



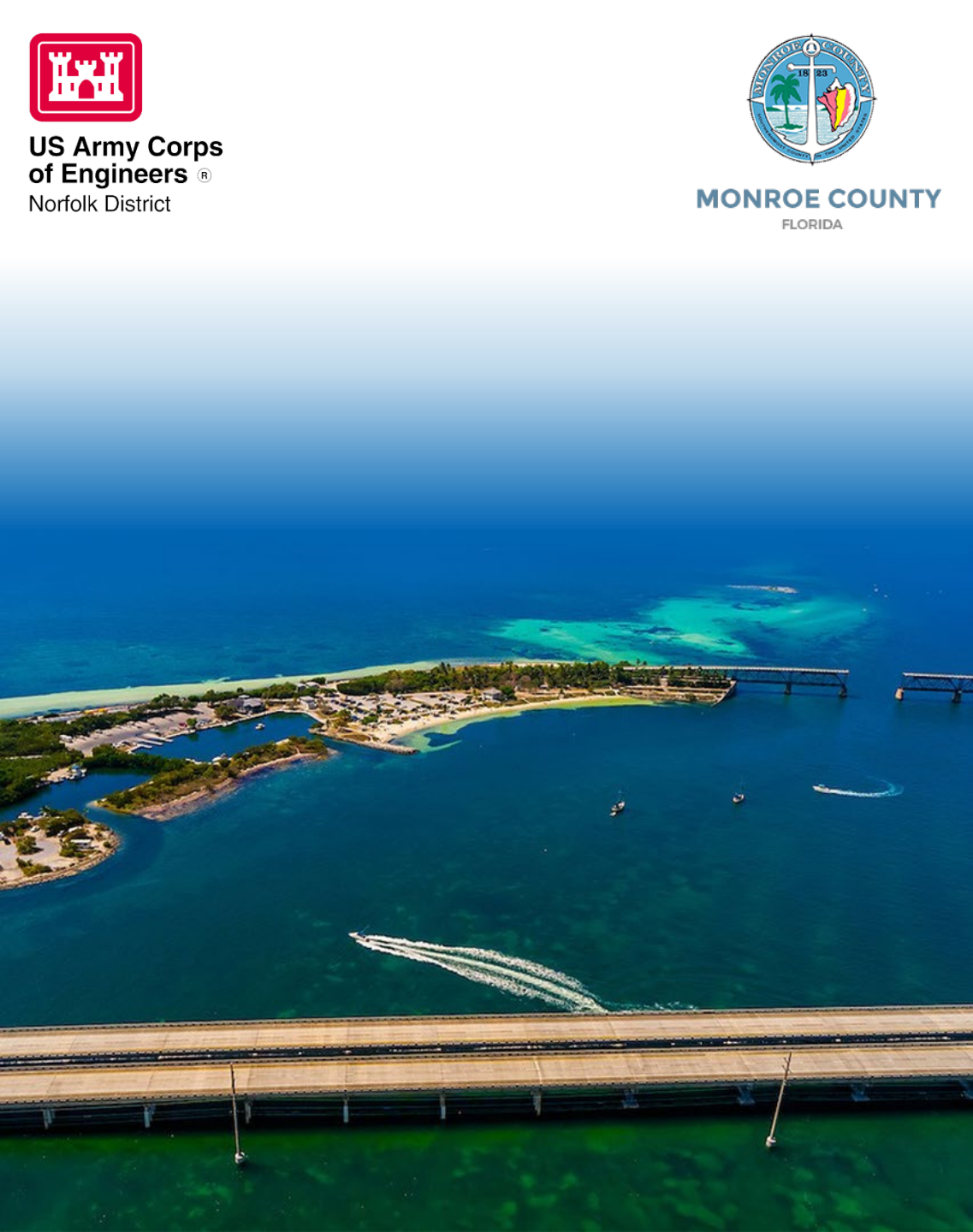
**US Army Corps
of Engineers**®
Norfolk District



MONROE COUNTY
FLORIDA

FLORIDA KEYS COASTAL STORM RISK MANAGEMENT FEASIBILITY STUDY

Rachel Haug
Senior Planner and Study Lead
Norfolk District
U.S. Army Corps of Engineers



PURPOSE OF PRESENTATION

- Review details of the Recommended Plan
- Outline the path forward to end of study
- Outline the project design and implementation process



STUDY PURPOSE

The Florida Keys Coastal Storm Risk Management Study is investigating solutions that will improve resiliency by reducing damage and risk from impacts of coastal storms taking into account sea level rise.



STUDY SCOPE

An aerial photograph of a tropical island, likely in the Florida Keys. The island is small and rectangular, with a sandy beach and some buildings. A long bridge extends from the island across the water. The water is a vibrant turquoise color, and there are several small boats visible. The sky is a clear, deep blue.

