St. Augustine, Florida Back Bay
Coastal Storm Risk Management (CSRM) Feasibility Study

MONTHLY PLANNING MEETING

APRIL 2023

PLEASE MAKE SURE YOUR PHONE AND/OR COMPUTER IS MUTED.

CITY OF ST AUGUSTINE EST. 1565

MEETING AGENDA

- ❑ Introductions
- ❑ Study Overview
- ❑ Discussion of Key Ongoing Activities (Study Status)
- ❑ Schedule Review (30/60/90 Day Look-Ahead)
- ❑ Upcoming Public Meetings/Engagements
- ❑ Questions/Comments (Federal Agencies, State Agencies, Sponsor)
- ❑ Public Comments

BACKGROUND

- The Corps Feasibility Study is typically a formal ***three-year process*** used to ***identify water resource problems***, ***formulate and evaluate solutions***, ***determine federal interest*** and ***prepare recommendations***. Process is initiated when a local sponsor asks USACE to address a particular issue ***through a formal letter to the district commander (current Jacksonville District Commander, COL James Booth)***.

- Studies are ***cost shared*** with a Sponsor (i.e., State, Tribe, county, city, town, etc.) that has the ***legal and financial authority*** and capability to ***provide funding and real property requirements*** needed for a study and future project.

- Before USACE becomes involved in a study, two types of Congressional actions are required:
  - ***Study Authority*** (typically in Water Resource Development Act (WRDA))
  - ***Federal Appropriations*** (Annual President's Budget, Work Plans, Supplementals)

STUDY AUTHORITY AND FUNDING

House Resolution 2646 (June 21, 2000): St. Johns County, Florida

Resolved by the Committee on Transportation and Infrastructure of the United States House of Representatives, That in accordance with Section 110 of the River and Harbor Act of 1962, the Secretary of the Army, acting through the Chief of Engineers, is ***requested to survey the shores of St. Johns County***, Florida, with particular reference to the advisability of providing beach erosion control works in the area north of St. Augustine Inlet, the shoreline in the vicinity of Matanzas Inlet, and adjacent shorelines, as may be necessary in the interest of ***hurricane protection, storm damage reduction, beach erosion control, and other related purposes***.

Total Study Cost: $3M (Split 50/50) to date $1.5M Fed Received and $1.5M Non-Fed

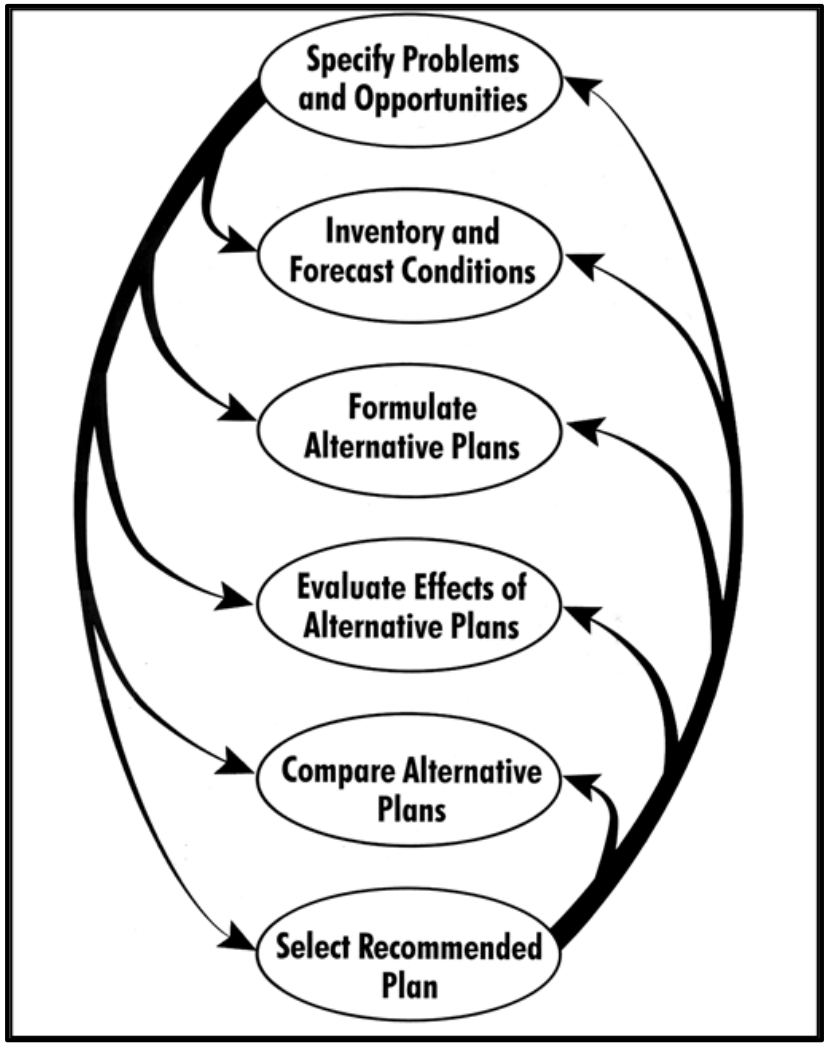
SMART PLANNING STUDIES

- Since 2012, USACE has implemented a new study process – ***SMART*** (Specific, Measurable, Attainable, Risk Informed, Timely) Planning – for conducting civil works feasibility studies.

- The goal of this new process is to:
  - - complete each study within ***three years***
  - - complete at a cost of no more than ***$3 million***
  - - complete with ***three levels of the Corps engagement***

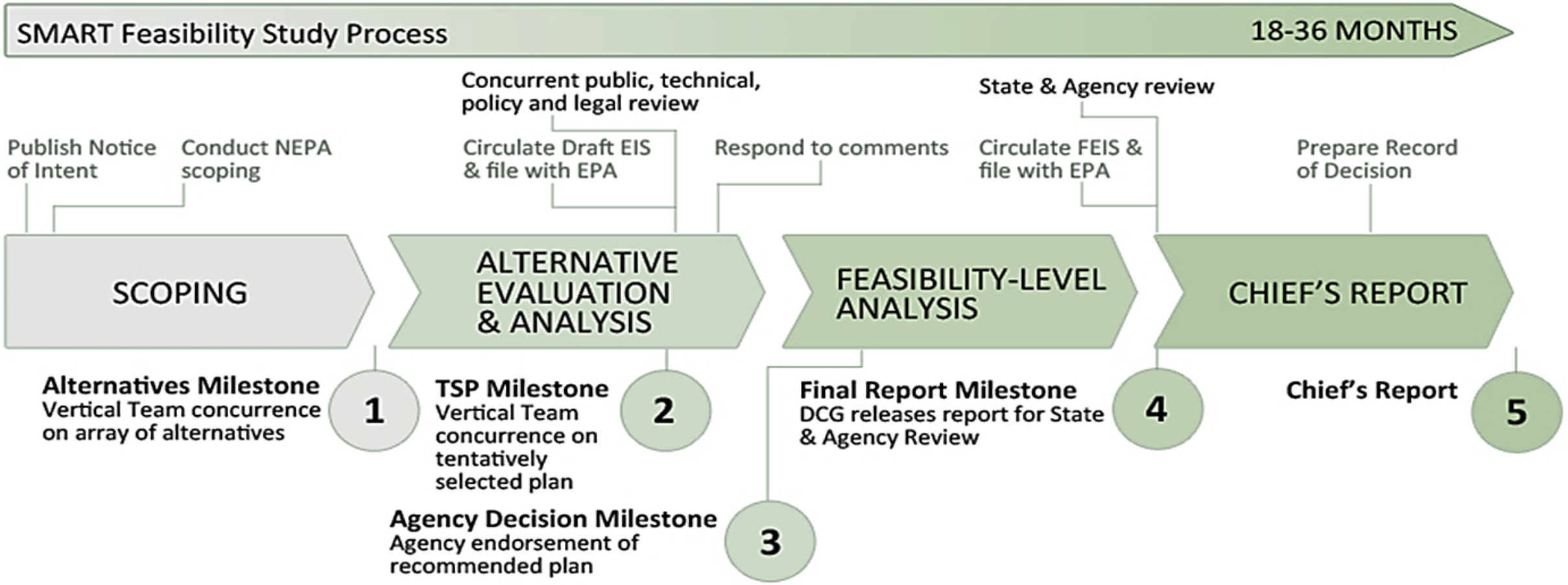
- Study begins when Corps and non-Fed sponsor sign a feasibility cost share agreement (FCSA).

