

Florida Silver Jackets: Collaboratively Working Towards Resiliency



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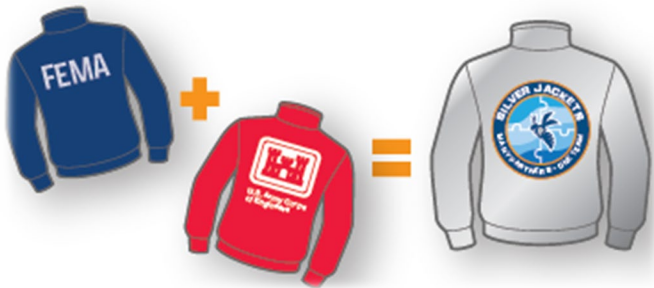


SILVER JACKETS

MANY PARTNERS • ONE TEAM

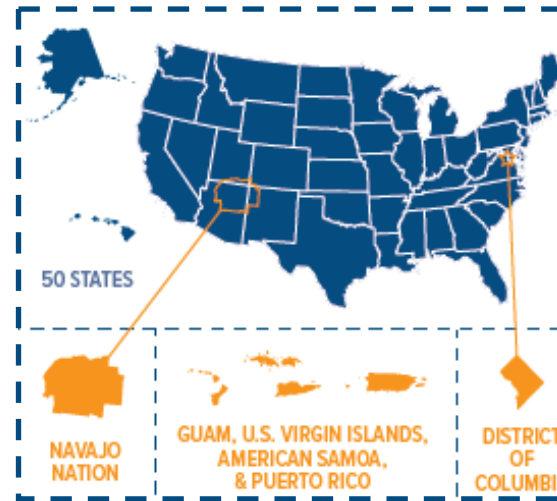
THE NAME

Agencies can be recognized by jacket colors. "Silver Jackets" team represents the coming together of many agencies to achieve a better outcome as one.



SILVER JACKETS NOW

56 Teams representing:
States
Territories
Wash D.C.
Navajo Nation



HOW IT WORKS

NO SINGLE AGENCY HAS ALL THE ANSWERS BUT EACH HAS ONE PIECE OF THE PUZZLE





SILVER JACKETS

MANY PARTNERS • ONE TEAM

INTERAGENCY SILVER JACKETS TEAMS are led by **state, tribe, or territory** and responsible for setting the **team's priorities** and facilitate cooperation and collaboration among partners to find innovative and creative solutions needed to make communities more resilient to flooding, droughts, and other natural hazards.

USACE ROLE funded by Institute of Water Resources
National Flood Risk Management Program
COORDINATION SUPPORT provided by USACE staff,
alongside the state, tribe, or territory team lead.

SILVER JACKETS PROJECT TEAMS provide technical assistance to find solutions to flood, drought, and other natural hazards.

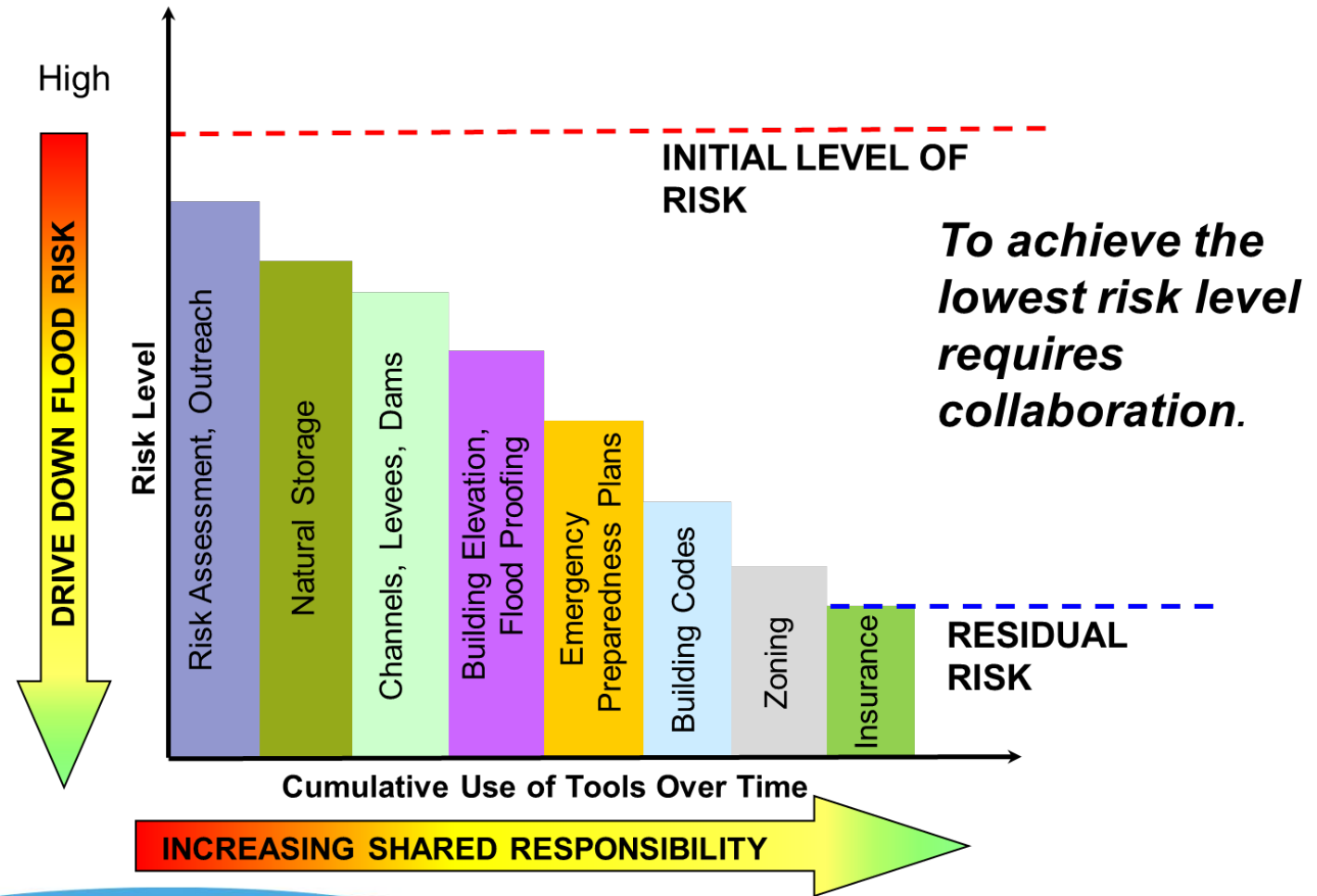
Potential project ideas from state, tribe, or local entities are provided to the Interagency Silver Jackets Team for selection to develop full Silver Jackets Project Proposal.

