



South Shore of Long Island, NY Regional Sediment Management Investigation

Description

The south shore of Long Island, NY includes regionally important Federal navigation channels, coastal storm risk management (CSRSM) projects, recreational areas, and habitat for critical species that could benefit from improved regional sediment management. This proposal includes a review of the existing systems, and a plan for developing regional sediment management strategies that could benefit existing and planned Federal projects, the region's economy, and the environment. CENAN is undertaking an investigation into unaddressed opportunities for improving management of sediment from the system of inlets and Federal Navigation Channel assets along the south shore of Long Island. These include the following Federal Navigation Channel assets: Jamaica Bay (Rockaway Inlet), East Rockaway Inlet, Jones Inlet, Fire Island Inlet, Moriches Inlet, Shinnecock Inlet, and Long Island Intracoastal Waterway. Billions of dollars in Federal investments may benefit from actionable recommendations made through the proposed investigation. Technical tools and lessons learned could be used for nationally-important regions and USACE projects.



Federal navigation channels included in investigation, south shore of Long Island, NY.

Issue/Challenge To Address

The south shore of Long Island contains a number of navigation channels, and a high density of Federal investment along the shoreline. There is a wealth of information available regarding the sediment transport system, and a long history of beneficial reuse of material. There is a history of success in beneficially using sand within this system, but these activities are often based upon decisions made over the last 20 years, and may not reflect the current needs, and available opportunities within the current USACE framework.

Successes Lessons Learned

The study has benefited by collaboration with stakeholders. The team is leveraging information and lessons learned from a broad coalition of Federal, state, and local partners, as well as academic institutions.

Projected Benefits Cost Savings Value Added

A significant opportunity exists to use existing knowledge and tools to better manage complementary projects on the south shore. Based upon the level of investment in this region,

improved efficiencies in managing this system more effectively could result in savings of tens of millions of Federal dollars annually.

Expected Products

- ERDC Technical Note
- Hydrodynamic and Sediment Transport Evaluation
- Technical Report
- Conference workshops and/or presentations

Stakeholders/Users

USACE, New York State, local municipalities, universities, and stakeholders.

Leveraging Opportunities

There is tremendous amount of information on the physical setting, and the existing sediment transport system, which is available as a result of ongoing and planned work associated with the long list of projects. The team is working with SUNY Stony Brook coastal researchers to consolidate and review existing information. Opportunities exist to leverage design work, surveys, modeling results, and other work products from the Federal, state, and local projects.

Points of Contact

Suzana Rice, P.E.; Danielle Tommaso, CFM

Participating Partners

Federal: National Park Service, U.S. Coast Guard, U.S. Fish and Wildlife Service

State & Local: New York Sea Grant, New York State Department of Environmental Conservation, New York State Parks Recreation & Historic Preservation, Town of Babylon, Town of Brookhaven, Town of East Hampton, Town of Hempstead

Academic: Florida Institute of Technology, SUNY Stony Brook