

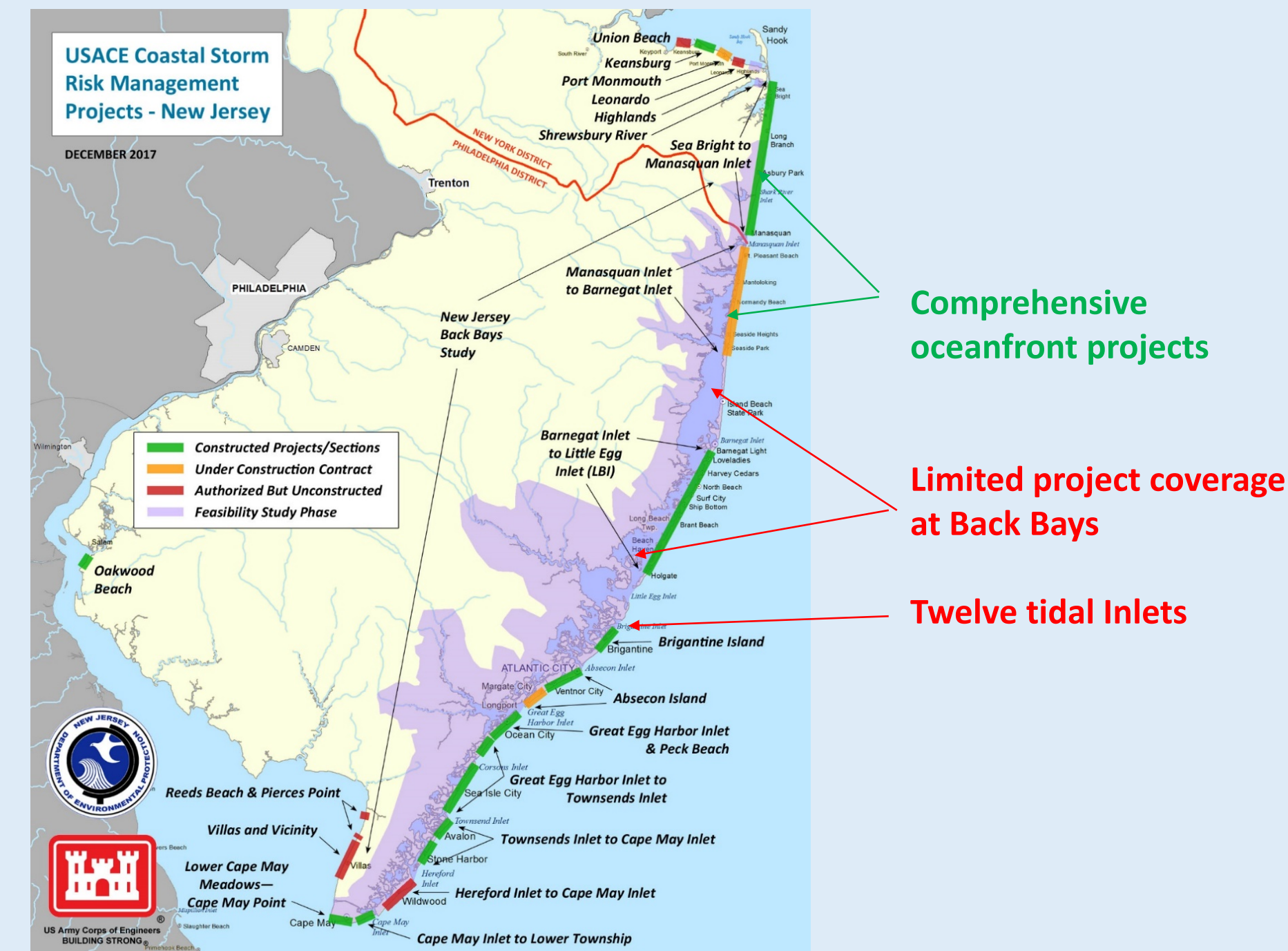
# THE NEW JERSEY BACK BAYS COASTAL STORM RISK MANAGEMENT FEASIBILITY STUDY

## The Problem



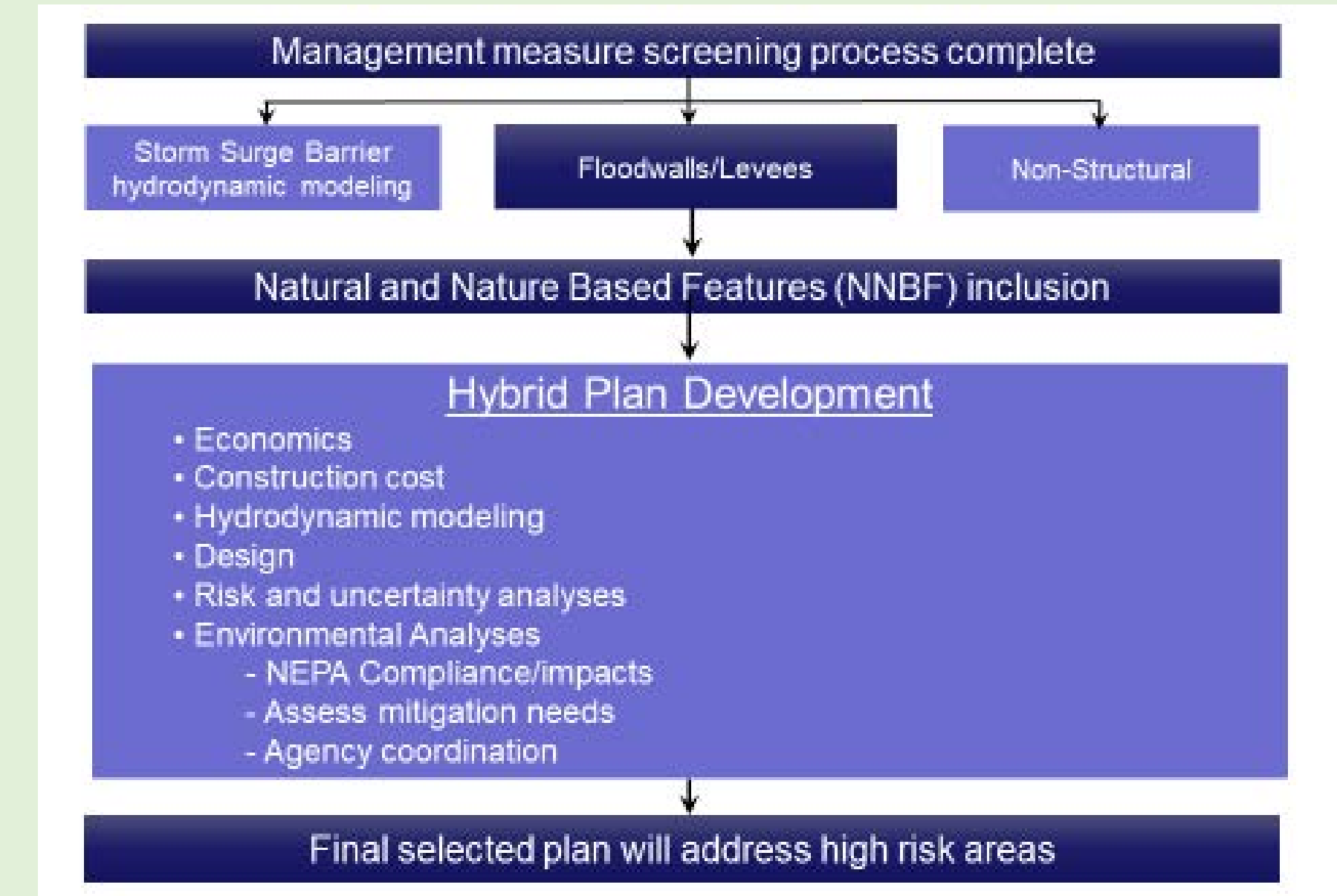
- Sandy caused \$30 billion in damage in NJ
  - An estimated 72,000 homes and business in NJ damaged or destroyed – more than 40,000 in Ocean County (Reference: FEMA)
- Multiple nor'easter events since Sandy
- > \$1 billion average annual flood damage under existing conditions
- Limited project coverage in Back Bays
- 12 tidal inlets (5 Federal navigation channels). Connected by NJ Intracoastal Waterway