USACE ROLE funded through Flood Plain Management Services program
PROPOSAL SUBMITTAL to USACE Headquarters
PROJECT SUPPORT via team facilitation, planning and technical abilities, and information sharing

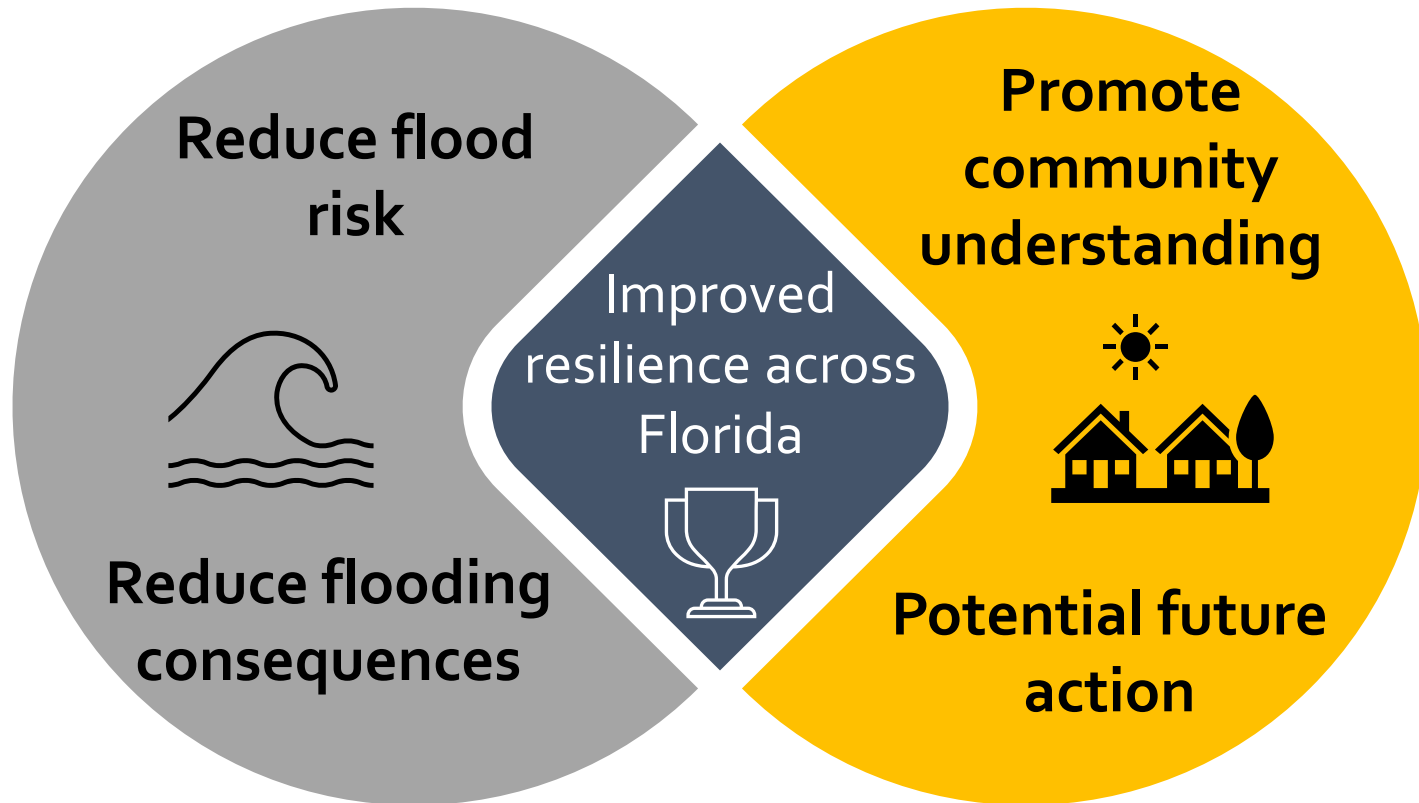
Silver Jackets Collaboration to Reduce Flood Risk