- Study ends when the Chief of Engineers signs a "***Chiefs Report***" and transmits it to the Assistant Secretary of the Army for Civil Works (ASA-CW), then to the Office of Management and Budget (OMB), then to Congress for authorization to construct in a future WRDA Bill.
- Waiver required to exceed $3M, 3-years

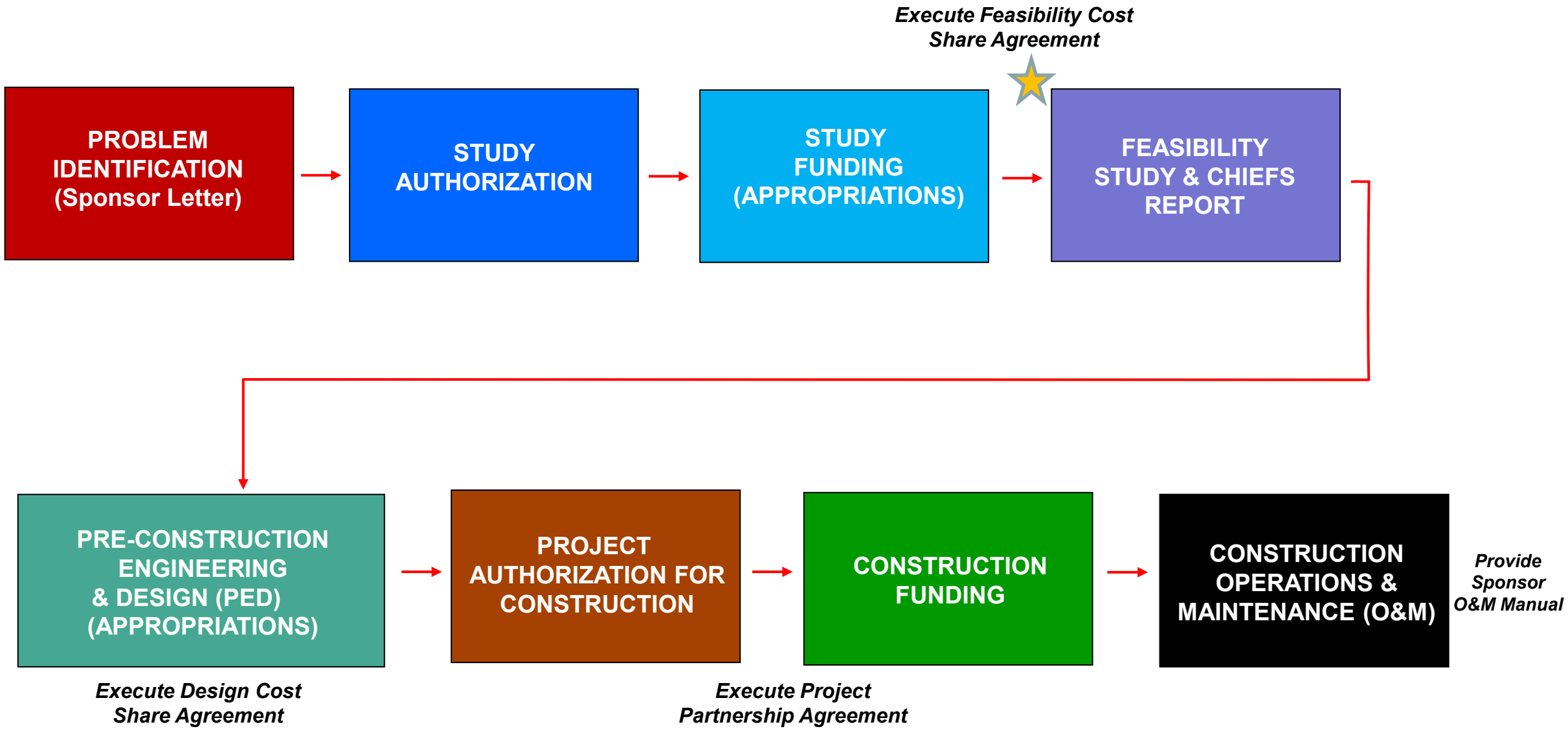


STUDY TIMELINE

*The study process includes **four separate phases** and **five key decision milestones***



