions – Not Mitigation

ID	Action	Related to Goal	Address Current Development	Address Future Development	Continued Compliance with NFIP	Mitigation Category
Existing Mitigation Actions Carried Forward from 2008 Plan						
8	Annually prepare a budget to fully implement the Stormwater Capital Improvement Plan.	1, 5	Y	Y	Y	Prevention, Structural Projects
9	Prepare a public information meeting schedule annually and coordinate public information meetings for the FMPC.	1, 2	Y	N	Y	Public Information and Outreach
10	Enhance the County floodplain management website and hold meetings with federal/state/local organizations and agencies to identify flood hazard information and enhance flood hazard awareness.	1, 2	Y	N	Y	Public Information and Outreach
11	Coordinate with the local real estate boards to hold all hazards educational meetings.	1, 2	Y	N	Y	Public Information and Outreach
12	Annually visit each library branch containing the floodplain and flood insurance information by December of each year and update/replace materials as needed by the following February and report in April of the following year.	1, 2	Y	N	Y	Public Information and Outreach
13	Coordinate with other County departments to develop a program for addressing all technical assistance questions from the general public.	1, 2	Y	N	Y	Public Information and Outreach



Review Mitigation Actions – Not Mitigation

ID	Action	Related to Goal	Address Current Development	Address Future Development	Continued Compliance with NFIP	Mitigation Category
Existing Mitigation Actions Carried Forward from 2015 Plan						
1	Develop a Program for Public Information (PPI) involving Collier County, Marco Island, Naples and Everglades City.	2	Y	N	Y	Public Information and Outreach
2	Develop a comprehensive program to provide flood insurance information to property owners in the SFHA.	2	Y	N	Y	Public Information and Outreach
3	Support Stormwater Planning projects, starting with the top three: 1. Naples Park Stormwater Management Improvement, 2. Griffin Road Stormwater Management Improvement, and 3. Ridge Street Stormwater Management Improvement.	1, 5	Y	Y	Y	Prevention, Structural Projects
4	Maintain a professional landscaper certification program.	2, 4	Y	Y	Y	Public Information and Outreach
5	Utilize pollutant screening baskets in catch basins. ¹	4	Y	Y	N	Prevention, Natural Resource Protection



Review Mitigation Actions – Not Mitigation

ID	Action	Related to Goal	Address Current Development	Address Future Development	Continued Compliance with NFIP	Mitigation Category
Existing Mitigation Actions Carried Forward from 2015 Plan						
6	Develop a Low Impact Development (LID) Manual.	1, 4, 5	N	Y	Y	Prevention, Natural Resource Protection
7	Provide education/outreach for the Flood Watch Program (BCB Tool).	2	Y	N	Y	Public Information and Outreach
8	Maintain a “Localized Flooding Bubble Map”.	1	Y	Y	Y	Property Protection
9	Review the Land Development Code and Floodplain Damage Prevention Ordinance to propose improvements regarding floodplain management, as needed and as appropriate.	1, 4	Y	Y	Y	Prevention, Property Protection
10	Plan to obtain topographic information, including LiDAR in 10-15 year intervals.	1, 3	Y	Y	Y	Prevention, Property Protection



Potential Capital Improvement Projects

Stormwater Department

- SW Cross Street Culverts – Structural – Ongoing throughout the county
- Golden Gate City Outfall Replacements – Structural / Natural Resource Protection
- Poinciana Village Improvements – Preventive / Structural – Currently in construction
- Naples Manor Improvements – Structural
- Immokalee Improvements/ImmSIP – Preventive / Structural
- West Goodlette Frank Phase II – Structural
- Harbor Lane/Holiday Lane Brookside – Structural – Ready for construction next Spring
- Upper Gordon Basin, Goodlette-Frank Ditch A&B – Structural / Natural Resource Protection

**Scan the QR code to submit
your recommendations**

Collier County FMP Mitigation
Strategy Form





Potential Capital Improvement Projects

Public Utilities

- Collier County Wastewater Inflow and Infiltration Mitigation Project – Project will identify points of vulnerability in the wastewater collection system to better protect from inundation
- Pump Station Rehabilitation Project

Coastal Zone Management

- South Marco Beach Renourishment Project – Will involve placement of approximately 141,000 tons of beach quality sand
- Hurricane Milton Planting Project – Designed to prevent beach erosion and protect dune systems along Collier County shoreline
- Naples Beach Renourishment Project – Will involve placement of approximately 208,200 tons of beach quality sand