Providing opportunities to improve community resilience with Silver Jackets partnerships:

- Collaborative resource sharing and leveraging capabilities
- Integrated solutions
- Ability to include or enable flood risk management action



Silver Jackets PROJECT Teams



Activities & Products
Workshops
Hazard educational materials and signage
Vulnerability assessment
Hydrology and Hydraulic modeling
Guides, Pamphlets, and Press Releases
Regional water plans
Resilience studies
Assessment tools and processes

Addressing Resilience through Silver Jackets

Florida Silver Jackets Team

- *Quarterly webinars* sharing/highlighting efforts by partners in Florida and surrounding states
- *Team meetings* to share opportunities, leverage resources, and collaborate on other projects (can be non-Silver Jackets projects)

Florida Silver Jackets Projects

- Collective partner involvement to reach communities and address needs to improve resilience

Silver Jackets Project: Florida Basin-Level Flood Assessment Inventory

Project Goals: comprehensively inventory the status of flood data acquisition and assessment efforts at the basin-level across the state.

Products:

- **State-wide database** - Inventory of flood models and analysis efforts in Florida
- **Interactive tool for communities to access information** - GIS dashboard to determine what level (HUC 8-12) of modeling and types of modeling available.



Silver Jackets Project: Florida Basin-Level Flood Assessment Inventory

Model outputs of interest (Drivers):

- Groundwater (305)
- Rainfall/Surface Flow (532)
- Storm Surge (134)
- Tidal (106)

<u>PROJECT SUITABILITY</u>	<u>Identification of appropriate use(s) of model</u>
Catchment Hydrology	Analysis of drainage basin hydrology
Flood Damage Assessment	Quantification of loss resulting from a flood event
Flood Monitoring	Tracking rise and fall of water levels
Flood Related Engineering	Detailed analysis to inform project design and implementation
Flood Risk Assessment	Quantification of flood risk
Floodplain Ecology	Characterization of biotic and abiotic processes in floodplains
Real-time Flood Forecasting	Short-term prediction of evolving flood conditions
River Bank Erosion	Quantification of erosional processes along a waterway
River System Hydrology	Analysis of inflows and outflows within a river system
Scenario Modeling	Analysis of the effects of specific conditions on flooding
Sediment Transport	Quantification of the movement of sediments
Water Resources Planning	Analysis of water supply & demand, and potential impacts of their imbalance