- The Florida Keys Coastal Storm Risk Management Study will be completed in 3 years and for \$3 million
- The feasibility study is 100% federally funded
- The study area includes the entire Florida Keys including all municipalities.
- The study will recommend a project to be constructed
- A Feasibility Report documents the Recommended Plan and includes an Environmental Impact Statement

3 Year SMART Feasibility Study Process: Florida Keys CSRM



RECOMMENDED PLAN



The Recommended Plan Includes:

- U.S. 1 shoreline stabilization (revetment) in 6 areas
- Nonstructural measures for residential and non-residential structures at risk:
 - Elevation of residential properties
 - Floodproofing of commercial properties
 - The plan does not include structure acquisition
- Floodproofing critical infrastructure at risk

Estimated Project Costs and Benefits:

- Total Estimated Project Cost (65/35 cost share):
\$2,772,359,000
 - 65% federal funding of project = \$1,802,033,000
 - 35% non-federal funding of project = \$970,326,000
- Total Average Annual Benefit: \$131,603,000
- BCR is 1.5

NONSTRUCTURAL MEASURES INCLUDED IN RECOMMENDED PLAN

Reduce storm damage to structures identified at risk by implementing one of the following measures based on structure type and risk:

- Elevation of residential structures
 - 4,698 structures



- Floodproofing of commercial properties and critical infrastructure
 - 1,052 commercial structures
 - 53 critical infrastructure buildings



An aerial photograph of a coastal area, likely in Florida, showing a long bridge spanning across a body of water. The water is a vibrant blue-green color, and there are some small islands or peninsulas visible. The sky is clear and blue. The text 'NONSTRUCTURAL MEASURES IN RECOMMENDED PLAN' is overlaid on the left side of the image in large, white, bold, sans-serif font.

NONSTRUCTURAL MEASURES IN RECOMMENDED PLAN

Location	Elevation	Floodproofing	Critical Infrastructure Floodproofing	Total NS
City of Key Colony Beach	30	7	2	39
City of Key West	2,028	382	12	2,422
City of Layton	31	9	1	41
City of Marathon	562	225	14	801
Unincorporated Monroe County	1,839	348	15	2,202
Village of Islamorada	208	81	9	298
Grand Total	4,698	1,052	53	5,803

NONSTRUCTURAL COST DISTRIBUTION

Location	Elevation	Floodproofing	Critical Infrastructure Floodproofing	Total NS
City of Key Colony Beach	\$14,842,720	\$2,662,316	\$911,396	\$18,416,432
City of Key West	\$1,003,367,893	\$145,286,365	\$5,468,377	\$1,154,122,635
City of Layton	\$15,337,478	\$3,422,977	\$455,698	\$19,216,153
City of Marathon	\$278,053,627	\$85,574,430	\$6,379,774	\$370,007,830
Unincorporated Monroe County	\$909,858,755	\$132,355,118	\$6,835,472	\$1,049,049,344
Village of Islamorada	\$102,909,527	\$30,806,795	\$4,101,283	\$137,817,605
Grand Total	\$2,324,370,000	\$400,108,000	\$24,152,000	\$2,748,630,000

The costs on this slide are estimates that are based on an average cost per structure for each nonstructural measure category.



NON-FEDERAL SPONSOR RESPONSIBILITIES FOR PROJECT IMPLEMENTATION

- ❑ Monroe County is the non-federal sponsor
- ❑ Project Partnership Agreement (PPA) will be executed between USACE and the County following a construction new start designation from Congress.
 - PPA will include all project elements and outline the sponsor's financial commitment to construction of the project.
 - Could occur as early as FY24 but would be requested each following year not received.
- ❑ The County may seek funds from other non-federal sources for their 35% share of the project implementation cost.
 - PPA will only include USACE and Monroe County
- ❑ FY23 budget request will be submitted for federal funding needed to begin the preconstruction engineering and design for the U.S. 1 Revetments
 - Design agreement will be signed with County if FY23 budget request is appropriated

NEXT STEPS

Date	Task
February-April 2021	Internal USACE technical review of Final Feasibility Report and Integrated Environmental Impact Statement (EIS)
Late April 2021	Submit Final Feasibility Report and Integrated EIS submitted to agency headquarters for policy review
Late June 2021	Release Final Feasibility Report and Integrated EIS submitted to agency headquarters for public review
September 2021	Chief of Engineer's Report and study complete
WRDA 2022	Congress authorizes project
2023	Preconstruction Engineering and Design begins, Design Agreement is signed
2024	PPA Executed
2025	First construction contract award
2035	All construction complete

QUESTIONS, COMMENTS & DISCUSSION