## The Study Goals



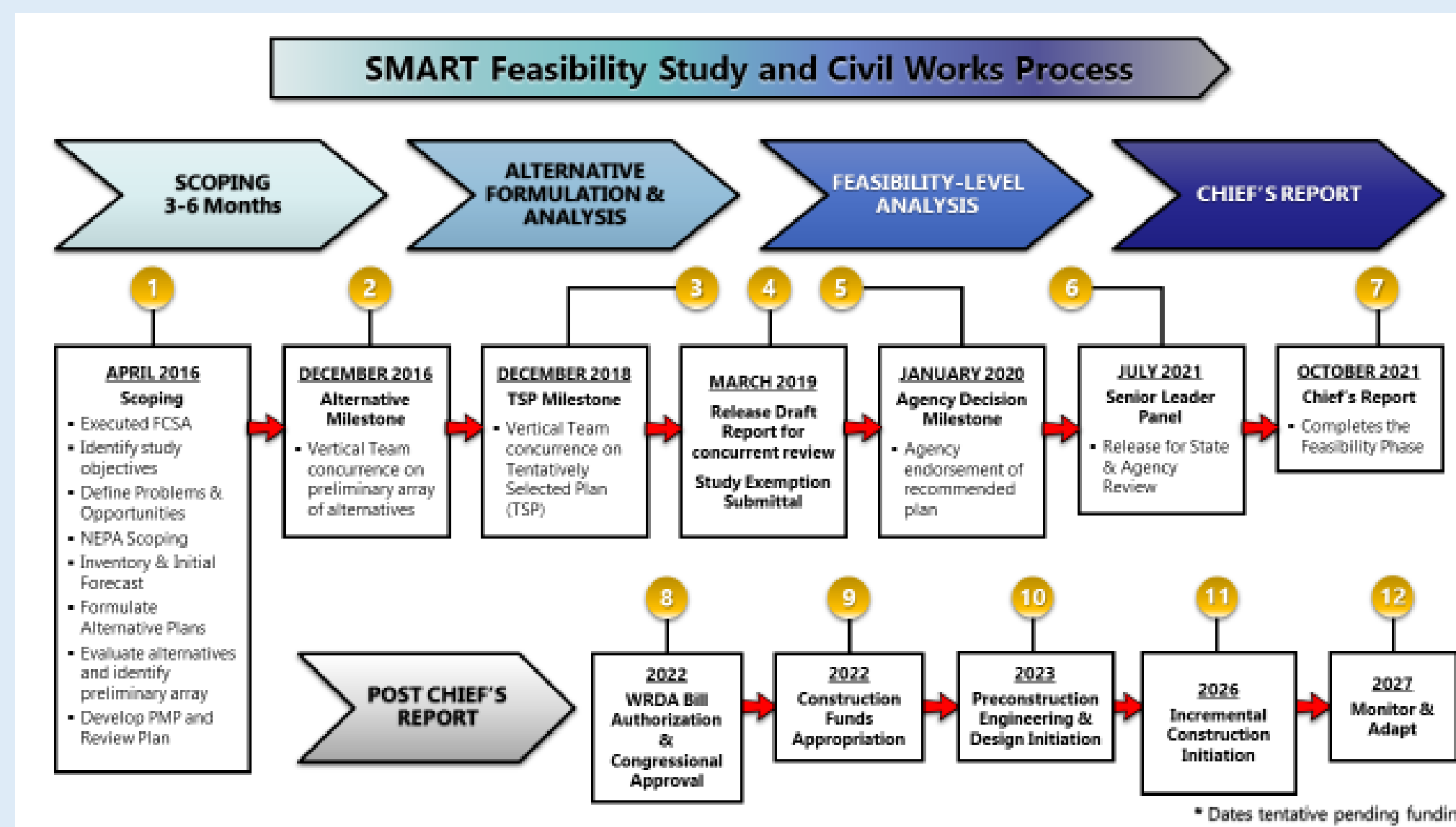
- Coastal flooding and sea level rise risk management
- Reduce damages that affect population, critical infrastructure, critical facilities, property, and ecosystems
- Implement system-wide structural, nonstructural, natural and nature-based solutions
- Three-year study to Tentative Plan (April 2019)
- Scaled and incrementally implementable design and construction opportunities