Silver Jackets Project: Florida Basin-Level Flood Assessment Inventory

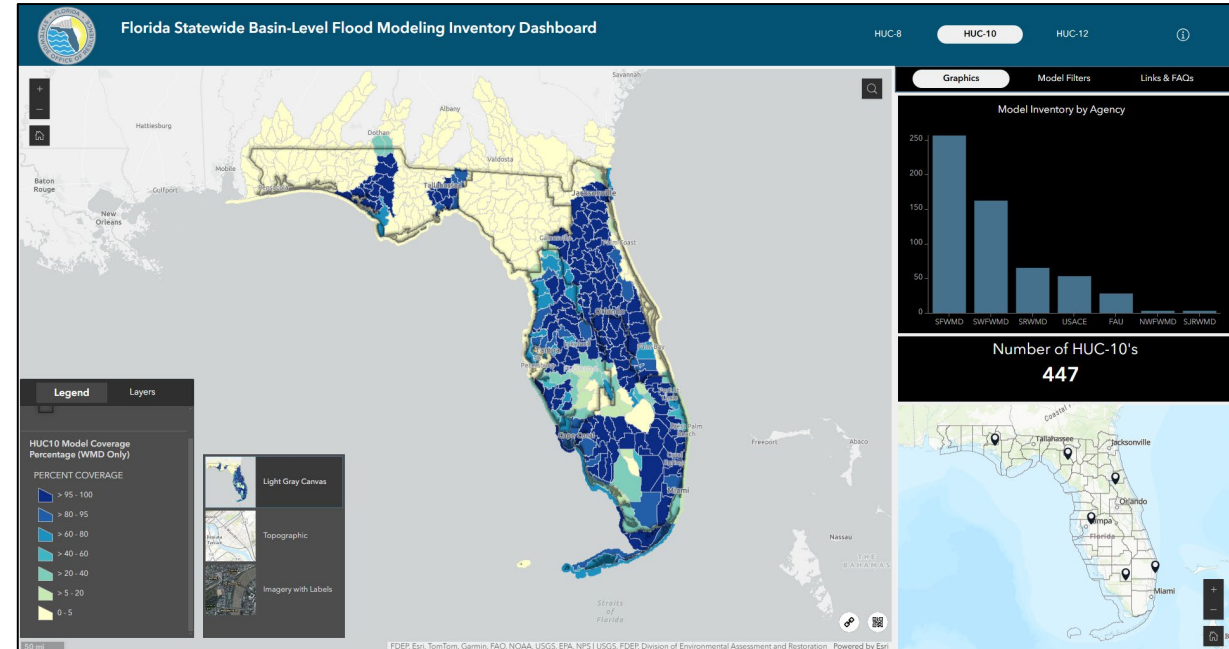
Resilience through flood modeling

Project Benefits:

- Centralized location of flood modeling
- Identifying resources to prioritize new flood models

Next steps:

- Completion of dashboard for public use (almost there!)
- Guidebook for dashboard use



[Florida Basin-Level Flood Assessment Inventory](#)

Silver Jackets Project: Hydrologic and Hydrodynamic modeling

Lake Martin Flood Management Study

Project Goals: Provide technical hydrologic and hydrodynamic modeling to communities at risk of rainfall flooding and storm surge

Products:

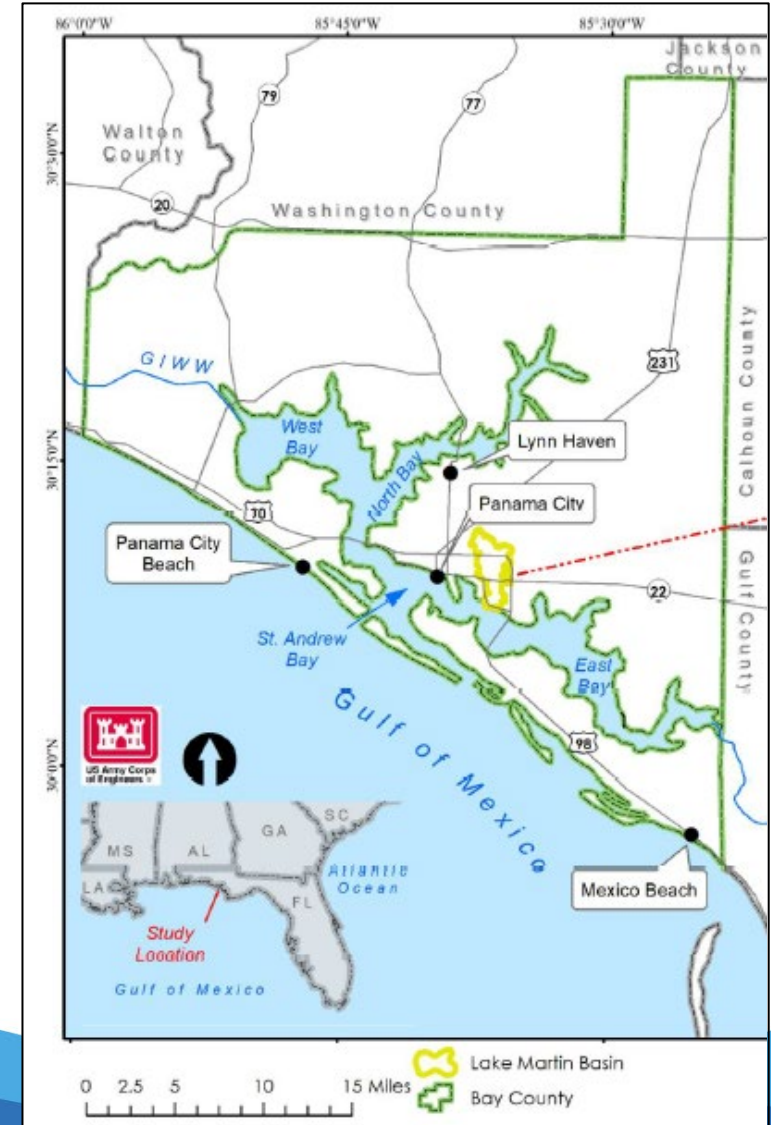
- Modeling output of flood risk in communities
- Recommendations to reduce flood risk



Roadway overtopping at East 5th St. during September 2020 flood event. Photo courtesy of City of Springfield.