**Scan the QR code to submit
your recommendations!**

Collier County FMP Mitigation
Strategy Form



NEXT STEPS





Project Schedule

March	Project Kickoff Meetings Working Group & Public Meetings
August	Meeting 2 FMP Risk Assessment Review
September	Meeting 3 FMP Capability & Mitigation Strategy
October	Draft Plan Review Meetings Working Group & Public Meetings
November	Final Plan



Next Steps

WSP team action item:

- Schedule final Working Group and public meetings

Requests for FMPWG input:

- Review draft Risk Assessment
- Review existing goals and objectives
- Indicate new mitigation projects by October 1st

Send comments to
WSP by Sept 25th

www.CollierCountyFL-FMP.com

Collier County FMP Mitigation
Strategy Form

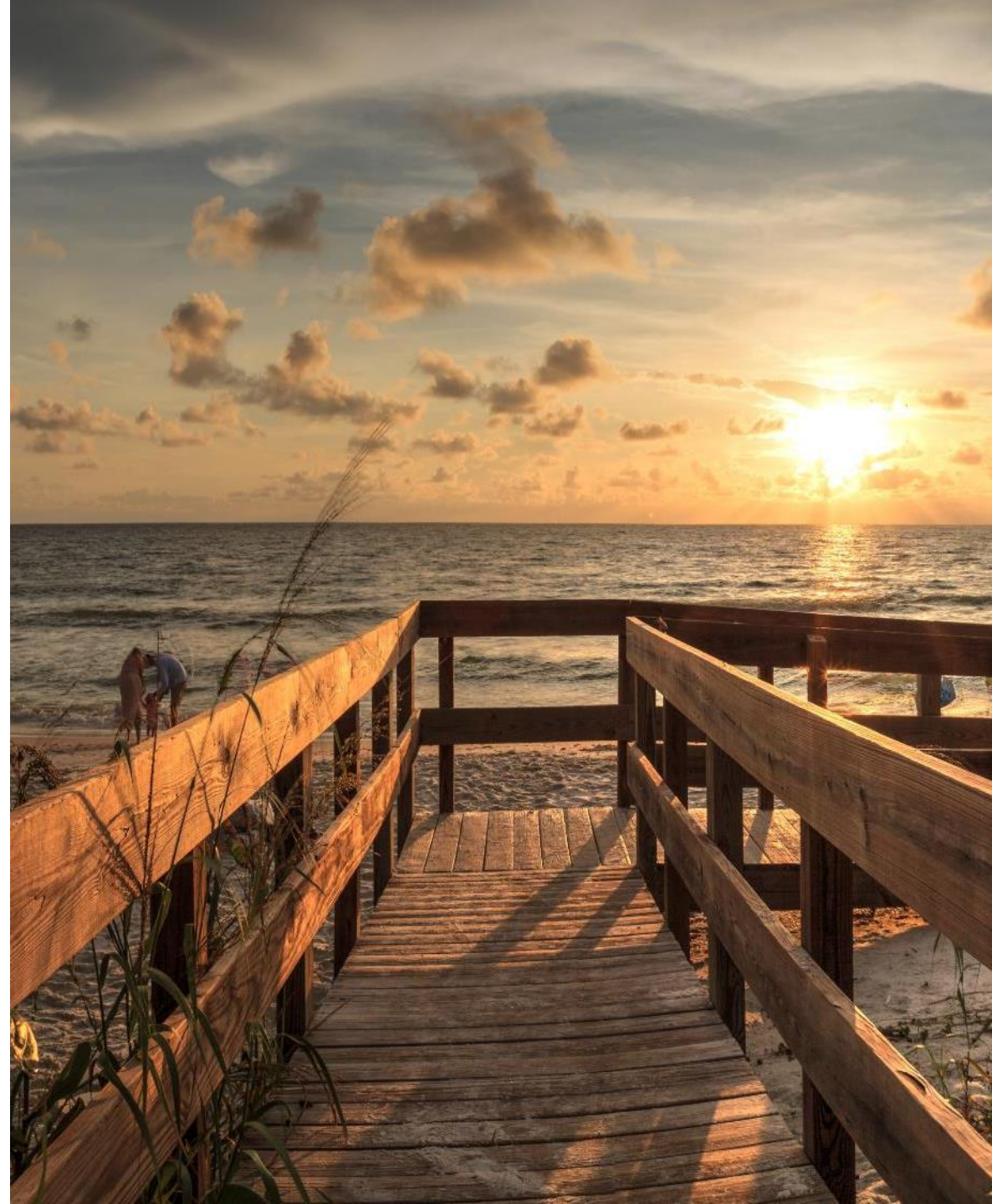




The Watershed is the Infrastructure

A countywide decision platform for coastal resiliency

Presentation by: Dennis P. Vasey



THANK YOU