PROJECT IMPLEMENTATION

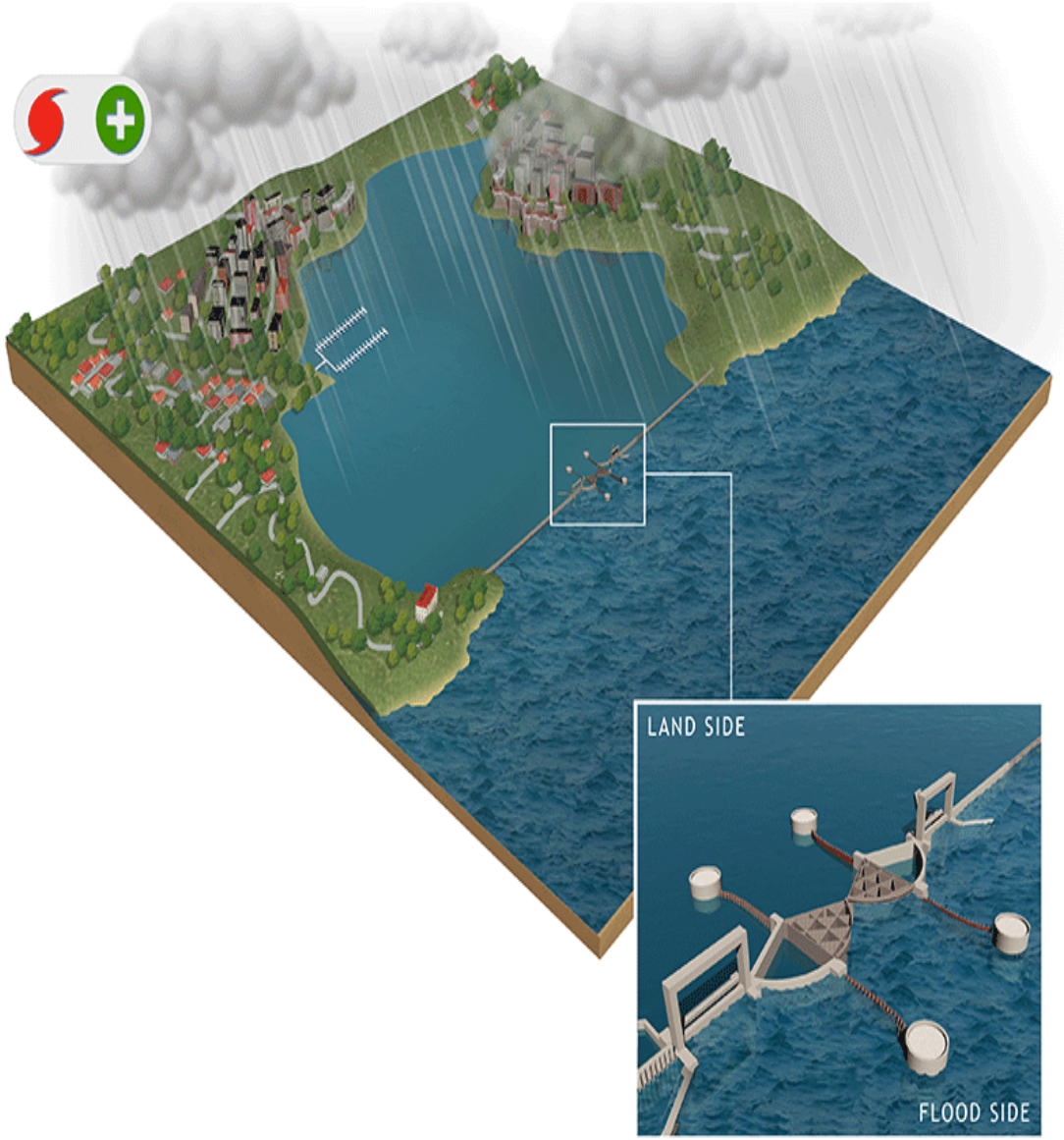


ALTERNATIVES EVALUATION

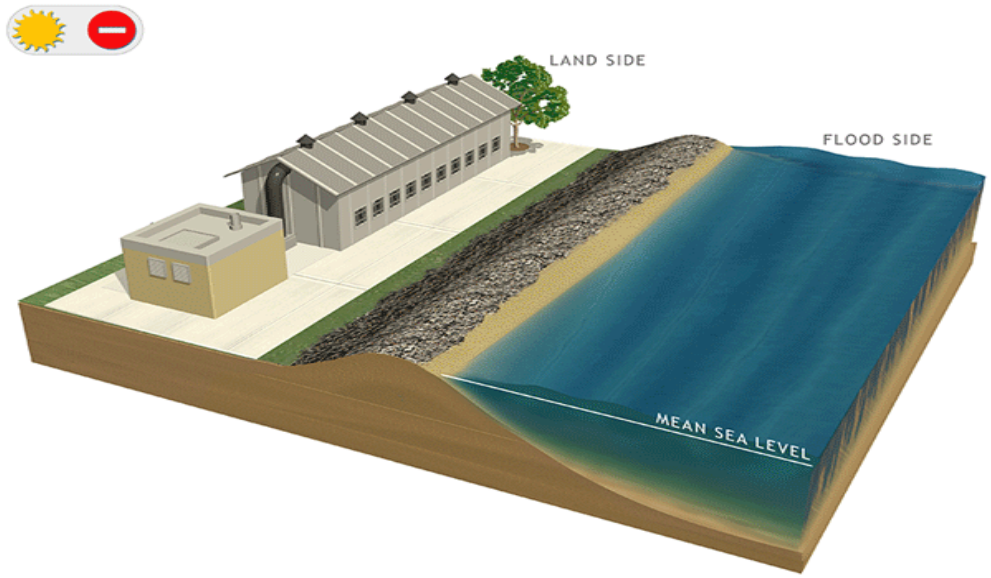
- During the study process, the Corps will consider many alternatives

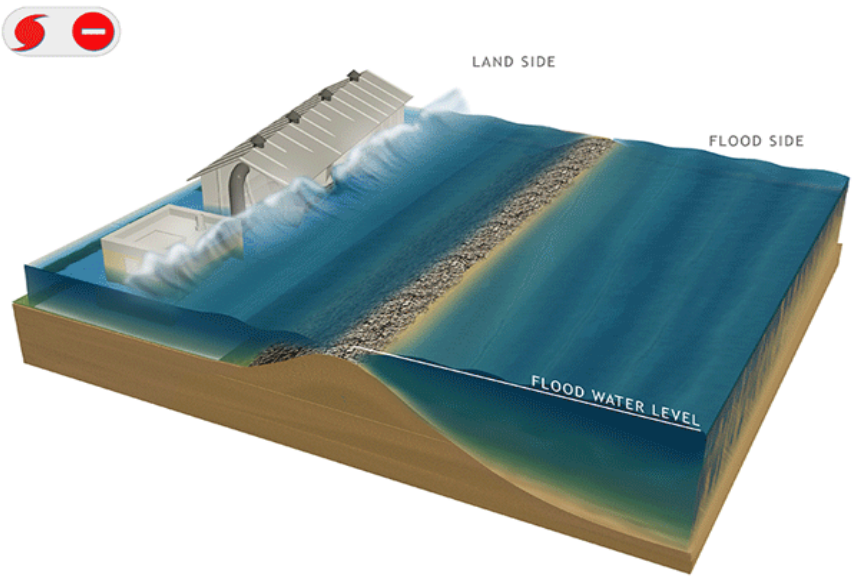
- Each of these alternatives will be evaluated based on:
  - ✓ Effectiveness
  - ✓ Cost
  - ✓ Environmental Impacts
  - ✓ Public/Agency/Stakeholder Feedback
  - ✓ Real estate
  - ✓ Socioeconomic Considerations
  - ✓ Adverse Impacts
  - ✓ Risk Reduction
  - ✓ Aesthetics