Robindale neighborhood during April 2014 flood event. Photo courtesy of City of Springfield.



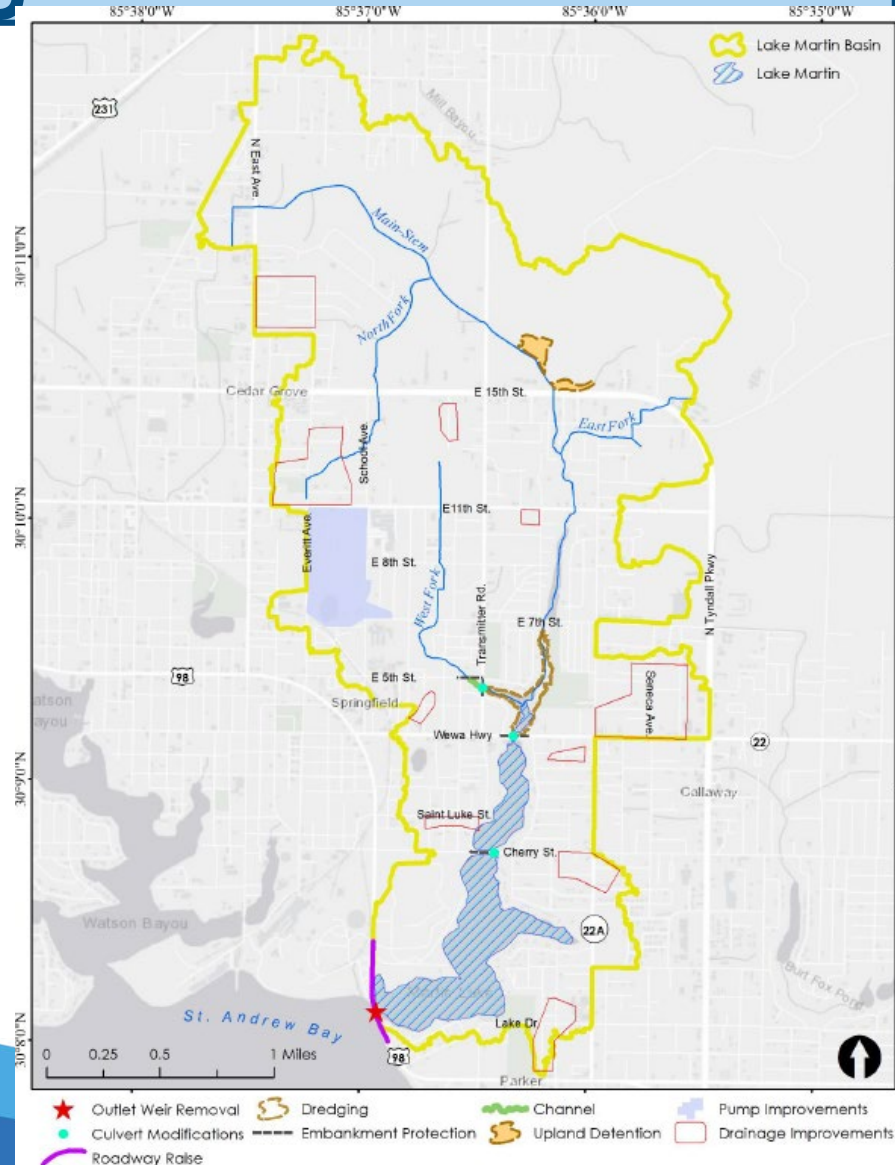
Silver Jackets Project: Hydrologic and Hydrodynamic modeling

H&H modeling:

- Flood risk management measures analyzed at locations identified by municipalities

Findings:

- Identification of areas most vulnerable within study basin
- Acknowledgement/recognition of non-structural floodproofing is best solution in several areas
- Recommendations to improve drainage
- Recognize efforts that would not provide substantial benefits



Silver Jackets Project: Hydrologic and Hydrodynamic modeling

Astor, Florida Flood Management Study

Project Goal: Provide technical hydrologic and hydrodynamic modeling to Astor to assist Lake County in the identification of long-term structural and nonstructural flood risk management measures to alleviate flooding

Products:

- Preliminary modeling effort to represent existing, future, and alternative basin conditions through analysis of a suite of frequency flood profiles.
- Engineering documents and modeling output assessing areas vulnerable to flooding and proposed structural measures (culverts)



High water mark in Astor in December 2022 after October 2022 Hurricane Ian and November 2022 Hurricane Nicole. Photo courtesy of Lake County.

