

New Jersey Regional Sediment Management: System Optimization Plan

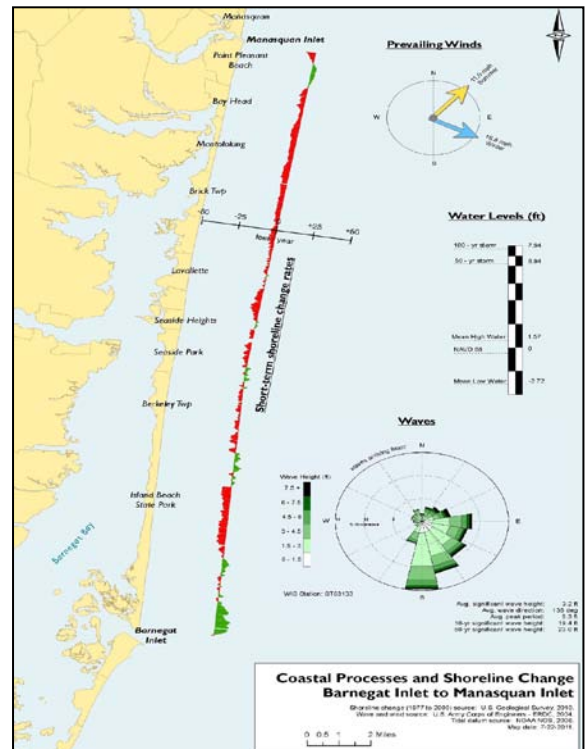
Project Characteristics:

- *Regional Sediment Management*
- *Large-Scale Beach Nourishment and Engineering Alternatives*
- *Long-Term Shore Protection Planning*
- *Life Cycle Cost Analysis*

Woods Hole Group completed a System Optimization Study to support the New Jersey Alternative Long-Term Nourishment (NJALTN) Project. This project is intended to evaluate methods to manage New Jersey's coastal projects on a regional basis to ensure maximum benefits are achieved from the Federal investment. The primary purposes of the NJALTN Study are to:

- Reduce long-term periodic nourishment requirements and costs
- Reduce sand resource requirements
- Minimize environmental impacts

These objectives are consistent with national objectives for the regional sediment management (RSM) program. Given the breadth of Federal projects, long-term commitment, and significant Federal investment in the coast for navigation and shore protection, New Jersey represents an ideal location to identify and realize these types of long-term benefits. The local sponsor, New Jersey Department of Environmental Protection (NJDEP), also is afforded significant benefits as a result of this Study, along with other local municipal stakeholders.



Results include:

- Tiered recommendations related to the sixteen (16) federally-authorized projects.
- Broad regional strategies to optimize shore protection along the New Jersey coast.
- Consolidated reference document for coastal communities and decision-makers, including a summary of data and coastal processes.
- Project Implementation Plan
- Cost analysis demonstrating potential for life cycle project savings