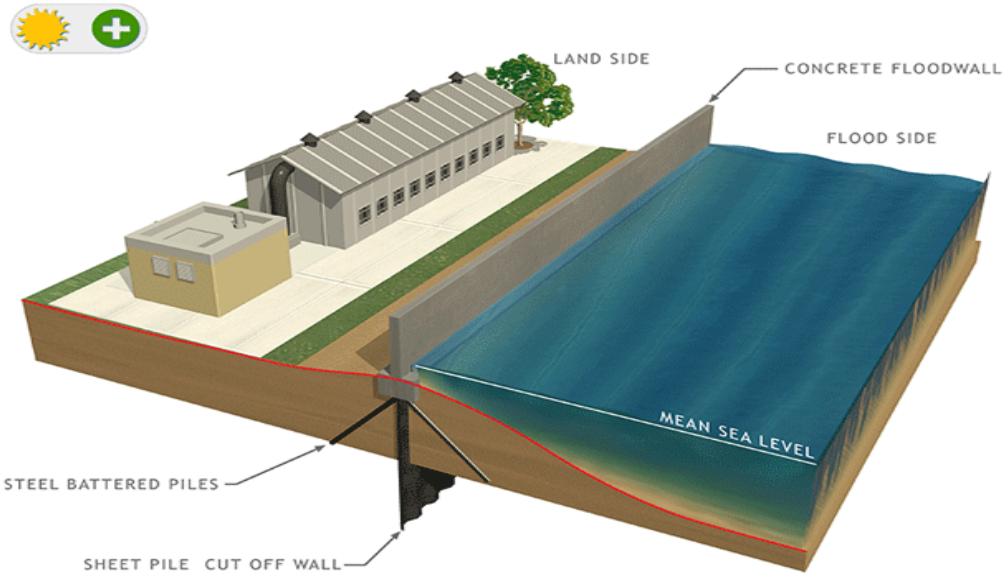
STORM SURGE BARRIERS

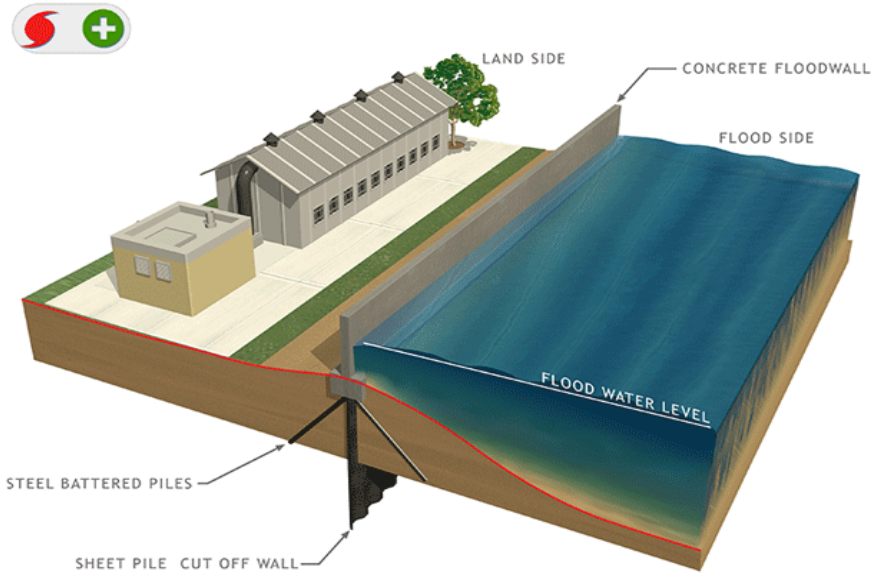


FLOODWALLS

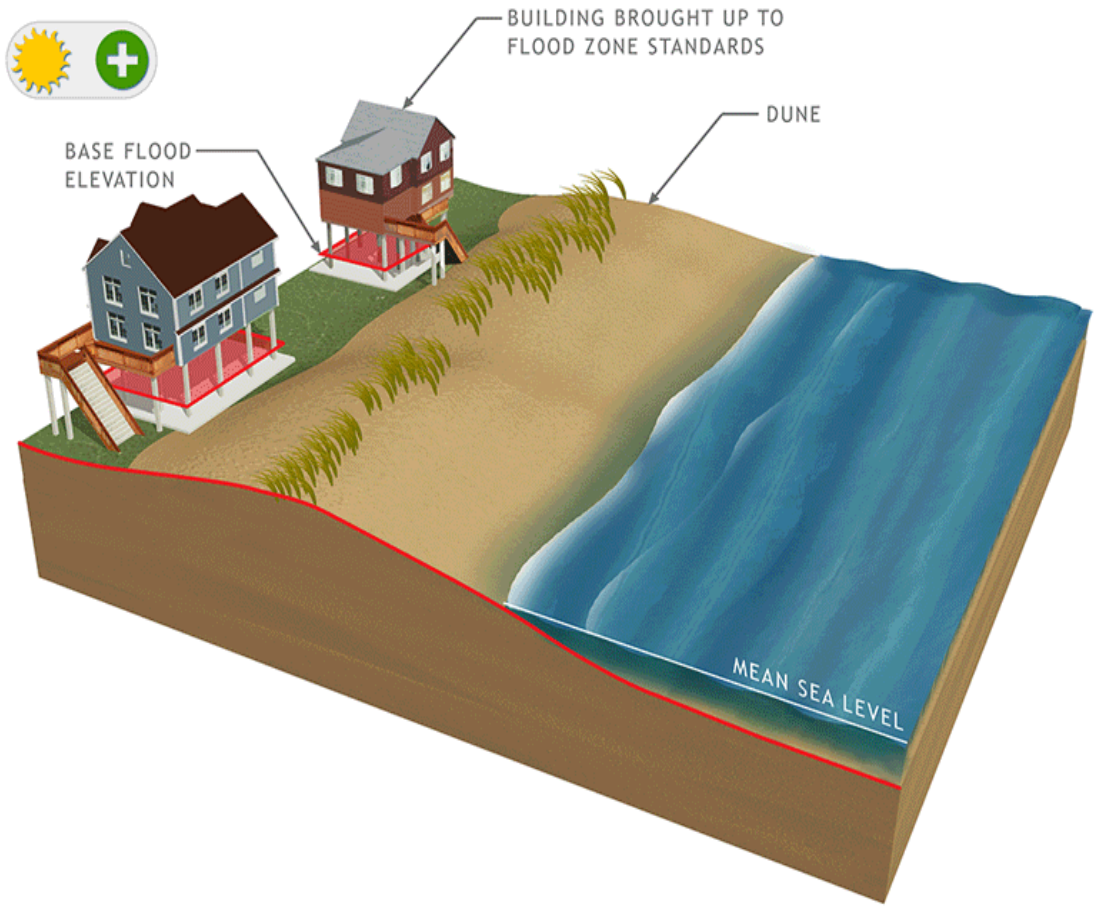

LAND SIDE
FLOOD SIDE
MEAN SEA LEVEL

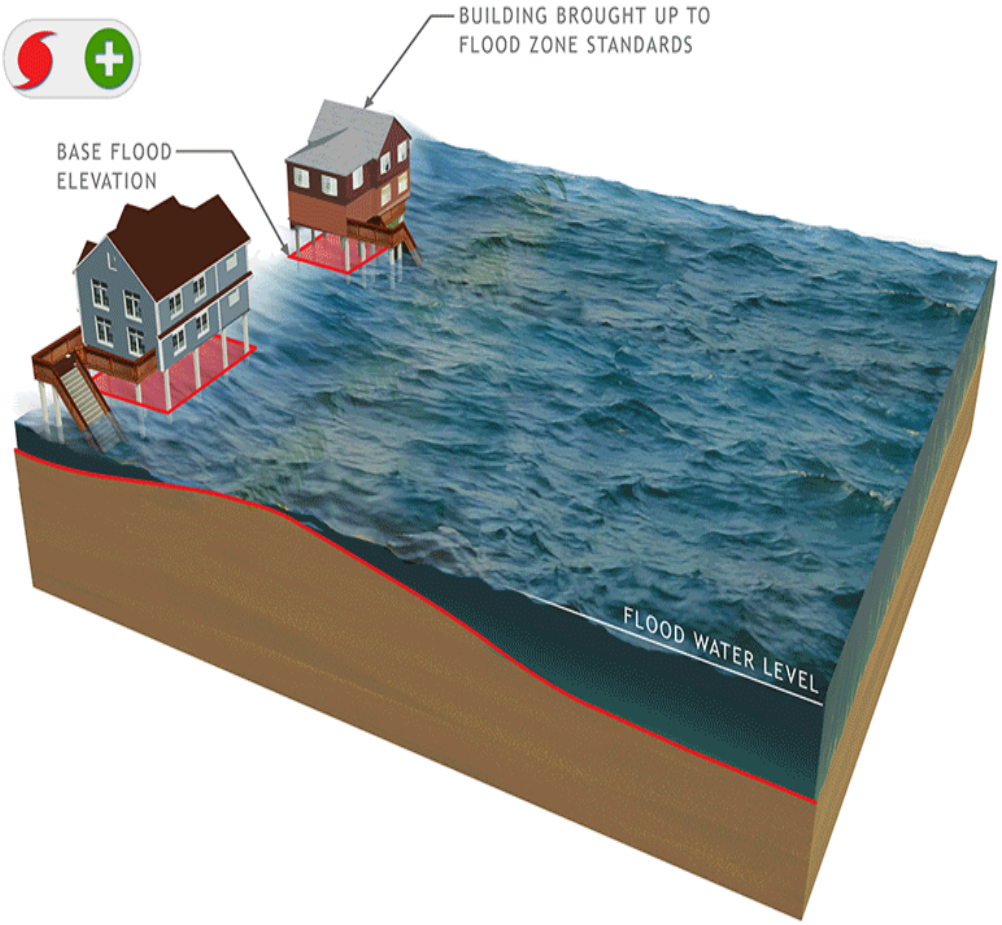

LAND SIDE
FLOOD SIDE
FLOOD WATER LEVEL


LAND SIDE
CONCRETE FLOODWALL
FLOOD SIDE
MEAN SEA LEVEL
STEEL BATTERED PILES
SHEET PILE CUT OFF WALL

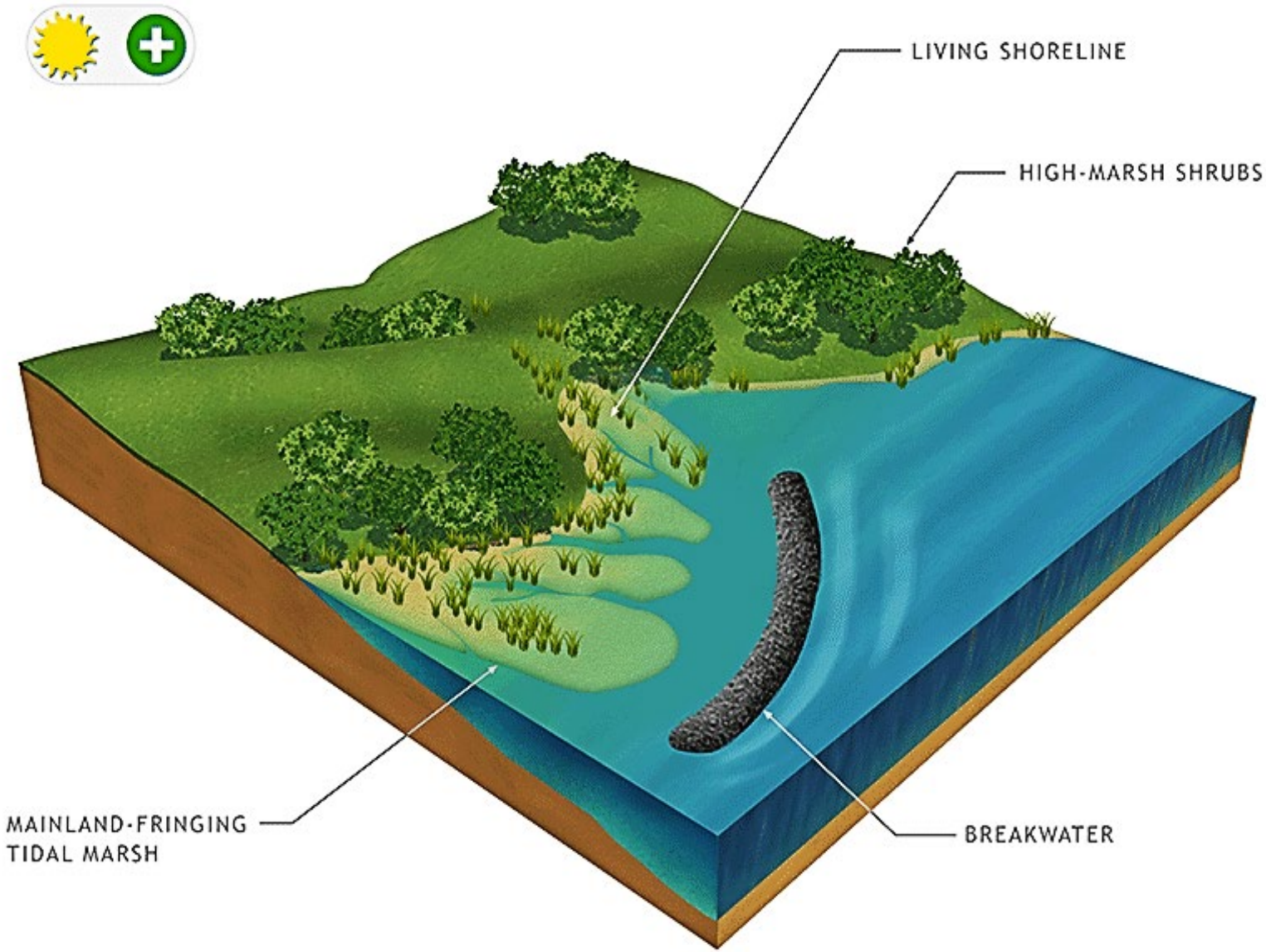

LAND SIDE
CONCRETE FLOODWALL
FLOOD SIDE
FLOOD WATER LEVEL
STEEL BATTERED PILES
SHEET PILE CUT OFF WALL

ELEVATING STRUCTURES, FLOODPROOFING, RING WALLS, ACQUISITION





NATURAL AND NATURE-BASED FEATURES



KEY FACTORS FOR A SUCCESSFUL STUDY

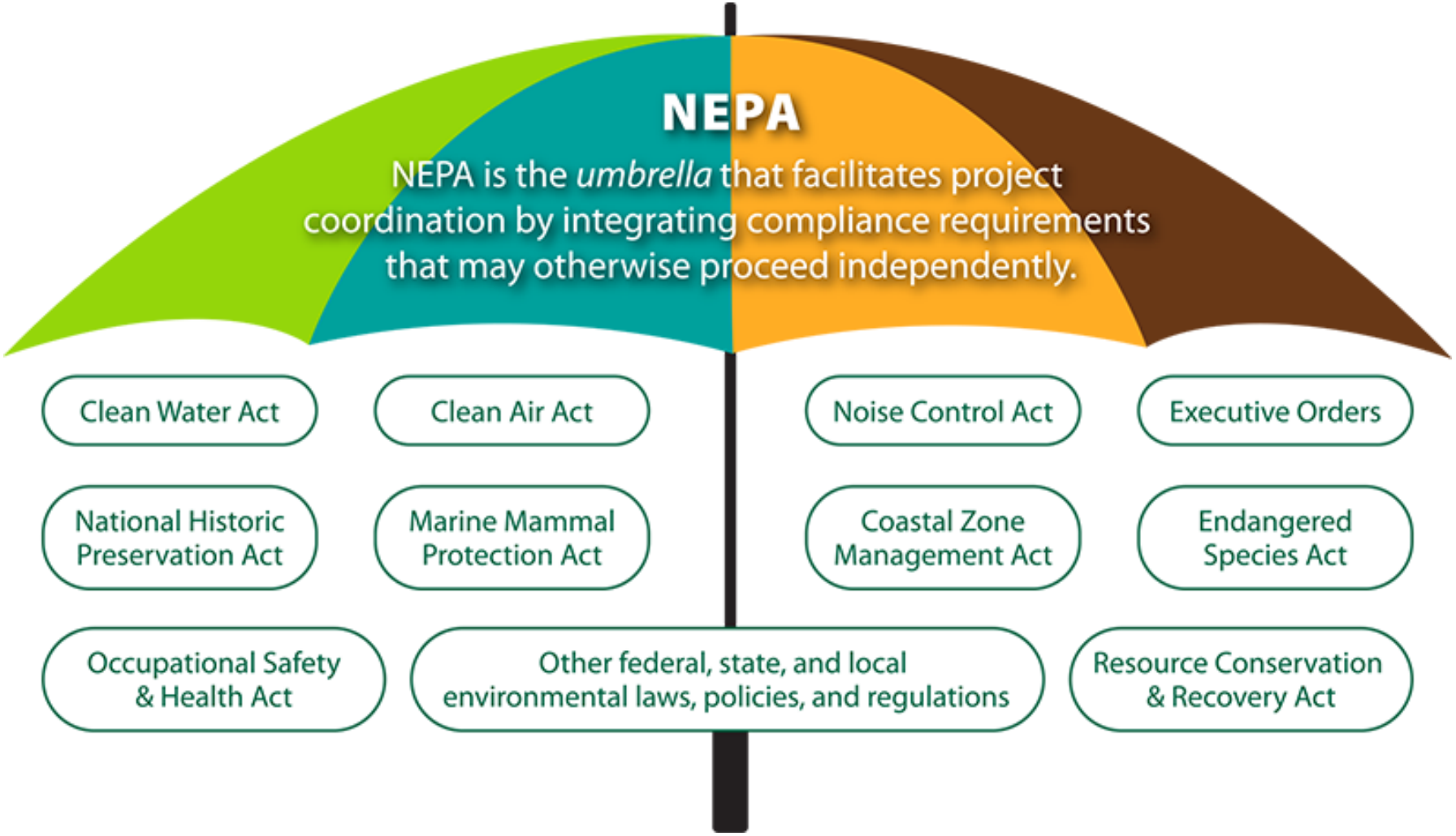
- Sponsor, Agency and Public Involvement during ALL phases of the project!

- Develop an Environmentally Sound Project meeting policy regulations!

- Study full array of alternatives to include:
  - ***Soft Structural*** (i.e., beach nourishment, dune construction, living shorelines, etc.)
  - ***Hard Structural*** (i.e., coastal armoring, groins, breakwaters, etc.)
  - ***Non-Structural*** (i.e., acquisition, relocation, elevating, floodproofing, etc.)

NATIONAL ENVIRONMENTAL POLICY ACT OF 1969 (NEPA)

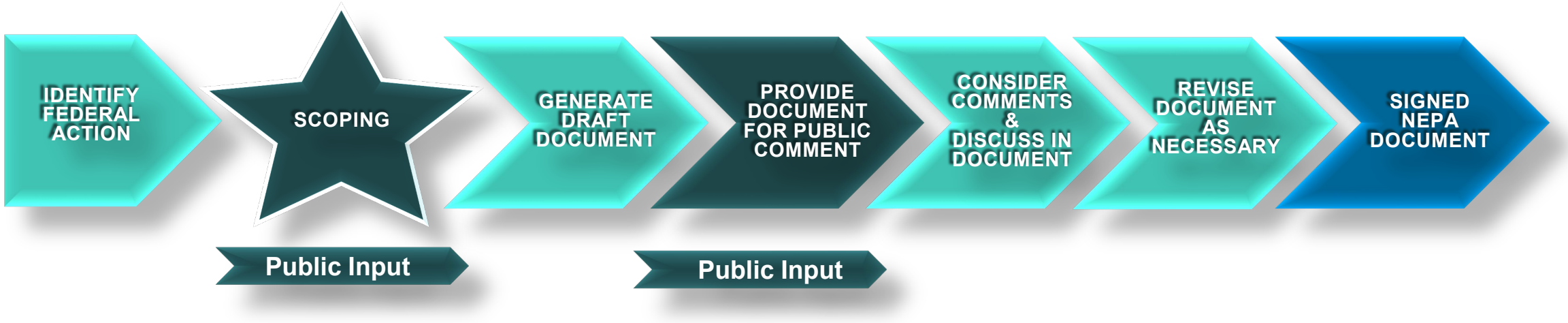
BUILDING STRONG



NATIONAL ENVIRONMENTAL POLICY ACT OF 1969 (NEPA)

BUILDING STRONG

- Applies to all Federal actions
- **Disclose** proposed actions and alternatives
- **Consider, evaluate, and document** effects of proposed actions as part of *overall* planning and decision-making
- **Cooperate** with Federal, state and local governments, private organizations, and concerned citizens



PUBLIC INVOLVEMENT OPPORTUNITIES

- Scoping ended March 10th
- Draft NEPA Public Review Period (written comments)
- Draft NEPA Public Meeting (oral or written comments)

Public notices will be published when the Draft and Final NEPA are released for public review!

Additional information about the Project/NEPA will be made available at the project website:

https://www.saj.usace.army.mil/Missions/Civil-Works/Shore-Protection/St-Johns-County/City-of-St-Augustine-Florida-Back-Bay-Feasibility-Study/

STUDY AREA

- Entire COSA Municipal Boundary
- 17 Distinct Neighborhoods
- 3 Separate Land Masses
- Environmental Justice Communities
- Interconnected Water Bodies
  - Atlantic Ocean
  - St. Augustine Inlet
  - IWW
  - Salt Run
  - San Sebastian River

PROBLEMS AND OPPORTUNITIES

Within the City of St. Augustine, flooding attributable to coastal storms, rainfall, riverine flow, tidal fluctuations, and sea level rise is:

1. causing damages to structures and infrastructure and degrading cultural and environmental resources.
2. negatively impacting critical infrastructure and the health and life-safety of residents.
3. negatively impacting businesses, organizations, and industry.