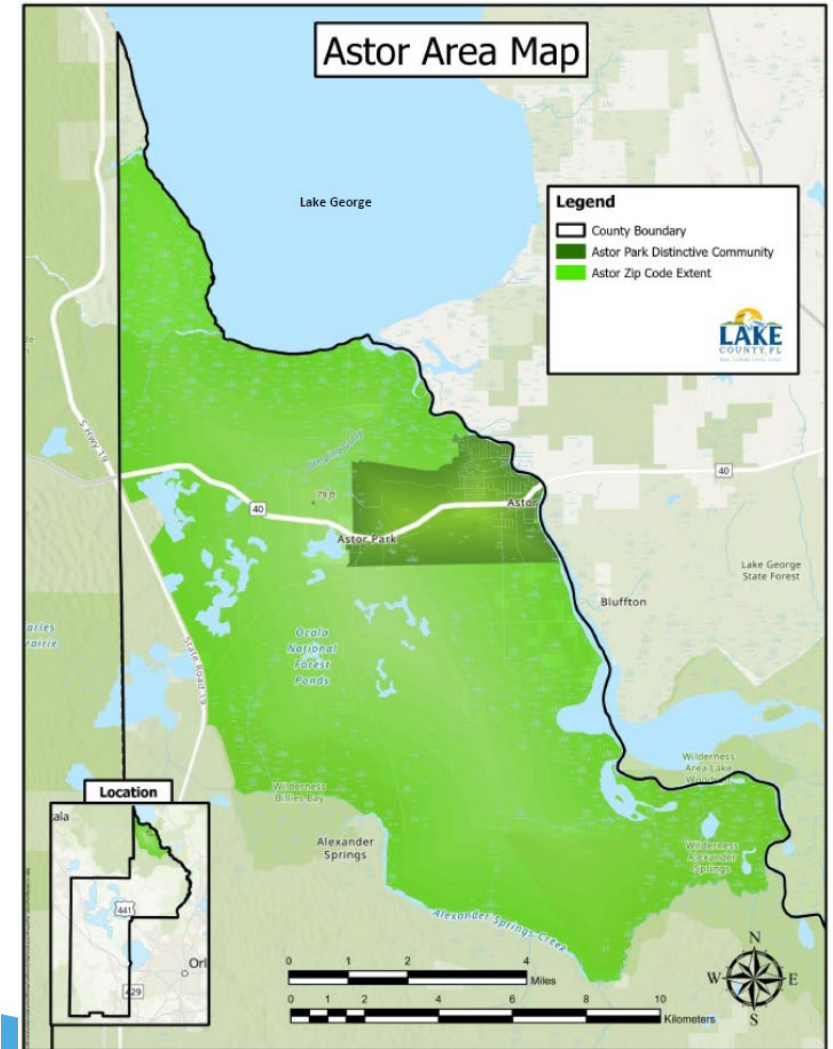


Figure 1: Unincorporated area of Astor map showing boundaries and major bodies of water.

Silver Jackets Project: Vulnerability Assessment

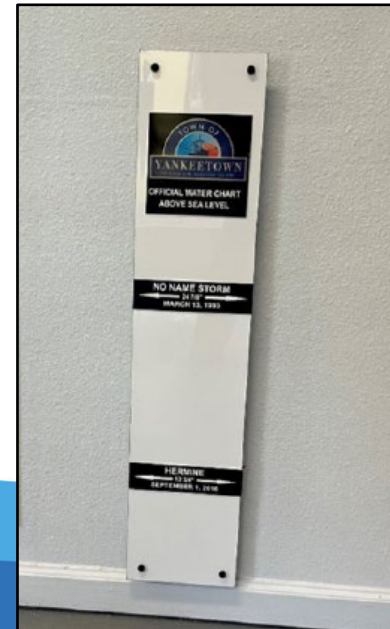
Project Goal: Develop Yankeetown Vulnerability Assessment

Products:

- Analysis of the town's vulnerabilities to sea level rise, extreme tides, storm surge, and rainfall

Benefits to Yankeetown:

- Communities can become more prepared and resilient to hazards related to extreme weather and climate
- Completing the vulnerability assessment according to criteria outlined in Florida statutes qualifies the for additional FDEP project funding



Silver Jackets Project: Vulnerability Assessment

Critically or Regionally Significant Assets Inventory	
Transportation Assets and Evacuation Routes	Major Roadway
	Major Roadway
	Evacuation Route
	Bridge
	Bridge
	Marina
Critical Infrastructure	Drinking Water Facility
	Drinking Water Facility
	Military Installation
	Communication Facility
Critical Community and Emergency Facilities	Emergency Operation Center
	Fire Station
	Emergency Medical Service Facility
	Local Government Facility
Natural, Cultural, and Historical Resources	Conservations Lands
	Conservations Lands
	Historical and Cultural Assets