## The Study Strategy



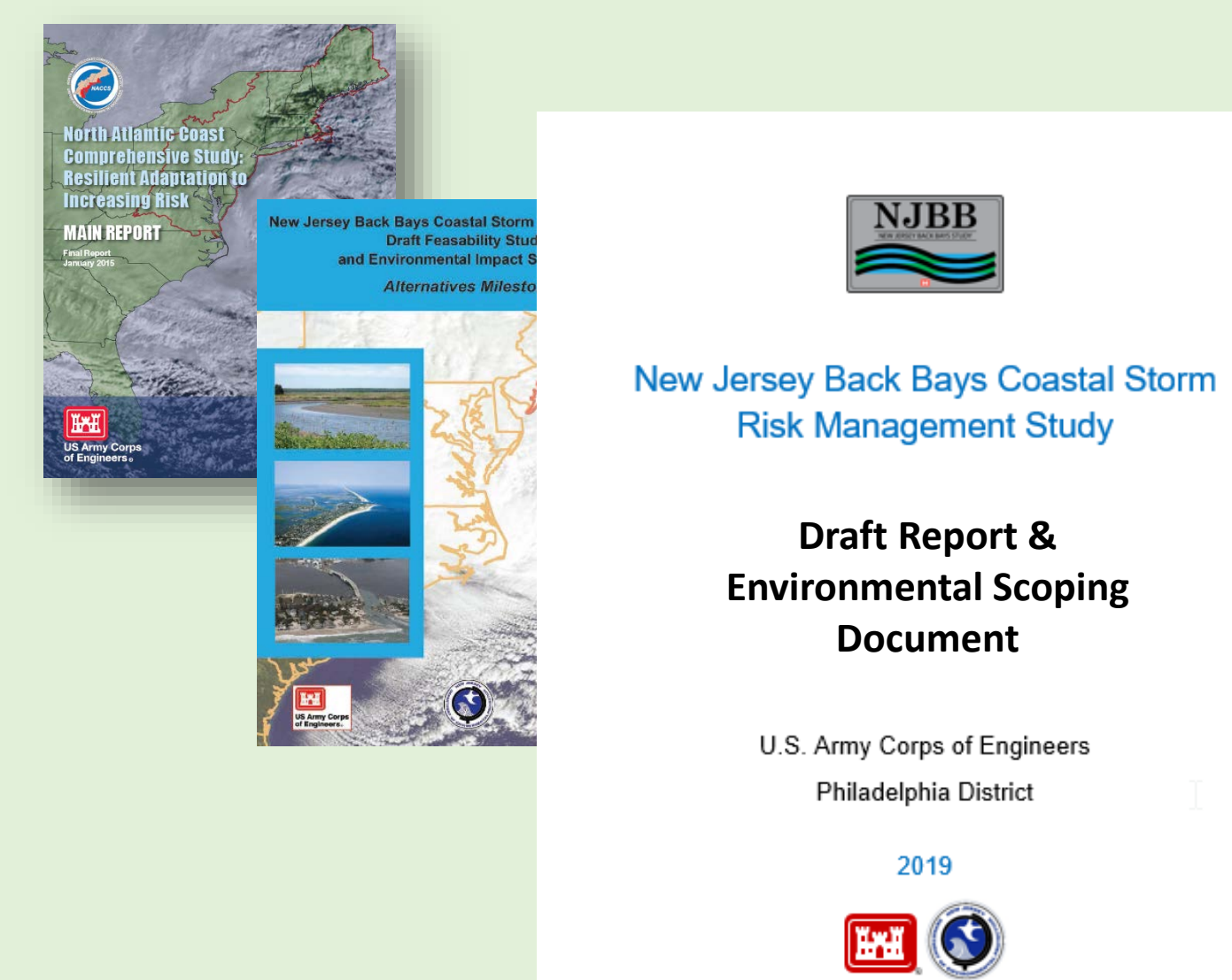
The Study adheres to US Army Corps of Engineers Principles and Guidelines to formulate a selected plan to manage the risk of coastal flooding according to a variety of criteria. Through this iterative process emphasizing risk and uncertainty, management measures are screened toward the formulation of alternative plans based on planning, environmental and engineering principles. Net monetary benefits are calculated according to the National Economic Development (NED) account which are then compared to project costs to allow complete comparison of different alternative plans towards the identification of a selected plan.

## The Process & Schedule



An agreement between the Army Corps of Engineers and the NJDEP was executed in 2016. The three-year study schedule for the NJBB study has been extended due to the complexity and size of the study area. The current date for a signed Chief's Report, which concludes the feasibility study is 2021. Other pertinent study dates include the Tentatively Selected Plan milestone meeting in December, 2018 and the release of the Draft Feasibility Report for concurrent review in January, 2019. Additional Civil Works Process dates include Pre-Construction Design and Engineering completion (2026), construction completion (2030) and monitoring and adaptive management commencement (2031).

## The Report Structure



Reporting will identify an economically justified selected plan that meet Federal and State Standards and Procedures to manage coastal flooding risk in the Back Bays of New Jersey. This Selected Plan will address the Problems and Goals and will adhere to the Study Strategy as well as North Atlantic Coast Comprehensive Study (January 2015) principals and previous NJBB documents. Specific Report topics include:

- Planning considerations (Goals, problems & opportunities)
- Study Need
- Existing conditions
- Future projections
- Economic, hydrodynamic, design and cost analyses
- Management measure and alternative plan screening/formulation
- The Tentatively Selected Plan (TSP)
- Risk and uncertainty evaluation
- Real estate considerations
- Plan implementation and construction sequencing
- Operation and maintenance considerations
- Environmental considerations of the TSP (NEPA compliance, impacts & mitigation)
- Systems/Watershed context



US Army Corps of Engineers®