Within the City of St. Augustine opportunities exists to:

- maintain or improve environmental resources.
- Achieve incidental benefits from preventing nuisance flooding.
- Maintain the quality of tourism & recreation experiences.
- improve community understanding of flood risks.
- provide equitable benefits to economically disadvantaged and minority communities.

OBJECTIVES AND CONSTRAINTS

Problems & Opportunities

Objectives to be achieved within the City of St. Augustine over a 50-year period of analysis from 2035-2084…

1. Reduce risk of flood damages.
2. Reduce risks to health and life-safety.
3. Preserve cultural and natural resources and maintain aesthetic quality.
4. Reduce flooding impacts to the local economy.

Local Considerations include…

1. Avoid or minimize adverse effects to cultural resources.
2. Consideration of local affordability.
3. Avoid or minimize designs that do not conform to the city's historic character.
4. Avoid or minimize encroaching on navigational or recreational features.
5. Avoid environmental impacts.
6. Avoid or minimize impacts to community cohesion.
7. Consider local responsibilities for technical operations and maintenance.

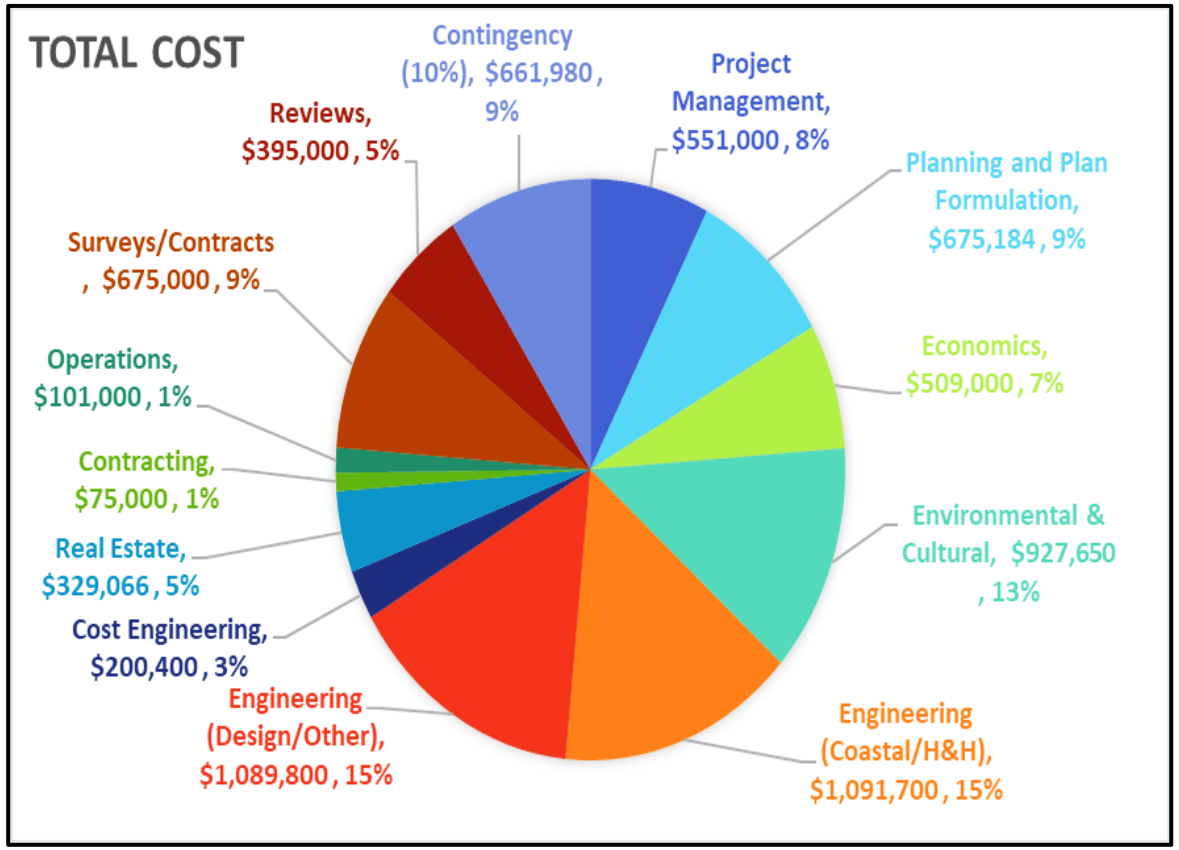
Constraints on plan formulation are limited to…

1. Do not increase flood risk in any areas adjacent to the project area without mitigation.
2. Do not violate Federal Laws or Policy.

STUDY SCHEDULE & BUDGET (6YRS X $7M)

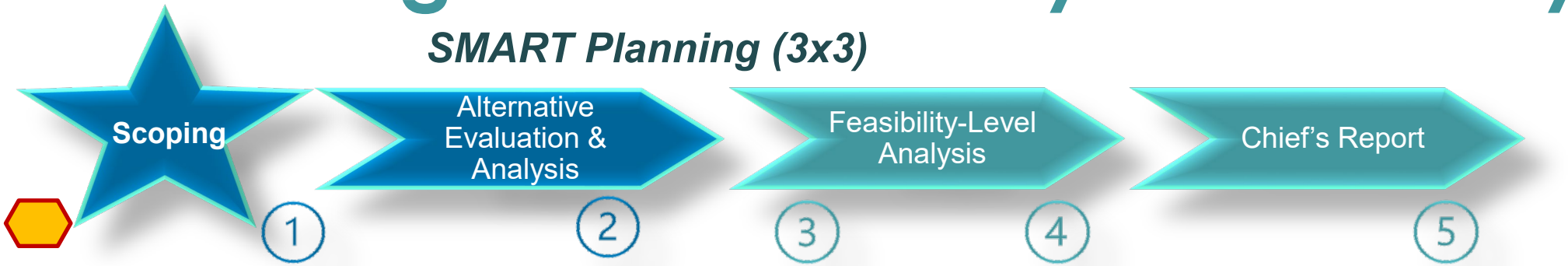
- Proposed Study Schedule 5 years 9 months
- Proposed Study Budget: $7.3M

Milestone	Date
Feasibility Cost Share Agreement Executed	January 9, 2023
Alternatives Milestone Meeting	May 1, 2023
Tentatively Selected Plan	February 2, 2027
Release Draft Report for Public Review	April 2, 2027
Alternatives Decision Milestone	November 3, 2027
Final Report Submitted to USACE HQ	May 22, 2028
Chief of Engineers Report Signed	September 15, 2028



Planning Process for St. Augustine Back Bay CSRM Study

SMART Planning (3x3)



Alternatives Milestone (1 May 2023)
Vertical Team concurrence on array of alternatives