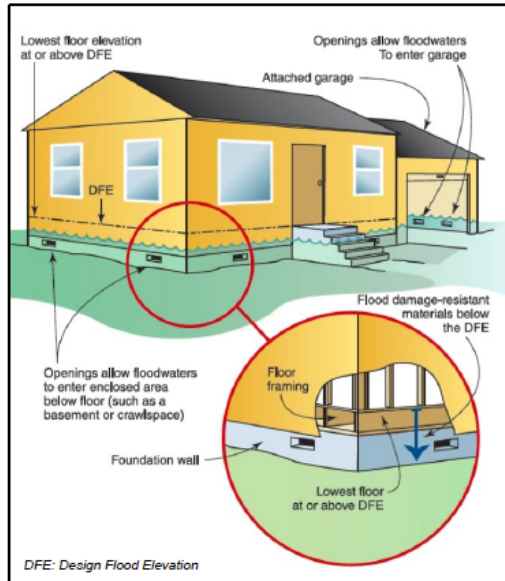


Table 16: Yankeetown Critical Infrastructure Sensitivity Analysis for NOAA MHHW Plus SLR Scenarios

Critical Infrastructure Inundation Scenario Sensitivity Analysis					
Asset Name	Mean Higher High Water (MHHW)	MHHW + NOAA Inter Low SLR in 2040	MHHW + NOAA Inter High SLR in 2040	MHHW + NOAA Inter Low SLR in 2070	MHHW + NOAA Inter High SLR in 2070
Water Treatment Plant	LOW	LOW	LOW	LOW	LOW
U.S. Coast Guard Station	LOW	LOW	LOW	LOW	MED
Yankeetown Fire and Rescue (Fire Station)	LOW	LOW	LOW	LOW	LOW
Yankeetown Fire and Rescue (Emergency Medical Service Facility)	LOW	LOW	LOW	LOW	LOW
County Road 40 Bridge	MED	MED	MED	MED	MED
Allen Park Road Bridge	MED	MED	MED	MED	HIGH
Yankeetown Marina	LOW	LOW	MED	MED	HIGH
Fisher's Marina and Campground	MED	MED	MED	MED	HIGH
U.S. Postal Service	LOW	LOW	LOW	LOW	LOW
Yankeetown Town Hall (Emergency Operations Center)	LOW	LOW	LOW	LOW	LOW
Yankeetown Town Hall (Local Government Facility)	LOW	LOW	LOW	LOW	LOW
Withlacoochee Gulf Preserve Ellie Schiller Education Center	LOW	LOW	LOW	LOW	MED
Eugene Knotts House	LOW	LOW	LOW	LOW	MED

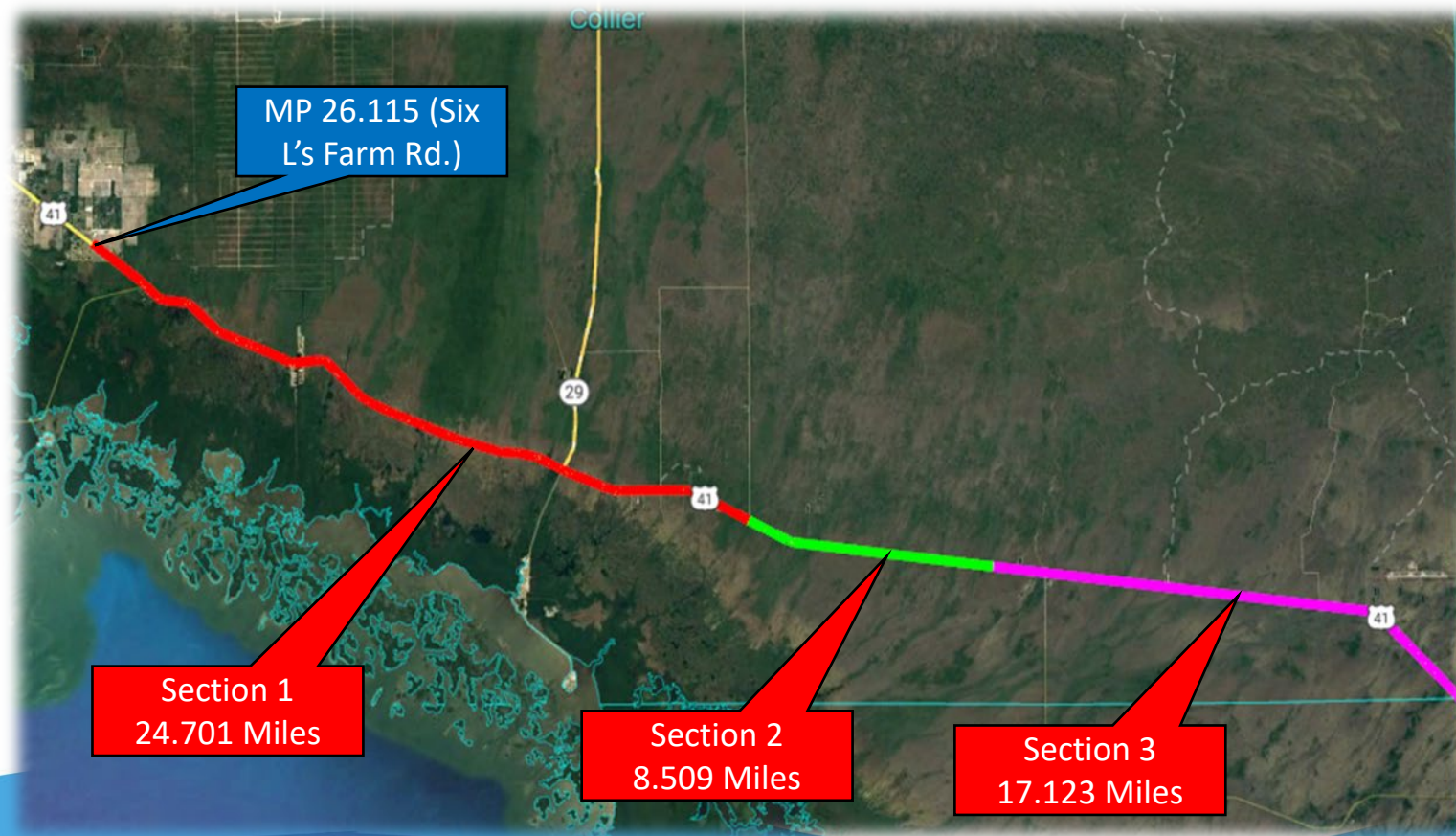
Silver Jackets Projects for Resilience

US 41 Collier County Resiliency

Project Goals: Develop strategic planning for US 41 in Collier County

Products:

-Project memo to FDOT with stakeholder recommendations



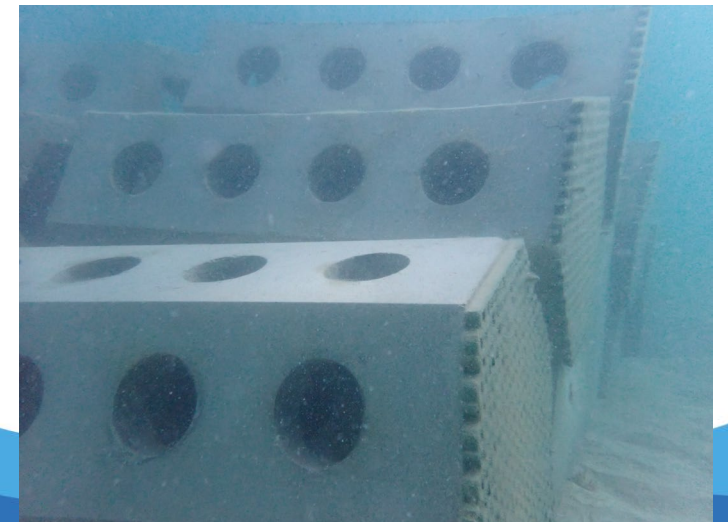
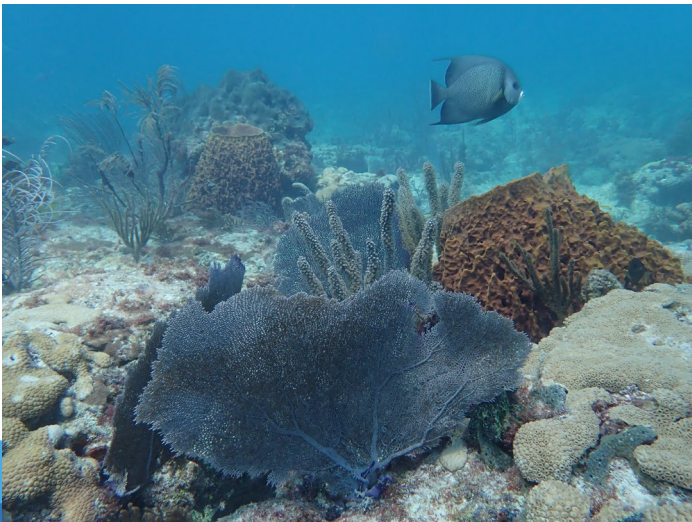
Silver Jackets Projects for Resilience

Incorporating Corals in Hazard Mitigation Grant Program funding

Project Goals: Establish framework for community planners to use natural and hybrid coral reefs as flood mitigation features

Products:

- Florida-centric guidance
- FAQs



How can you be involved?

- Florida Silver Jackets Team has quarterly meetings and webinars!
 - Guest Speakers - you can request a topic or speaker.
- Submit ideas for Interagency FPMS (Silver Jackets) projects!
- Any other requests?
 - Maximize collaboration between many agencies.



Scan this QR code to be linked
to the Silver Jackets Website



SILVER JACKETS

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Questions?

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