Tentatively Selected Plan (TSP) Milestone (2 Feb 2027)
Draft Feasibility Report/NEPA Document

Agency Decision Milestone (3 Nov 2027)
Agency endorsement of recommended plan

Final Report Milestone (22 May 2028)
Draft/Final Recommended Plan/ NEPA Document

Chief's Report (15 Sep 2028)

Formal Public Comment Periods

Government to Government Consultation Initiated

Iterative 6-Step Planning Process

SCHEDULE STATUS 30/60/90-DAY LOOKAHEAD

TASK	LEAD SECTION(S)	START	END
FCSA Executed		**1/9/2023**	**1/9/2023**
ALTERNATIVES MILESTONE MEETING (AMM) PHASE		1/9/2023	5/9/2023
Jacksonville District (SAJ) Project Delivery Team (PDT) / City Kick-off Meeting(s) & General Coordination	PM/PDT	1/9/2023	5/9/2023
Public Scoping Period	ENV	2/8/2023	3/10/2023
Scoping Letters Sent Out (Public, Agency, G2G, Section 106 Letter/SHPO)	ENV/CR	2/9/2023	2/9/2023
USACE Internal VT Technical Meeting with Planning Centers of Expertise (PCXs) and Communities of Practice (CoPs)	PF	2/9/2023	2/9/2023
Planning Charrette	PM/PDT	2/22/2023	2/24/2023
Scoping Meeting	ENV	2/22/2023	2/22/2023
Finalized Problems, Opportunities, Objectives, and Constraints	PF	2/24/2023	3/24/2023
Identify Initial Array of Alternatives	PF/PDT	2/24/2023	3/24/2023
Section 1002 Letter Sent to Sponsor	PM	3/1/2023	3/1/2023
Initial Array of Alternatives Identified with General Design	PF/PDT	3/10/2023	4/5/2023
Initial Flood Driver Screening (Scope Decision Point)	**EN**	**3/10/2023**	**5/17/2023**
Coordination for Collecting and Compiling Data for Inventory	ECON/PDT	3/10/2023	10/27/2023
Refined Existing Data Inventory & Analysis / New Data Collection & Analysis	ECON/PDT	3/10/2023	10/27/2023
Inventory of Existing & Future Cultural Resources with Mapping	CR	3/13/2023	4/5/2023
Inventory of Existing & Future Environmental Resources with Mapping	ENV	3/13/2023	4/5/2023
Inventory of Existing & Future Economic Resources with Mapping	ECON	3/13/2023	4/5/2023
Inventory of Existing & Future Flooding with Mapping (just 4-8 flood scenarios to be used for the AMM)	EN	3/13/2023	4/5/2023
Inventory of Existing Geological Conditions with Mapping	EN	3/13/2023	4/5/2023
Inventory of Existing & Future Local Projects with Mapping	PF	3/13/2023	4/5/2023
Initial Entries into Risk Register	PF	3/13/2023	4/5/2023
Review Plan (Complete Draft) Sent to PCX-CSRM for Review & Endorsement	PF	3/13/2023	4/7/2023
Coastal Barrier Resources Act (CBRA) Coordination w/USFWS	ENV	3/13/2023	4/24/2023
GIS & Inventory of Baseline Structure Elevations & Properties Built Prior to 1978 (Cultural, Real Estate, GIS)	CR/GIS/RE	3/13/2023	11/20/2023
Identify Initial Area of Potential Effect (APE)	CR	3/14/2023	4/24/2023
SAJ Vertical Team Alignment Memo (VTAM) to South Atlantic Division (SAD)	PF/PM	3/20/2023	4/12/2023
Identify Potential Hazardous, Toxic and Radioactive Waste (HTRW) Issues associated with Initial Array of Alternatives	HTRW	3/22/2023	5/1/2023
Pre-IPR Discipline Specific VT Coordination Meetings As Needed	PDT	3/27/2023	4/12/2023
Web Map Viewer	EN	4/3/2023	5/1/2023
Parametric Costs for Initial Array of Alternatives	EN	4/5/2023	4/24/2023
Real Estate Considerations for Initial Array of Alternatives	RE	4/5/2023	4/24/2023
Environmental Resource Considerations for Initial Array of Alternatives	ENV	4/5/2023	4/24/2023
AMM Read Ahead Prep & Presentation Dry Runs	PF	4/5/2023	4/28/2023
Vertical Team (VT) IPR #1 Status Update	PF/PDT	4/12/2023	4/12/2023
Pre-AMM Discipline Specific VT Coordination Meetings As Needed	PDT	4/17/2023	4/28/2023
Data Gathering and Digital Elevation Model (DEM) creation	EN	4/17/2023	5/30/2023
Develop Environmental Resources Subgroup	ENV	4/24/2023	5/1/2023
Develop Cultural Resources Subgroup	CR	4/24/2023	5/1/2023
AMM Milestone Meeting		5/1/2023	5/1/2023
Complete/Review/Send SAD VTAM (to cover 3x3x3 exception package) to Headquarters (HQ)	**SAD**	5/2/2023	5/9/2023
TENTATIVELY SELECTED PLAN (TSP) PHASE		**5/9/2023**	**2/2/2027**
TSP Phase Supervisor Support	PDT	5/9/2023	2/2/2027
General PDT Coordination & Participation	PDT	5/9/2023	2/2/2027
Neighborhood Outreach Meetings	PM/PDT	5/9/2023	2/2/2027
Ongoing Draft Report Writing and Preparation to have complete draft report and appendices by the TSP.	PDT	5/9/2023	2/2/2027
Environmental Surveys	EN	5/9/2023	2/2/2027
GIS Support (Web Mapper, Figures, Story Map, etc) through	EN	5/9/2023	2/2/2027
Future Without-Project (FWOP) Hydrologic Engineering Center's River Analysis System (HEC RAS) Modeling for Generation 2 Coastal Risk Model (G2CRM) Hydrographs	EN	5/17/2023	10/5/2023
Characterize Systems Protective System Elements (PSEs)	EN/ECON	5/17/2023	10/19/2023
Coordinate with H&H as needed to characterize storms and any other H&H data	EN/ECON	5/17/2023	10/27/2023
Delineate Study Area into Model Areas	EN/ECON/PF	5/17/2023	10/27/2023
Develop Modeling Strategy for Comprehensive Benefits	PF/PDT	5/17/2023	10/27/2023
Engineering Inputs for G2CRM (including Coastal Hazards System (CHS) based storm suite from Engineer Research and Development Center (ERDC))	EN	5/17/2023	12/5/2023

UPCOMING PUBLIC ENGAGEMENTS

- 12 May 2023: Ravenswood Community Meeting
- 18 May 2023: Monthly Planning Meeting
- 27 May 2023: SARNA Ravenswood Quarterly Meeting
- 15 June 2023: Monthly Planning Meeting
- 20 July 2023: Monthly Planning Meeting
- 30 July 2023: COSA Neighborhood Council Meeting

COMMENTS

- Non-Federal Sponsor (City of St. Augustine)
- Federal Agencies
- State Agencies
- St. Johns County
- Local Agencies
- Public Comments

THANK YOU!!!